BUREAUCRATIC DESIGNS

The Paradox of Irrigation Management Transfer in Indonesia

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BUREAUCRATIC DESIGNS

The Paradox of Irrigation Management Transfer in Indonesia

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Table of contents

Chapte	er 1: Introduction	1
1.1	Assumptions versus reasons shaping IMT policy	2
1.2	Background of the research	2
1.3	Researching IMT paradigms	-
1.4	Conceptual framework	9
1. 4. 1	Policy as a process	9
1.4.2	Politics of policy theoretical perspective	1.
1.4.3	The concept of bureaucratic designs	I_{z}^{z}
1. 4. 4	The concept of interdependencies in policy network analysis	1.5
1.4.5	The process of alliance formation and the advocacy coalition framework	14
1. 4.6	The concept of water control	13
1.5	Research questions	16
1.6	Research methodology	16
1.7	Research site selection	10
1.8	Research methods	18
1.9	Research limitations	22
1.10	Structure of the thesis	24
Chapte	er 2: The Indonesian state in transition	27
2.1	Introduction	27
2.2	The Indonesian state as a rentier state	28
2.3	The political party partisanship system and the Indonesian state (re)formation	30
2.4	Regional autonomy and the fall of the New Order government	33
2.4.1		33
2.4.2	Regional autonomy and the irrigation agency's organizational structure	30
2.5	The application of regional autonomy before 2005	38
2.5.1	Regional autonomy and the preservation of fiscal dependency	38
2.5.2	Regional autonomy and bureaucratic rent-seeking	40
2.5.3	The prospect of regional autonomy	4
2.6	The project approach and Indonesia's sectoral development	42
2.6.1	The origin of the project development approach	43
2. 6.2	The project development approach and government's organizational structure	44
2.6.3	The project development approach and systemic rent-seeking practices	47
2.7	Conclusion	50
Chante	er 3: The irrigation agency's bureaucratic identity contested	55
3.1	Introduction	55
3.2	The irrigation agency's bureaucratic identity	56
3.3	The structural properties of the irrigation agency	57
3. 3. 1	The irrigation agency and infrastructure-oriented development	57
3. 3. 2	The upeti system and bureaucratic rent-seeking	62
3.4	Rent-seeking rules in project fund management	64
J. 7	trem peering reter in broles, tene membernem	0-

3.5	Bureaucratic identity and resistance to new policy trends in irrigation	67
3.6	Bureaucratic reform in the irrigation agency	68
3.6.I	The abolition of the Ministry of Public Works	68
3.6.2	The reemergence of the core policy actors' importance	72
3.7	Conclusion	74
Chapte	er 4: Irrigation Management Transfer: A policy narrative	79
4.1	Introduction	79
4,2	Dominant policy narratives in Indonesian irrigation development	80
4.3	The technical approach to irrigation development and resulting management inconsistency in government irrigation systems	82
4.4	The O&M approach and the establishment of infrastructure-oriented irrigation development	84
4.5	Farmer participation and the organizational approach	85
4.6	The institutionalist approach and IMT: a new policy remedy?	90
4.7	IMT policy: an analysis	92
4.8	Conclusion	95
Chante	er 5: IMT in Indonesia: a changing policy game	99
5.1	Introduction	99
5.2	IMT in Indonesia: a comparative overview	100
5.3	IMT under the IOMP 1987 statement	104
5.3.1	IMT: a policy tool for funds mobilization	104
5.3.2	From cost recovery to construction program	105
5.3.3	Analysis of IMT under the IOMP 1987 statement	107
5.4	IMT under WATSAL	108
5.4.1	IMT policy reintroduced	108
5.4.2	The renewal	109
5.4.3	Policy reform by foreign loans	111
5.5	WATSAL organizational structure: from sectoral to inter-sectoral decision	113
2.5	making	
5.6	The strategic positioning of WUA empowerment	115
5.7	The implementation set-up: new elements, old structure	119
5.8	Conclusion	121
Chapte	er 6: The struggle on the principle of IMT under the WATSAL program	125
6.1	Introduction	125
6.2	The conflicting policy frames in Indonesian IMT	126
6.3	The prelude to the IMT policy struggles	128
6.4	Controversial clauses of the draft Water Act	130
6.4.1	Water Act promulgation procedure	130
6.4.2	Kimpraswil's revision of the draft Water Act	133
6.5	The start of the policy struggles	136
6.5.1	The Kimpraswil moratorium	136
6.5.2	The Kimpraswil-MoHA relationship in IMT: bureaucratic clash and agreement	139
6.6	Public consultation about the draft Water Act	141
6.6.1	Kimpraswil's public consultation	141
6.6.2	MoHA's forum dialogue	142
6.7	The second Working Committee meeting: the emergence of the Kimpraswil-PDI-	145
	P coalition	

6.8 6.8.1	The emergence of a Kimpraswil-PDI-P counter alliance The consortium's political approach	146 146
6. 8. 2	The first Commission IV meeting: the emergence of counter political forces in parliamentary decision making	150
6.9	The re-occurrence of bureaucratic conflicts	153
6.10	Back to the parliamentary setting	154
6.1 0.1	The continuation of coalition building	154
6.10.2	The second Commission IV meeting: Reformasi faction's strategy	155
6.1 0. 3	The plenary meeting: the outcome of the policy struggles	158
6.11	One day before the meeting	161
6.12	A side view: Kimpraswil-World Bank relationship	163
6.13	Conclusion	164
_	r 7: Regional governments and IMT policies	171
7.1	Introduction	171
7.2	Kimpraswil and its new Participatory Irrigation Program	172
7.3	Provincial governments' positions on IMT	174
7.3.1	The PIA's position and its interests	174
7.3.2	The PIA-PIP relationship	176
7. 3 .3	The PIA's position and its ability to ensure funds allocation outside the project structure	177
7.4	The district government's position on IMT	177
7.4.1	The district irrigation agency's organizational restructuring	178
7.4.2	The district irrigation agency and Kimpraswil's attempt to halt the WATSAL IMT program	181
7.5	The stimulant fund: a weapon to eradicate rent seeking or a tool to transfer rent seeking?	183
7.5.1	The stimulant fund and infrastructure-oriented irrigation development	185
7.5.2	The stimulant fund and transferred rent-seeking practices	186
7. 5.3	The stimulant fund and the SDI's preserved bureaucratic power	188
7.6	Target-oriented IMT implementation and FWUA organizational development	189
7. 6.1	Farmer empowerment and rapid FWUA formation	189
7. 6.2	Management transfer as project targets	191
7.7	Community organizer recruitment: a reflection of the project development approach	191
7.7.1	Who needs a community organizer?	192
7. 7.2	CO employment in the aftermath of the IMT policy struggle	193
7.8	Conclusion	194
Chapte	r 8: IMT and water distribution practices in Kulon Progo district	199
8.1	Introduction	199
8.2	General description of irrigation systems in Kulon Progo district	201
8.3	IMT and water distribution at the inter-system level	206
8. 3. 1	IMT and farmers' decision making authority for water distribution	206
8. 3.2	The ten-day water distribution meeting	209
8.4	Dominant alliances in water distribution	212
8. 4. 1	The FWUA-DPIS field staff alliance	212
8. 4 .2	The FWUA-SDI staff alliance	214
8.5	The establishment of "spatial authority"	215
8. 5 .1	Spatial authority in the inter-system water distribution	216
8. 5.2	Spatial authority and unequal water distribution	217
8.6	Rural elite domination in FWUA organizational functioning	218

8.7	Elite-farmer relationships	220
8.7.1	Elite leadership taxonomy	221
8.7.2	FWUA unification and farmer-elite relationships	222
8.8	WUA bureaucratization	224
8.9	WUAs tasks and activities	225
8.10	Conclusion	226
Chapte	er 9: Conclusions	231
9.1	Introduction	231
9.2	Sectoral ministry policy actors and the reshaping of IMT policy elements	232
9.3	Policy channeling and vested government interests	233
9.4	The meaning of IMT for farmers and the district irrigation agency	235
9.5	The IMT paradoxes and future research	237
9.6	Final Reflections on bureaucratic reform for IMT in Indonesia	240
Referei	neas.	245
Summa		273
Samen	•	277
	alum vitae	283
~~1116	414314 1 1444	200

List of figures	
1.1: Alliance formation, policy subsystems, and policy networks analysis	15
1.2: Overview of the proportional distribution of time spent on field research	19
2.1: Government fund disbursement before and after regional autonomy	35
2.2: Incorporation of project management unit into the structure line of the PWRS	37
2.3: The coexistence of structural and functional lines in the government organizational structure	45
2.4: Overview of the project management unit under the IWIRIP at the provincial level	46
2.5: Formal procedure in fund proposal and allocation (before and after the adoption of the project approach)	47
3.1: Extensive organizational units within the Directorate General of Irrigation in the MPW (1969 to 1984)	60
3.2: Organizational units of the Sub-Directorate of Program Guidance	61
3.3: Overview of the distribution of project benefits	66
3.4: Organizational structure of the Ministry of Public Works (from 1984 to 1999, prior to its abolition)	69
3.5: Organizational structure of Ministry of Settlement and Regional Development or Kimbangwil (from 1999 to 2001)	70
3.6: Organizational structure of Ministry of Settlement and Regional Infrastructure or Kimpraswil (from 2001 to the present)	73
5.1: The timeline of IMT in Indonesia	103
5.2: WATSAL organizational structure	114
5.3: Legal hierarchy of the IMT legal framework under WATSAL	115
6.1: The legal procedure of act promulgation	132
6.2: Formal policy network for the promulgation of the Water Act in parliament	132
6.3: The timeline of the IMT policy struggles	137
6.4: Parliamentary policy network at the Working Committee level	147
6.5: Parliamentary policy network at the first Commission IV meeting	152
6.6: Parliamentary policy network at the second Commission IV meeting	158
6.7: Parliamentary policy network at the plenary meeting	161
7.1: Overview of provincial government structure (before regional autonomy)	173
7.2: Overview of provincial government structure (after regional autonomy)	173
7.3: The organizational structure of the irrigation agency at district level (before regional autonomy)	179
7.4: The organizational restructuring of the irrigation agency at district level	179
8.1: Hydrological/technical inter-system connection in irrigation system management	202
8.2: Overview of the golongan system in Kulon Progo district	205
8.3: Water channeling path from Sermo reservoir to East Pekik Jamal	211
8.4: Overview of the water distribution between West and East Pengasih8.5: Overview of FWUA West Pekik Jamal's strategy to channel water to the Suka Maju tertiary unit	214 217
8.6: Data overview with regard to field farmers' knowledge about WUA/FWUA and IMT	220
List of maps	-
1.1: The seven technical irrigation systems in Kulon Progo district	170
7.1: Districts in Yogyakarta special province	178
7.2: Irrigation systems in Kulon Progo district	184
8.1: Operational boundaries of the seven technical irrigation systems in Kulon Progo8.2: The official division of the <i>golongan</i> system for technical irrigation systems in Kulon Progo district	200 207

List of tables	
1.1: Overview of time distribution in the field research and research focus at each	20
administrative/hydraulic level	
2.1: Overview on the formal changes brought by the Regional Autonomy and Fiscal	34
Decentralization Acts	
2.2: BPK Audit Findings	41
3.1: Total irrigation development expenditure by type of development, Repelita I through IV (Source: Ministry of Public Works, DGWRD 1988).	58
4.1: The path of dependency in irrigation policy development	81
4.2: Organizational distinction between FMIS and WUAs	88
5.1: The evolution of IMT policy in Indonesia	101
5.2: Comparison of IMT under the IOMP 1987 statement and WATSAL of 1999	102
5.3: WATSAL agreement	112
5.4: WATSAL policy products	115
6.1: Policy actors' perceptions of IMT	127
6.2: Clause-wise revision of the draft Water Act	133
6.3: Proposed changes to the draft Water Act, as presented during the forum dialog in Surabaya, 4 December 2003	143
6.4: The opinion of the political parties and the military faction with regard to the proposed change to clause 29	157
6.5: The opinion of the political parties and the military faction with regard to the proposed change to clause 40	157
6.6: GOI's position on IMT one year after Kimpraswil's withdrawal from WATSAL	164
7.1; Overview of FWUAs in Kulon Progo district	185
8.1: Overview of technical irrigation systems in Kulon Progo district	201
8.2: Overview of the water distribution schedule at the inter-system level	204
8.3: Different types of elite leadership in the seven technical irrigation systems in Kulon Progo district, as observed from May 2004 to August 2005	221
List of boxes	
5.1: Presidential Instruction Number 3 of 1999: Third policy element	110
5.2: Presidential Instruction Number 3 of 1999: Second policy element	110
5.3: Presidential Instruction Number 3 of 1999: First policy element	111
5.4: Presidential Instruction Number 3 of 1999: Explanation of the first policy element	111
5.5: Presidential Instruction Number 3 of 1999: Third policy element	111
5.6: LoSP 1999: Section on the need for sector reform and structural adjustment	112
5.7: LoSP 1999: Financing of government irrigation O&M	113
5.8: LoSP 1999: Financing of WUA activities section	113
5.9: Government Regulation Number 77 of 2001: clause 13, sub-clause 41	116
5.10: Government Regulation Number 77 of 2001: clause 13, sub-clause 42	117
6.1: Clause 41, Kimpraswil revised draft Water Act, 20 September 2003 version	134
6.2: Article 43, original version of the draft Water Act, 27August 2001 version	134

6.3: Clause 63, Kimpraswil revised draft Water Act, 20 September 2003 version

6.4: Article 68, original version of the draft Water Act, 27 August 2001 version

6.5: Clause 76, Kimpraswil revised draft Water Act, 20 September 2003 version

6.6: Article 81, original version of the draft Water Act, 27 August 2001 version

135

135

135

136

Preface

My idea to conduct research on the political dimensions of the Irrigation Management Transfer (IMT) policy started as early as in 1999, during my M.Sc. research in Indonesia. From this I learned how the idea of management transfer from the irrigation agency to Water Users Associations (WUAs) opposed the irrigation agency's interests to sustain their bureaucratic power in the sector's development. The way the irrigation agency redirected IMT policy (at that time under the Irrigation Operation and Maintenance Project) to fit their own policy agenda - which was to sustain infrastructure-oriented development in the irrigation sector - brought to light the issue of power struggles in the overall context of IMT policy formulation and implementation.

Peter Mollinga played an important role in awakening my interests to do Ph.D. research on IMT policy. I would like to thank him for his academic guidance prior to and during the entire course of this Ph.D. research. The way he critically perceived irrigation policies as something needing to be examined and reexamined, sharpened my understanding of the subject matter. Later, this understanding helped me in finding and defining my own position in the irrigation development debates in general, and the issue of management transfer in particular. Working closely with him I learned that one is entitled to question everything regardless of one's position, as only through questioning could one understand things better.

In 2003, I started my research with the support from the Wageningen University, in the Netherlands and the International Water Management Institute (IWMI), in Colombo, Sri Lanka.

In late 2002, IWMI decided to cover my field research period under its Ph.D. program. For this I express my gratitude to Frank Rijsberman for his support at the very early stage of this research. I would like to thank Douglas Vermillion, at that time stationed at the IWMI office in Bangkok, who helped shape the overall contextualization of my research proposal. As the member of the World Bank Team responsible for irrigation reform between 1999 and 2003, he brought me into contact with the key policy makers in the new IMT program under the Water Sector Adjustment Loan (WATSAL). I was privileged to learn about the ideas of management transfer from him as a pioneer and a long-term researcher in IMT in general, and IMT in Indonesia in particular. I value our sometimes heated discussions when I visited him in the IWMI office in Bangkok. I am thankful to Madar Samad for arranging my visits to the IWMI office in Hyderabad, India and Colombo, Sri Lanka and introducing my research to the wider audience in IWMI. He brought me into contact with Hugh Turral, Francois Molle and Meredith Giordano.

Shortly after IWMI's decision to cover my field research, Wageningen University awarded a grant to cover the other part of my research. I wish to express my gratitude to Professor Linden Vincent from the Irrigation and Water Engineering Group for her continuous support throughout this Ph.D. research. Her thoughts and our discussions helped me improve the line of argument in this thesis. Her holistic view on the subject matter and her keenness on specific details have tremendously improved the overall presentation of this thesis. Working closely with her I learned how to maneuver one deadline after another in order to progress with the work. I am indebted to her for her commitment and guidance in making me finalize this thesis according to the defined schedule. I also wish to thank Flip Wester for his help and guidance for the application of a 'sandwich Ph.D.' grant from the university, and practical advice on thesis production.

In Indonesia, this research has been supported by the Centre of Agro and Socio-Economic Research (CASER) in Bogor and the Centre for Rural and Regional Development Studies from Gadjah Mada University (PSPK-UGM) in Yogyakarta.

I would like to express my gratitude to Dr. Effendi Pasandaran from CASER for his support and interests in my research proposal, even before the research was financially covered by IWMI and Wageningen University. I am deeply indebted to him for his trust, openness and patience to enable me to see the many passages in the Indonesian bureaucracies, which has been crucial to my attempt to understand the bureaucratic mechanisms within the irrigation agency. He made me see the real picture of the bureaucracy beyond the formal bureaucratic structure and procedures. He taught me how to analyze and synthesize the perceptions of the bureaucratic actors on IMT, by virtualising myself in their positions. Without his guidance, I would not be able to understand the dynamics and the entrepreneurship of the Indonesian bureaucracy in the short period of this research.

I am indebted to Dr. Mochammad Maksum from the Centre for Rural and Regional Development Studies for facilitating my field research in Yogyakarta. His dedication and commitment to rural development is comparable to 'fresh breeze' in the hot Indonesian dry monsoon. I will always remember our conversation on people's sovereignty and their rights to be able to think for themselves, during our lunch conversations, both in Yogyakarta and elsewhere. I am thankful to Dr. Susetiawan for our many discussions on Indonesian state formation and the country's development paths, which sharpened my overall understanding of the Indonesian state's characteristics. From the Centre for Rural and Regional Development Studies, I made acquaintance with the staff from the Faculty of Agriculture and Technology from Gadjah Mada University (FTP-UGM). I would like to express my gratitude to the late Professor Soeprodjo Pusposutardjo in guiding me to sustain a certain degree of neutrality in my research, amidst the heated policy struggle over the principles of IMT which escalated in the early 2004. He was the one who always reminded me about the importance to put farmers' perceptions on IMT as a central argument in my research. I am sorry for not being able to completely fulfill this intention in the present research. From the same faculty, I would like to thank Dr. Sigit Supadmo Arif who took the initiative to introduce me with the head of the Provincial Irrigation

Agency (PIA) in West and East Java. I am also thankful to Dr. Saiful Rochdyanto and Murtiningrum for our discussion on irrigation management in general and IMT in particular. Last but not least, I thank Abi Prabowo for our friendship.

I would like to express my appreciation to the many government officials who were willing to share their opinions on IMT, in relation to their bureaucratic positions and their different roles in IMT policy formulation and implementation under the Water Sector Adjustment Loan (WATSAL). Among them were the high and mid-level officials from the National Development Planning Agency (NDPA), the Ministry of Settlement and Regional Infrastructure (Kimpraswil), Ministry of Home Affairs (MoHA) and the Ministry of Agriculture (MoA). I am deeply indebted to the consortium of NGOs and universities for their trust to take me along with them in the overall negotiation process of IMT policy formulation - in parliament, in the ministerial offices, and at the different conferences. For confidentiality, I cannot state their names in this thesis. I would also like to state that I do not want to personally praise or offend anyone within or outside the government bureaucracy and that my concerns are purely academic for understanding the overall process of IMT formulation and implementation. Similarly, I would like to state that the bureaucratic mechanisms highlighted in this research are not meant to attack or judge the organizational existence of the irrigation agency. Rather, my point is to elucidate the existence of these bureaucratic mechanisms, their dynamics, and how these influenced and shaped the overall process of management transfer in Indonesia. I also like to thank the WATSAL Task Force for their cooperation in providing me all the necessary policy documents on IMT policy formulation processes. I also would like to thank the Irrigation Communication Network of Indonesia (JKII) for giving me access to their regular staff meetings and national seminars.

I want to thank the staff of the Provincial Irrigation Agency (PIA) and the Provincial Irrigation Project (PIP) in West and East Java, and Yogyakarta in particular, for their time and efforts spent in making me understand their positions on IMT in relation to their role in irrigation sector development.

In Kulon Progo district, I am indebted to the staff of the District Water Resources Services (DWRS), and the Sub-District Irrigation (SDI) staff in particular. I owe a lot to the engineers in the SDI for helping me to contextualize the water distribution arrangements in the seven interconnected technical irrigation systems, from both technical and social perspectives. These engineers are: Anwar, Basito and Kuntarso. Without their guidance, I would never be able to understand the system interconnection in such a short period. Their eagerness to learn new things in irrigation system management is a living proof that bureaucratic reform can be conducted from within the irrigation agency, if the bureaucratic actors do see the necessity of this reform. I also wish to thank the field staff of the Division Provincial Irrigation Services (DPIS) for their time and efforts in increasing my understanding of actual water distribution practices at both inter-system and irrigation system level.

I thank all the FWUA/WUA staff for their hospitality in inviting me into their meetings and activities in the field, and for their patience in answering my questions, which seems trivial in comparison with their other more important daily activities. The way they cope with IMT enriched my insights on the subject matter. At the field level, I am grateful to the thirty farmers I have interviewed, for taking time answering my questions about words or concepts (such as IMT, FWUA/WUA) they had hardly ever heard before. I hope this research will highlight farmers' lack of knowledge and involvement in IMT and sharpen IMT policy reconceptualization to be more in line with farmers' actual development needs as a heterogenous group.

Back in Wageningen, I also would like to thank Gerda de Fauw for making the necessary arrangements during my stay in Wageningen and Gerrit van Vuren for solving the problem of editing prior to the thesis submission.

This research would never have been the same without the companionship of Nikolai Sindorf. His unfaltering support enabled me to face the challenges I encountered during the whole trajectory of this research. He was the one who insisted I pursued alternative financial resources when my research proposal was turned down by WOTRO in 2002. In Indonesia, he helped me sustain my objectivity in dealing with policy actors from national level down to farmers' fields. At the field level, I was privileged to conduct this research using his knowledge and experience in irrigation as an additional source to my own understanding in irrigation. Not to mention that without his presence, I would not have been able to attend FWUA/WUA meetings which generally took place in the middle of the night.

I am thankful to Jos Mooij for her support in providing me the access to her personal library in Hyderabad, in which I could find literatures on policy processes before I pursued my field research in Indonesia. I also thank Gerda Wink, Sander Schot and Timmo Gaasbeek for their support in the early period of this research. Based in Egypt at that time I was not able to access the necessary literature at Wageningen University. They took up the burden of collecting the (sometimes historic) literature from the scattered university libraries, photocopied them and sent them to me in Egypt. I am thankful to Jeroen Ensink for his hospitality to have me and Nikolai stay in his apartment during my visit to Hyderabad, India. I also wish to thank Balaraju Nikku and Pranita Udas for arranging a field visit during my stay in Hyderabad, India. In Yogyakarta, I would like to express my gratitude to Tri Satya Mastuti Widi, Aris Danisworo, Agus Suyanto and Dyah Rini who made us feel at home right from the beginning.

Last but not least, I acknowledge the encouragement from my parents who love me as I am and have learnt to let me go. This research has been a fertile period of learning and growth in both the academic and general sense. Academically, this research improves my understanding on the policy processes in irrigation sector development. Generally, it increases my awareness and sensitivity about people's intentions, feelings and preferences.

Acronyms

ADB Asian Development Bank

ASAL Agricultural Sector Adjustment Loan

BPK Supreme Audit Agency

BPKP State Audit Agency

CO Community Organizer

DAK Special Purpose Grant

DAU General Purpose Grant

DDPA District Development Planning Agency (also known as BAPPEDA)

DGRD Directorate General of Regional Development

DGWRD Directorate General of Water Resources Development

DPIS Division of Provincial Irrigation Services

DWRS District Water Resources Services

EU European Union

FAO Food and Agriculture Organization

FMIS Farmer Managed Irrigation System

FWUA Federation of Water Users Association

GOI Government of Indonesia

IMT Irrigation Management Transfer

INFOG International Forum for Globalization

IOMP Irrigation Operation and Maintenance Project

ISF Irrigation Service Fees

ISSP Irrigation Sub-Sector Project

IWIRIP Indonesia Water Resources and Irrigation Reform Program

IWMI International Water Management Institute

JICA Japan International Cooperation Agency

JIWMP-IDTO Java Irrigation Improvement and Water Resources Management Project -

Irrigation Development Turnover

JKII Irrigation Communication Network of Indonesia

KIIF Kabupaten Irrigation Improvement Fund

Kimbangwil Ministry of Settlement and Regional Development

Kimpraswil Ministry of Settlement and Regional Infrastructure

LoSP Letter of Sector Policy

Meneg PU State Ministry of Public Works

MoA Ministry of Agriculture

MoF Ministry of Finance

MoHA Ministry of Home Affairs

MPW Ministry of Public Works

NDPA National Development Planning Agency (also known as BAPPENAS)

NEDECO Netherlands Engineering Consultants

NewISF New Irrigation Service Fee

NGO Non-Governmental Organization

OED Operational Evaluation Development

O&M Operation and Maintenance

PDPA Provincial Development Planning Agency

PIA Provincial Irrigation Agency

PIP Provincial Irrigation Project

PROSIDA Project Irrigation of International Development Agency

PWRS Provincial Water Resources Services

SDI Sub-Division of Irrigation

SDWR Sub-Directorate of Water Resources

WALHI Indonesian Forum for the Environment

WATSAL Water Sector Adjustment Loan

WISMP Water Resources and Irrigation Sector Management Project

WTF WATSAL Task Force

WUA Water Users Association

Glossary

Bengkok lands: those lands belonging to the village government staff

Golongan: the defined cropping calendar for reducing the irrigation peak water demand

Privavi: the class that comprises the historical rural elites

Repelita: five year development plan

Ulu ulu: the person in charge for water distribution arrangements

Upeti: gift or tribute

1. Introduction

In Indonesia, irrigation management transfer (IMT¹) policy has been repeatedly formulated and implemented without significant change in the farmers-irrigation agency relationship (Bruns, 2003). In the formulation of the Irrigation Operation and Maintenance Project (IOMP) in 1987, farmers' involvement in systems management remained limited to the tertiary level. Even with the formulation of the Water Resources Adjustment Loan (WATSAL) in 1999, which is generally considered to be the most far-reaching reform package so far, the irrigation agency remained officially in charge of the overall system operation and maintenance. In addition, under WATSAL the organizational development of the Federation of Water Users Associations (FWUAs) was directed following the bureaucratic development path of the irrigation agency. The concept of 'turning over', as defined by international policy makers, as the attempt to change farmers-irrigation agency relationship thus had limited scope at the level of written policy.

International donors and national policy makers have primarily focused on IMT implementation and seem to unrealistically assume that IMT can solve a whole array of management problems in government irrigation systems. Similarly, research on IMT has hardly discussed the validity behind this basic assumption in IMT policy formulation. For instance, Rap (2004) and van der Zaag (1992) analyze both the process and outcomes of IMT implementation in Mexico, and explain reasons behind the different outcomes. However, these studies do not question the way policy makers assume that IMT can address the management problems in government irrigation systems by reshaping the farmer-agency relationship. The content of this study includes IMT policy implementation as part of IMT policy analysis. The analysis focuses on the dynamic shaping and reshaping of IMT policy concepts during policy formulation and implementation.

This research has the objective of providing empirical evidence and conceptual argument, which will support IMT policy (re)conceptualization. The first step towards this (re)conceptualization is to critically examine the basic assumptions behind IMT policy formulation. With this thesis, I draw attention to what IMT has actually meant for both the irrigation agency and farmers, as the very groups the policy is intended to address. This thesis will discuss the actual scope of the IMT policy implementation in Indonesia from November 2003 to July 2005, using the seven technical irrigation systems in Kulon Progo district as a case study. It illustrates the role of government institutions' vested interests at different administrative levels in shaping IMT policy. In addition, this research emphasizes the importance of bureaucratic reform within the irrigation agency in relation to IMT policy formulation and implementation. It argues that farmers can gain decision-making authority in irrigation system management only if the agency is willing or perhaps

forced to change its role in the irrigation sector development towards the proposed policy reform.

1.1 Assumptions versus reasons shaping IMT policy

International policy makers thought that, with IMT, management problems in the government irrigation system in Indonesia would be solved once the decision-making authority for systems management was transferred from the inefficient irrigation agency to the newly formed water user associations (FWUA/WUAs) (Vermillion and Sagardoy, 1999; Malano and Hofwegen, 1999; Turral, 1995). Among the problems to be solved were: the high operational cost of government irrigation systems; the rapid deterioration of the irrigation infrastructure; the deferred maintenance attitude; inefficient water use; and unequal water distribution. Similarly, international donors and policy makers thought that IMT could redirect the irrigation policies, from infrastructure-oriented to farmers-focused development.

Central to this line of thinking is the way policy makers assume the relationship between the irrigation agency and farmers in IMT to be neutral and apolitical. Hence, the thinking goes that new Water Users Associations (WUAs) and the Federations of WUAs (FWUAs) can be empowered by the very institution these organizations are formed to replace. In Indonesia, prior to WATSAL the irrigation agency was the only government agency assigned with the task of implementing IMT. International policy makers assumed either that the irrigation agency was willing to change its role in the sector development or that it could be ordered and forced to make direct changes in its organizational functioning in accordance with the proposed policy reform, following IMT policy adoption. This assumption was evident from the way international donors and policy makers prescribed different new roles (such as basin manager, regulator, and policy maker) for the irrigation agency in the post-IMT stage (Johnson III, Svendsen, Gonzales, 2004).

In reality, management transfer has been characterized by power struggles between the irrigation agency as the existing power holder and the FWUA/WUAs as the designated future decision makers in irrigation systems management. In Indonesia, the irrigation agency was not always convinced about its new role, or even about the need for management transfer. However, this unconvincing attitude was often camouflaged² by the irrigation agency's formal acceptance of the proposed change, as stated in loan agreements between the agency and the donors. The irrigation agency's resistance to IMT was evident in the way IMT policy under the IOMP was transformed into a construction program (Bruns and Atmanto, 1992). Even under WATSAL in 1999, the irrigation agency remained the main advocate for continued system construction and rehabilitation prior to formal transfer (IWIRIP Progress Report, 2003). As the agency was never seriously engaged itself in the decision-making process in relation to the redefinition of their role, and often clung to its pre-existing role.

The agency's resistance to change never translated into a revision of the policy concept in IMT. It seems that IMT policy makers failed to realize that IMT policy failure was rooted

in their paradoxical policy assumption³ that an unreformed, corrupt, and inefficient irrigation agency could form and develop high-performance farmer organizations. In contrast, research on IMT at that time was focused on finding the key elements for successful implementation, because policy makers believed that the agency's resistance was one of the barriers to IMT implementation (see the papers presented at the international conference on IMT in Wuhan, China, 1994). The discourse on IMT policy at that time centered on efforts to deal with or remove these implementation barriers. Among these barriers were: the lack of coordination between the implementing agencies; the poor organizational performance of these agencies; uncertain fund disbursement for IMT implementation; the FWUAs' inability to fill in their new role in systems management; and the irrigation agency's lack of motivation to direct the process of management transfer (Moustafa, 2004; Huppert, Svendsen and Vermillion, 2001; Vermillion and Sagardoy, 1999; Johnson III, 1995). Later, these elements were presented as the preconditions and requirements to be tackled for IMT policy implementation. Proposed remedial actions included: a clear task redefinition between government and farmers; presence of IMT legal backup; good condition of irrigation physical irrigation infrastructure; and strong support from the government (Frederiksen, 1992). Consequently, research on IMT fell short of explaining the reasons behind the persistent reoccurrence of these implementation barriers, because the irrigation agency's resistance to change was never concretely stated in public documents.

Apart from the farmer-agency relationship, IMT policy makers assumed that farmers were well represented within the FWUA/WUA and that they were willing and prepared to take over systems management (Bruns, 2003; Vermillion, 1994). In reality, an FWUA/WUA was often dominated by a rural elite (Nikku, 2006; Mollinga, Doraiswamy and Engbersen, 2001). In Indonesia, right from their formation, FWUA/WUAs' functioning was directed towards the representation of the elite's interests, not necessarily related to farmers' needs: but research on IMT at that time seldom addressed the different types of elite-farmer relationships, or how farmer representation could be increased or maneuvered through this relationship. Similarly, the way farmers actually perceived this organization or how they viewed the idea of IMT in general remained opaque. Trapped in the assumption that farmers' development needs are incorporated in IMT, existing research on IMT has failed to highlight farmers' actual needs, outside the context of IMT. Instead, research on IMT focused on mapping the management dimensions of the FWUA/WUA such as: their organizational capability (using indicators such as the irrigation service fee (ISF) collection rate, and the actual condition of the physical irrigation infrastructure); their development potential; their responsiveness towards government's policy intervention; and the way they addressed management problems occurring in the field (Carruthers and Morrison, 1996). In practice, although the organizational development of FWUA/WUAs is essential to measure the actual progress of IMT, this documentation does not necessarily represent farmers' needs in the irrigation system.

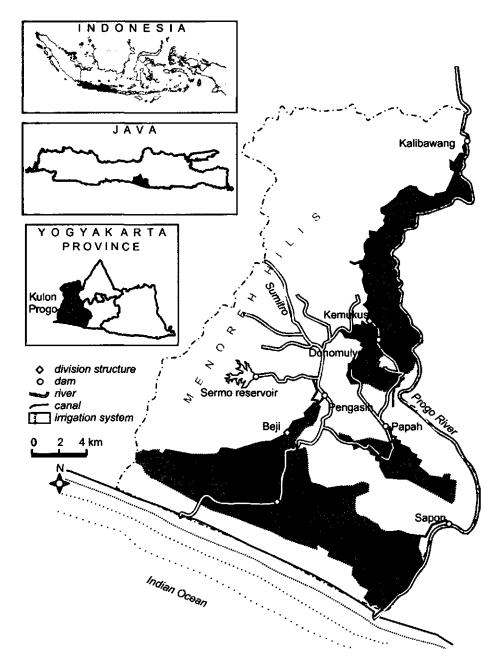
1.2 Background of the research

This study focuses on the IMT policy process in Indonesia. It highlights forces that shaped and reshaped IMT policy formulation and implementation under the Water Sector Adjustment Loan (WATSAL) from 1999 to 2005.

In this thesis, policy is defined as: "A planned impetus, energizer or reflection of constructed and coordinated (induced) change in order to control the production, distribution and use of irrigation resources" (Kloezen, 2002: 7). IMT policy making is viewed as an ongoing negotiation process involving past policies and how these are shaped by the socio-economic and political relations among relevant international and national organizations that formulate and implement irrigation reforms. It challenges the linear conception in policy making, which gives the impression that the government acts unilaterally in formulating policy (Zawe, 2006). It emphasizes that policy has more to do with action than with rhetoric (Anderson, 1997).

Triggered by political reform in Indonesia in 1998, a renewed IMT policy under WATSAL was put into practice as never before. In 2003, only four years after its formulation, the WATSAL IMT program was already applied in approximately 240 irrigation systems across 40 districts and 12 provinces in Indonesia (Consortium of NGOs and Universities, 2003). This is in contrast to the earlier IMT implementation under the IOMP 1987 policy statement. Under the IOMP, IMT was only implemented in small-scale irrigation systems located in the four provinces of Java. Furthermore, in 1997 (ten years after its implementation had started), less than one-third of the scheduled government irrigation systems were actually transferred (Herman, 2003). Under WATSAL, IMT was to be implemented in all irrigation systems regardless of their size. Prior to WATSAL, management transfer was applied only in irrigation systems smaller than 150 hectares. Later, this size was increased to 500 hectares. In addition, in 1999, management transfer was conducted at the secondary canal level up to the irrigation system level. Prior to the political reform, management transfer had been limited to the tertiary unit level with the formation of WUAs as the formal farmer organizations. Though management transfer at the secondary level did take place at that time, this was limited to the pilot cases conducted by the Java Irrigation Improvement and Water Resources Management Project (JIWMP) (Sindorf and Suhardiman, 1998).

Prior to IMT under WATSAL, IMT policy had been implemented in the seven irrigation systems in Kulon Progo district also studied here (with the transfer of decision-making authority to WUAs at the tertiary level). Getting their water sources from both Progo river and Sermo reservoir, these seven technical irrigation systems are interconnected (see Map 1.1) (see Chapter 3 for the definition of the technical irrigation system). For a more detailed illustration of the boundaries of these seven irrigation systems, see Map 8.1. However, these irrigation systems were still managed by the district irrigation agency. In 2000, the management of these systems was transferred to the newly formed Federation of Water Users Associations (FWUAs) following IMT reformulation. At the inter-system level, however, the district irrigation agency is still in charge of coordinating these FWUAs.



Map 1.1: The seven technical irrigation systems in Kulon Progo district

The IMT launched under WATSAL is often viewed by many⁴ as part of the country's wider political movements and sectoral reform, being closely linked to the political momentum of 1998. IMT was viewed as one of the first steps in promoting decentralization of government decision-making authority in the irrigation sector. Similarly, IMT under WATSAL was often seen as a policy measure that promoted democratization because decentralization was viewed as one of the requirements for good governance.

In this study, I distance myself from the question of IMT-decentralization-democratization linkages. Instead, I critically examine the way IMT under WATSAL has been connected to both farmers' and the irrigation agency's actual interests in water resources management, and how it has shaped their relationship in irrigation systems management. Despite the strong presence of decentralization and democratization aspects in IMT (such as the transfer of decision-making authority to lower levels and the increase of farmers' decision-making authority in systems management), the way in which the policy can promote both decentralization and democratization cannot be taken for granted. The first IMT formulation originated from the neo-liberal perspective of cost recovery or privatization of government institutions. It was only during the 1990s that the widespread implementation of renewed IMT policy was linked to decentralization and democratization movements (Groenfeldt, 2000; Easter and Hearne, 1993). Hence, with all these economic and political objectives and ideas becoming mixed up together, the actual policy objectives of IMT became ambiguous. For instance, with reference to the issue of farmer empowerment, it is unclear whether farmer organizations were set up to represent farmers' needs (as part of democratization and civil society movement), or merely as a new instrument for government to reduce its expenditure in irrigation systems management, or for both reasons. Furthermore, IMT formulation did not originate from farmers' popular demands to gain greater decision-making authority in irrigation systems management; rather, it was defined primarily by international and national policy makers as a reaction towards the poor performance of government irrigation systems.

This study investigates how IMT policy is channeled from national down to field level. This channeling is contextualized by linking the process of IMT formulation in the capital Jakarta, with its implementation in the seven technical irrigation systems located in Kulon Progo district, Yogyakarta province. At the national level, the study looks at the way IMT policy documents were formulated in a negotiation process between the different government ministries under the WATSAL Task Force⁵. These ministries are: the National Development Planning Agency (NDPA); the Ministry of Home Affairs (MoHA); the Ministry of Settlement and Regional Infrastructure (Kimpraswil); the Ministry of Agriculture (MoA); and other sector ministries (such as Fisheries, Mining and Energy, Forestry, Trade and Industry). The study also documents a key policy struggle on the principles of IMT in 2003, when the negotiation process was extended to parliament members, political party representatives, and NGOs representatives. At the provincial level, the research focuses on the role of provincial governments (mainly the Provincial Development Planning Agency, PDPA, and the Provincial Irrigation Agency, PIA) in channeling IMT policy formulation to the district level, both prior to and after the policy

struggle. At district level, more emphasis is given to the relationship between the district irrigation agency and the FWUAs in irrigation systems management. Last but not least, at field level, the research focuses on the way IMT is linked to farmers' water distribution activities (from inter-systems level down to farmers' fields) and the relationship between FWUA, WUA, and farmers.

1.3 Researching IMT paradigms

Much of the research on IMT approaches such policies from either the neo-liberal (Carney, 1998; Bauer, 1997; Rosegrant and Binswanger, 1994; Small, 1989) or the neoinstitutionalist perspective (Vermillion and Sagardov, 1999; North, 1990), From the neoliberal perspective. IMT policy is studied in relation to more general economic problems rooted in the poor performance of government-managed irrigation systems and the high financial requirements of the irrigation agency to manage these systems, and thus the need for cost recovery. Some examples from this neo-liberal perspective include studies on irrigation services undertaken by Gerards (1992) and Frederiksen (1992), as well as critical analysis of the financial autonomy of the irrigation sector and privatization conducted separately by Svendsen (1994) and Kloezen (2002). Within this perspective, the (financially) inefficient irrigation agency was viewed as the main obstacle to improve system performance (Svendsen, 1993; Moore, 1989; Repetto, 1986). Most studies⁶ on IMT hardly ever link the irrigation agency's organizational characteristics, or its actual functioning, with the basic policy assumptions of IMT. Similarly, literature on IMT from the neo-institutionalist perspective tends to promote the idea of farmer participation and facilitation (see for example, Vermillion and Sagardoy, 1999; Coward 1986a). How farmers actually perceive their 'promoted' involvement in irrigation management is seldom discussed.

Both these perspectives have roots in a strong social engineering approach by public agencies (Barker and Molle, 2003). Assuming that new institutions can be crafted separate from the influence of the existing institutions, documentation on IMT often ignores the power struggles that shape the actual process of transfer. IMT policy is studied primarily in relation to the crafting of the new irrigation organizations consisting of farmers and other water users, which with properly designed rules and regulations will function better than the irrigation agency (Ostrom, 1992). More emphasis is placed on the policy inputoutput relationship, rather than on understanding the mechanisms of the institutional change. For example, research on IMT policy practices conducted by the International Water Management Institute (IWMI) and Gadiah Mada University in Indonesia focused on the outcomes and impacts of IMT policy (Vermillion, Samad, Pusposutardio, Arif and Rochdyanto, 2000). In that research, IMT policy was analyzed in relation to certain defined performance indicators (such as irrigation intensity, relative irrigation supply, physical condition of the irrigation infrastructure, cost of irrigation, maintenance expenditure, and financial capability of the newly formed farmer organizations). Although such research gives a valuable overview of the way IMT policy has changed the present practices in irrigation management, it lacks the ability to explain the reasons behind any (un)changing situations or how IMT implementation is shaped by both farmers and the irrigation agency.

This thesis moves beyond these neo-liberal and neo-institutionalist perspectives. It examines the political aspect in IMT policy that often remains hidden under the technical and managerial aspect of policies, and aims to increase understanding of them. As stated by Mollinga and Bolding: "The word 'politics' is virtually absent in the formal policy discourse on irrigation reform" (Mollinga and Bolding, 2003: 4). Yet, the fact that the political dimension in IMT is hardly acknowledged does not mean that actors are unaware about the policy's political aspect. On the contrary, in Indonesia, the political aspects of IMT often are often discussed informally, by high-level government officials, behind closed doors.

Since around 2003 the political dimension in IMT has become more widely acknowledged. Under the new development focus on good governance, more emphasis has been given to the political aspect of policy (Mollinga and Bolding, 2003; Moore, 2004, 2001). For example, in 2004 the World Water Council organized a meeting on water and politics to raise awareness of the importance of political issues in water policy reforms. During the same year, a special program to fight corruption practices in the water sector was established within the Stockholm International Water Institute. Within the World Bank, a special program on governance and anti-corruption measures was initiated.

Nevertheless, discussion on the issue remains limited to the settings of international seminars or workshops (usually arranged by the international agencies, involving national policy actors from the developing countries). It is thus rather isolated from the concrete context of IMT policy formulation and implementation. An understanding of the irrigation agency's bureaucratic mechanisms and their role in shaping IMT policy formulation and implementation has remained largely absent in IMT policy research⁷. For Indonesia, studies by Bruns show the way the irrigation agency resisted IMT policy under the IOMP 1987 statement (Bruns, 2003; Bruns and Atmanto, 1992). However, it remains unexplained how this resistance is linked to the agency's bureaucratic identity and mechanisms.

More in-depth research on the agency's bureaucratic identity and working mechanisms is required to understand the agency's perceptions about IMT and how this perception directs actual policy outcomes. This need to conduct research on the agency's bureaucratic identity is also raised by Mollinga and Bolding (2003) (see also Zawe, 2006). In their book on the politics of irrigation reform, they identify three themes for further research. These are: the resilience of the irrigation agency in resisting reform, the role of international donor agencies, and the reshaping of reform policy in the implementation process (see also Rap, 2004; Khanal, 2003).

This study focuses on the political dimensions of IMT that have been embedded in the policy's objective to reduce the irrigation agency's control over irrigation sector development through the formation of farmer organizations. Referring to the four levels of

politics identified by Mollinga and Bolding (2003), I first focus on the level of 'politics of policy'. At this level, I highlight how the IMT policy has been viewed by the irrigation agency in relation to its bureaucratic identity, and how this view has shaped the agency's strategy to steer both IMT formulation and its implementation. The role of international donor agencies is studied here only when it is relevant to the irrigation agency's strategies and interest in IMT. This study also sheds light on the way IMT has been perceived by different policy actors (defined here as policy makers, government officials, farmer group leaders, NGO representatives, parliament members, contracting agencies, and farmers), according to their interests and access to resources, and thus their room for maneuver in shaping actual policy outcomes. Later, I move further down to the level of farmers' fields in my research and emphasize more the so-called everyday politics in irrigation management practices (Kerkvliet, 1990). Despite the study's focus on the political aspect of IMT, it does not treat the relationship between FWUA/WUA (as government-induced farmer organizations) and the irrigation agency as a zero-sum power relationship. Rather, this research concentrates primarily on finding alternative concepts to reconcile the conflicting perceptions. It argues that as long as the relationship between these government-induced farmer organizations and the irrigation agency remains dichotomous, IMT policy can and will always be resisted by the agency. At the national level, this resistance to change became evident during the IMT policy struggle in 2003. At that time, resisted by the very agency charge with its formulation and implementation, IMT policy under WATSAL underwent major revisions.

1.4 Conceptual framework

Findings from policy research in general have been fertile ground for policy discourse and discussion in policy sciences. However, research on IMT policy is hardly directed by the theoretical discourse in the policy sciences. Equally an understanding of bureaucratic design and reform is hardly linked with discourses in public administration. With reference to this problem of theoretical discrepancy, I develop a conceptual framework primarily from policy sciences to explain how IMT policy (formulation and implementation) is shaped by the policy actors. Central in this analysis is the mapping and understanding of their perceptions, interests, and strategies. In this study I use a combination of the following concepts.

1.4.1 Policy as a process

I view policy as a process (Clay and Schaffer, 1984). Referring to the post-positivist approach in policy studies (Kingdon, 1995; Pressman and Wildavsky, 1984; Lasswell, 1962, 1958), my research emphasizes producing insights into the dynamics of concrete policy context, rather than attempting to predict IMT policy outcomes.

The main advantage of viewing policy as a process is that I can analyze IMT policy in its totality. For instance, I analyze IMT policy concepts under WATSAL in relation to the way the country's sectoral development has been directed through the so-called project approach since the late 1960s and how this approach has shaped the present bureaucratic

identity of the irrigation agency. Similarly, I analyze the origin of IMT policy formulation and implementation in Indonesia in relation to the shifting international policy trends in irrigation development. In addition, I can connect the different stages in policy making, and thus link decisions made during policy formulation with the policy's actual implementation. This is in contrast to the mainstream linear model of public policy that represents policy as a dichotomous linear process of two distinct but sequential phases (formulation and implementation). In this way, I can analyze IMT policy as a series of decisions and actions, constructed by human agents who have multiple, often conflicting, and sometimes changing, perceptions and interests, instead of being constricted into the stages of policy formulation and implementation (Turner and Hulme, 1997).

Viewing policy as a process enables me to focus on policy practices, and thus on what policy actors actually do. I argue that a better understanding of how and why policy actors act on IMT can be gained only when we know their perceptions of the policy. Put another way, this study explains what actually happened between the objectives of a policy and its outcome. As stated by Griffin: "Rather than assume that governments attempt to maximize social or national welfare but fail to do so, it might be more suitable to assume that governments have quite different objectives and generally succeed in achieving them. Rather than criticizing governments for failing to attain, or offering advice on how to attain a non-goal, it would be instructive if more time were devoted to analyzing what governments actually do and why" (Griffin, 1975: 2). In short, in this research I focus on discovering and understanding policy actors' strategies (as the representation of their policy perceptions and interests) and their room for maneuver (Clay and Schaffer, 1984) in shaping actual IMT policy formulation and implementation. Though Griffin focuses on the role of governments in shaping policy processes, the range of policy actors in this study is broadened from government staff only, to parliament members, and NGO representatives as well as farmers.

However, there are also some limitations to policy process analysis. These limitations were brought to light by the advocates of the positivist approach (Sabatier, 1999). These include the theory's inability to define causal relationships or to provide a clear basis for empirical hypothesis testing, which in turn limits the policy analyst's ability to confirm, amend or fabricate the required 'policy situation'. Sabatier has criticized the theory with regard to its descriptive inaccuracy, as well as its failure to provide a good vehicle for integrating the roles of policy analysis and policy-oriented learning throughout the policy process. Reacting to this criticism, advocates of the post-positivist approach argue the positivist approach's focus on prediction (Ricci, 1984) (for a more elaborate description of this discourse, see de Leon, 1998). For instance, Ricci argues that the problem with prediction hinges on a positivist orientation that consciously excludes normative considerations or treats them as hidden assumptions (Ricci, 1984). More centrally, Danziger (1995) argues that unlike what is often assumed by the positivists' research, 'objective' analysts or agencies are anything but unbiased or objective.

In this study I symbiotically use the theoretical concepts from both approaches to support my research analysis. I base the selection of theoretical concepts in this study on the characteristics of the research problems, rather than on theoretical preferences (de Leon, 1998). For instance, it is clear that no prediction with regard to IMT policy outcomes can be made without first understanding how the policies have been perceived by both farmers and the irrigation agency. I think it is more important that my research focuses on IMT policy dynamics rather than on hastily producing recommendations and guidelines to improve the IMT policy outcome, bearing in mind the complex situation in which IMT policy is applied. As stated by de Leon: "Policy research must arrive at some sort of a conclusion, but it is inappropriate to come up with the 'wrong' answer, no matter how 'precise' or exactly documented" (de Leon, 1998: 158).

1.4.2 Politics of policy theoretical perspective

I use the politics of policy theoretical perspective (Grindle, 1990) to understand the actual dynamics of IMT policy under WATSAL. Like policy process analysis, the politics of policy theoretical perspective originates from the post-positivist approach in the study of policy making (Howlett and Ramesh, 1998). It views policy as being established out of political contestation (Rochefort and Cobb, 1993; Hilgartner and Bosk, 1981; Spector and Kitsuse, 1977). Referring to the way the language of politics constructs public policy, the post-positivist approach focuses on the way a policy problem is recognized, acknowledged, and defined as a result of political processes. As stated by Edelman: "Problems come into existence, not simply because they are there or because they are important for well-being. They constitute people as subjects with particular kinds of aspirations, self-concepts and fears, and they create beliefs about the relative importance of events and objects. Most importantly, they are critical in determining who exercise authority and who accept it" (Edelman, 1988: 12-13).

In this study I use the politics of policy theoretical perspective to analyze IMT policy in the whole trajectory of problem definition, the inclusion of these problems on the policy agenda, the shaping of this agenda by policy makers, and the channeling of the policy for its implementation. For this purpose I focus first on the way management problems in government irrigation systems were defined under the IOMP in 1987 and how the irrigation agency shaped the first IMT implementation under the IOMP policy statement. Similarly, I link this problem definition with IMT formulation under WATSAL in 1999, and with how the irrigation agency approached the IMT policy renewal at that time.

The politics of policy perspective has three major conceptual advantages. Firstly, it suggests a continuous decision-making process throughout policy formulation and its actual implementation. It highlights the crucial role of negotiation processes, resource allocations, and alliance formation in policy processes.

Secondly, the politics of policy theory highlights the policy elites' interests, perceptions and strategies, in relation to the (to be) defined policy. Unlike other theories that presume rational decision making in policy processes, the politics of policy theory focuses on the way policy formulation and implementation is shaped by political practices applied by the policy elites (policy makers and managers). In addition, the politics of policy theory

acknowledges the need to include other policy actors (including farmers, irrigation field staff, local leaders, regional government staff in this context) as part of the policy analysis, despite the focus on the policy elites. It argues that the policy elites' autonomy to shape policy processes is neither as constrained nor as independent as current theoretical approaches suggest (see for example Eisenstadt, 1963, on the issue of patron-client relationships in policy decision making).

The third conceptual advantage of the theory is that it includes circumstances unique to a particular policy initiative as an essential part in the policy analysis. Here, the characteristics of the proposed policy change are analyzed in relation to other significant contextual elements, and thus not in isolation from the existing power structures, relationships and power struggles. For example, whether a reform initiative is made under a political and economic crisis, or under conditions that can be termed as 'politics as usual', is critical in understanding the stakes involved in the reform, the decision-making process, the degree of change introduced, and the actual proceedings of the proposed reform (Grindle, 1980).

Given the above advantages, the politics of policy theoretical perspective is essential to understanding the overall negotiation process in the Indonesian IMT policy struggle that took place from 2003 to 2005. Using the theory, I focus my research on how the different forces in the central government ministries attempted to sustain and reshape IMT policy elements as defined under WATSAL.

1.4.3 The concept of bureaucratic designs

I use the concept of bureaucratic designs (Moe, 1989) to analyze the irrigation agency's bureaucratic identity in Indonesia. The concept originates from public administration literature, focusing primarily on the American public bureaucracy (Bozeman and Rainey, 1998; Barnard, 1938). Comparable with the way the political aspects in the policy-making process is highlighted in the politics of policy theoretical perspective, the concept of bureaucratic designs highlights the political process that shapes the structure of government bureaucracy. It argues that the structure of government bureaucracy is designed to represent the interests of the 'winning group', as bureaucratic structure emerges as the result of political interactions between different interest groups.

The concept of bureaucratic designs has three conceptual advantages. Firstly, it includes the structure of the bureaucracy and the behavior of bureaucratic actors in its analysis⁸. Put another way, as the conducts of bureaucratic actors reflect the established bureaucratic procedures and rules, these conducts become part of the mechanisms that preserve the existing bureaucratic structure. The interplay between bureaucratic structure and mechanisms becomes apparent in my analysis of the structural properties of the irrigation agency in Indonesia. The concept of bureaucratic designs enables me to analyze the practice of bureaucratic rent-seeking in the irrigation not only as a product of 'bureaucratic capitalism' (see also Chapter 3 for a definition of bureaucratic capitalism),

but also as the driving force that preserved and reproduced the existing bureaucratic structure.

Secondly, the concept of bureaucratic design challenges the notion that government bureaucracy can be used as a neutral instrument to perform certain tasks or to reach certain objectives (Toye, 1988). It reveals that, like any other organization, government bureaucracy has an identity of its own. In contrast to Weber's idea of bureaucracy, the concept of bureaucratic designs highlights how government bureaucracy is formed and shaped by different interest groups incorporated into informal networks within the formal organization structure (Perrow, 1972).

Thirdly, the concept of bureaucratic designs includes the relationship between bureaucrats and politicians in its analysis. It highlights the role of the president in imposing his/her own layer of structure on top of the legislative organ. As stated by Moe: "The president will try to ensure that agency behavior is consistent with broader presidential priorities" (Moe, 1989: 285). In Indonesia, the bureaucrats-politicians nexus is particularly important to analyze how the irrigation agency's bureaucratic identity is linked to the political relationship between the president and his/her ministers.

1.4.4 The concept of interdependencies in policy network analysis

I use policy network analysis to map policy actors' relationships from national down to field level and how these developed over time (before, during and after the policy struggle of 2003). For instance, I investigate how the outcome of the policy struggle at the national level was translated to the district level by the provincial government. Similarly, I monitor how the district government justified their position on IMT and coped with the overall IMT implementation in the aftermath of the policy struggle.

Policy network analysis⁹ focuses on the interdependent relationships between policy actors (Klijn, 1996). In this study, policy networks are defined as "stable patterns of social relationships between interdependent actors, which take shape around policy problems or policy programs, and that are being formed, reproduced, and changed by an ecology of games between these actors. A network is not a static entity, but changes over time as a result of the ongoing series of games" (Klijn, 1996: 5). Here, a game is defined as "an ongoing sequential chain of strategic actions between different players (actors) governed by formal and informal rules that develop around issues or decisions in which actors are interested. In these games, actors try to influence policy processes by strategic behavior" (Klijn, 1996: 5).

Within policy networks analysis, I analyze the establishment of rules of the games (which often reflect existing norms) and how these are preserved or changed by policy actors' strategic maneuvers, and their (changing) access to resources. In Ostrom's institutional analysis development framework (Ostrom, 1999), rules¹⁰ are defined as "shared prescriptions (must, must not or may) that are mutually understood and predictably enforced in particular situations by agents responsible for monitoring conduct and for

imposing sanctions, whereas norms are defined as "shared prescriptions that tend to be enforced by the participants themselves through internally and externally imposed costs and inducements. In addition, strategies are defined as the regularized plans that individuals make within the structure of incentives produced by rules, norms and expectations of the likely behavior of others in a situation affected by relevant physical and material conditions" (Ostrom, 1999: 37). Based on these rules, decisive factors behind the formation, abruption, unification or transformation of policy networks are identified.

One of the main advantages of policy network analysis is that it does not limit the formation of these networks (as structural and functional relationships) within a particular organizational or contextual domain. On the contrary, it focuses on the increasingly complex (mutual) interdependencies that exist between groups and alliances, represented by a complex configuration of actors and institutions, clustered around different domains of activities.

1.4.5 The process of alliance formation and the advocacy coalition framework

I use the advocacy coalition framework to synthesize the internal conditions in which policy actors decide to join and withdraw from existing policy networks, or to form new networks within the overall negotiation process of IMT policy formulation and implementation. According to the framework, policy change can only take place when the belief system of the policy community is altered (Sabatier, 1988). This belief system consists of normative and causal values shared by the members of the alliance, and thus referred to by these members as their ideological basis on which to act in concert. Central in this belief system is the role of policy elites in shaping and directing the actual meaning of the proposed policy reform. Hence, each alliance may revise its beliefs and alter its policy strategy on the basis of these elites' (changing) perceptions. In addition, the framework also acknowledges the role of wider social, economic and political conditions in influencing these elites' perceptions (Heclo, 1985).

The main advantage of the advocacy coalition framework is that it takes into account policy actors' perceptions about IMT in relation to their formal policy position (according to the organization's policy guideline). It highlights the causal relationship between policy actors' perceptions and interests in relation to a certain policy, their coalition forming tendencies, and their policy strategies. For my research in particular, this causal relationship is essential in my analysis of how officials in the irrigation agency maneuvered their position on IMT both formally and informally prior to, during, and after the IMT policy struggle of 2003. In this way, I can link the actual outcome of policy change and the evolution of the belief system, essential in reshaping the agency's bureaucratic mechanisms, and thus in transforming its bureaucratic identity.

Furthermore, the advocacy coalition framework highlights how policy actors can have completely different opinions from the formal policy guideline as defined by their organizations. For instance, irrigation agency officials often joined alliances outside the

agency's organizational context, despite the agency's formal resistance to IMT. Similarly, not all staff from the National Development Planning Agency were supportive of the proposed policy reform, despite the agency's formal position as the main promoter of IMT under WATSAL. In addition, the advocacy coalition framework suits my research because it includes an intergovernmental dimension, and thus involves actors from all levels of government in its analysis. It argues that to examine policy change only at the national level will, in most cases, be seriously misleading¹¹ (Sabatier, 1993).

The incorporation of this process of alliance formation into the policy network analysis is presented in Figure 1.1.

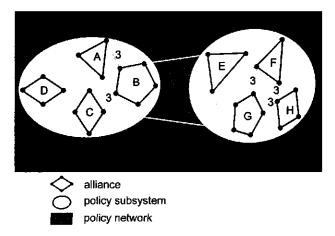


Figure 1.1: Alliance formation, policy subsystems, and policy networks analysis

1.4.6 The concept of water control

The concept of water control refers to technical, organizational, and political aspects of water distribution activities in the irrigation system (Mollinga, 1998). The main advantage of this concept is that it puts the spotlight on the connection between irrigation management practices and wider socio-economic and political contexts (see Mollinga, 1998, for a more elaborate description and discussion on the three dimensions of water control). The theory highlights political practices as part of the overall dynamics involved in water distribution activities (see also water control as part of 'everyday politics' in Kerkvliet, 1990). It brings to light how the actual systems management is constantly shaped by the outcomes of policy actors' continuous negotiations to ensure their irrigation water or their access to construction and maintenance funds. A major disadvantage of the socio-technical perspective in irrigation management relates to its inability or lack of uptake to help develop programs and strategies that support the sustainability of irrigation (Helmi, 2000).

This study highlights how policy actors' strategies are partly defined by their field locations in the system's technical hierarchy, and by the way technical infrastructure in the system is composed to regulate the water delivery schedule. By reference to these technical characteristics, the role of this irrigation infrastructure in shaping and directing the policy reform process can be studied via the social shaping or social construction approach to irrigation technology (Mollinga, 1998; Huppert, 1989; Uphoff, 1986). Within the approach, the social dimensions of irrigation infrastructure can be analyzed through the concept of social requirement for use (Mollinga, 1998). This concept argues that, as irrigation infrastructure is designed with a particular objective in mind, its principles of operation can be achieved only if the required technical and organizational conditions are met. In this study, the social requirements for use of the irrigation infrastructure are analyzed in relation to the infrastructure's actual functioning, as shaped by both farmers and the irrigation agency staff and the change under IMT.

1.5 Research questions

The above combination of conceptual frameworks conveys the central questions I try to explore and answer in this study. The general question the thesis addresses is the following.

How have government actors and farmers shaped the negotiation processes and actions in IMT policy formulation and implementation at different levels in Indonesia?

Within the frame of this general question, some more specific questions are explored.

- How has the identity of the irrigation agency emerged and influenced IMT policies?
- How has IMT policy in Indonesia been formulated and implemented in relation to both the influence of international policy trends and the national government's policy initiatives?
- How did the irrigation agency at different administrative levels cope with the internal contradiction in implementing IMT policy between the second and third tranche of WATSAL?
- How did IMT prescription under WATSAL transform actual water distribution practices?

Geographically, the last sub-question is studied in the seven interconnected irrigation systems in Kulon Progo district, Yogyakarta province.

1.6 Research methodology

I use the general concept of grounded theory as my research methodology. This methodology highlights the link between theory and practice, and thus the development of

theory as a process (Strauss and Corbin, 1990). I chose this methodology for the following reasons.

Firstly, with grounded theory I could focus on the development of complex relations, instead of causal relations only, and how these shape the overall process of management transfer. As IMT is shaped by policy actors' different perceptions, interests, strategies, and access to resources, its actual outcome is often the result of different types of relationships and interaction between these actors. Sometimes, the relationship becomes so complex that it is hard to define what is causing what. For instance, in the case of corruption practices shifting from the irrigation agency to the FWUAs, while I could identify the main reasons behind this shift, I found it difficult to synthesize these reasons into a single causal explanation. Though being aware of the complex nature of the research's subject, I never had the intention of reducing this complexity to a single explanatory causal relation.

Secondly, using grounded theory methodology, I could focus on the practices that took place during the policy formulation and its implementation. Here, systematic sets of data obtained from actual practices in irrigation management, as well as the interaction between policy actors in different policy domains, are regarded as the structural representation of concrete reality, perceived by the researcher through predictions, explanations and interpretations of policy actors' conduct and actions. I am aware that the formation of this concrete reality is a highly subjective and biased experience defined primarily by the researcher's ability to grasp the actual process of policy shaping. Hence, to reduce the degree of subjectivity in this research, I also include data from secondary sources (such as policy reports on IMT, project documents, newspapers articles on the policy struggle, and how issues in policy struggle were reviewed in the irrigation agency's journals) in my overall research analysis.

Further, I use in-depth case-study research to gain better insights and understanding about the actual meaning of IMT policy for the policy actors (Yin, 1994; Burawoy, 1991). Included in this case study is the way IMT policy was shaped by: the national government ministries (the irrigation agency within the Ministry of Settlement and Regional Infrastructure, the Ministry of Home Affairs, and the National Development Planning Agency); provincial governments (the Provincial Irrigation Agency and the Provincial Development Planning Agency in Yogyakarta province); district governments (the Division of Provincial Irrigation Services and the District Development Planning Agency in Kulon Progo district); as well as by FWUAs, WUAs and farmers, respectively at system, secondary, tertiary, and field levels of the seven technical irrigation systems in Kulon Progo district.

1.7 Research site selection

The Kulon Progo district was selected for several reasons. Firstly, Kulon Progo district was one of the first districts on Java where IMT under WATSAL had been widely implemented since 2000. Different elements (irrigation service fees, participatory rehabilitation, and maintenance) in IMT policy had already been experimented with

within some of the irrigation systems in the district since as early as 1998 (as part of the JIWMP-IDTO field laboratory site). In some other districts, IMT was only initiated as late as 2002. This 'long' duration of IMT under WATSAL became important, especially in relation to Kimpraswil's attempt to halt IMT implementation in 2003. I assumed that the longer duration of IMT implementation would result in a greater ability (on the part of both FWUA/WUA and district government) either to counteract Kimpraswil's policy directive, or to cope with the consequences of this directive at the regional level.

Secondly, Kulon Progo district was among the few districts in Java where the district government had formally manifested their decision to continue with IMT implementation. During the meeting of the Irrigation Committee that took place on 4th of March 2004, the district government staff from both the District Development Planning Agency (DDPA) and the District Water Resources Services (DWRS) agreed to continue with IMT implementation and solve the possible financial problems that might occur during the implementation (see the meeting notes, 4 March 2004). On 13 March 2004, this manifestation was presented to the head of the district, during a formal government meeting. In my opinion, insights on farmers' capabilities and the presence of grass-roots forces could only be gained if the case study focused on a district that opposed Kimpraswil's efforts towards recentralization, given that this study on IMT implementation was conducted in the aftermath of the 2003 policy struggle.

Thirdly, the strong presence of NGOs in IMT implementation in the area was an important asset in the attempt to facilitate farmers' direct involvement in IMT. Possible contributions from these NGOs were important, primarily concerning the way IMT could have crafted farmers' decision making.

Last but not least, my site selection of only districts on Java was related to my attempt to take into account IMT implementation during the pre-WATSAL policy period. By focusing my field site on districts on Java, where IMT had been continuously implemented through different projects since the formulation of the IOMP 1987 policy statement, I could describe IMT policy evolution both in its formulation and implementation. In addition, I could also use the history of IMT implementation on Java as general information to enrich my insights with regard to farmers' capabilities and FWUA/WUA organizational characteristics, as well as the relationship between farmers, FWUA/WUAs, and the irrigation agency.

1.8 Research methods

In this study I used social-anthropological research techniques, such as participant observation, semi-structured interviews, field observations, and key informant analysis (Johnson, 1978; Bogdan and Taylor, 1975). In addition, I also used participatory research methods, such as problem assessment and focus group discussion to understand the reasons behind policy actors' strategies towards IMT policy.

Including the time spent at the national level, and the local level, my field research took a total of twenty months, conducted between November 2003 and June 2005. An overview of time spent at the different administrative levels is presented in Figure 1.2.

The amount of time spent at each administrative level does not correspond with the richness of data gathered at each particular level. For example, given the greater coverage and scope of the field research conducted at the district level down to the farmers' fields, a longer time for data collection at these levels was required. At these levels I undertook research with farmers, FWUA/WUA staff, and the irrigation agency staff on their involvement in shaping IMT policy in the seven technical irrigation systems. Furthermore, considerable time was spent gaining insights into the systems' interconnection, given both the technical and the organizational complexity of these run-of-the river systems. Similarly, although only twenty-five percent of my total time in the field was spent collecting data at the national level, this does not mean that fewer insights were gained with regard to the perceptions of national policy actors about IMT. On the contrary, I was able to gain tremendous insights on how the IMT policy process was shaped by policy actors from different government departments, NGO representatives, and parliament members from the relatively short time (four months) spent on data collection at that level.

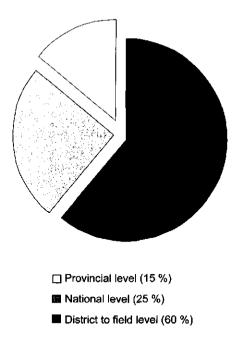


Figure 1.2: Overview of the proportional distribution of time spent on field research

An overview of time distribution in my field research and the focus of the research at each administrative/hydraulic level are presented in Table 1.1.

Table 1.1: Overview of time distribution in the field research and research focus at each administrative/hydraulic level

Administrative/ hydraulic level	Policy actors	Research focus	Duration of field research
National level	Both bureaucratically active and retired officials from Kimpraswil, MoHA, MoA, and the NDPA. Parliament members (within the Commission IV) -Ministerial staff belonging to the WATSAL Task Force -NGO representatives (LP3ES, consortium of NGOs and universities, INFOG) -Officials from the World Bank and the Royal Netherlands Embassy	-Actual decision-making process in parliament (concerning the promulgation process of the new Water Act) -The formation process of different alliances in the IMT policy struggle -Policy actors' interests, strategies and access to resources to influence the outcome of the policy struggle	4 months November 2003- February 2004
Provincial level	-Provincial government staff (PIA and PDPA) -Former and current project heads	The role of provincial government in shaping IMT implementation, prior and after the promulgation of the new Water Act	3 months March 2004- May 2004
District level down to irrigation systems level	-District government staff (DPIS, DWRS, and DDPA) -Regional NGOs representatives -System WUA leaders and staff -Irrigation Committee	-Both district government's and system WUA leaders' ability to cope with the consequences of the struggle -The relationship between the irrigation agency and system WUA -The shaping of inter-systems water distribution arrangements -The systems' interconnection linkage to inter-WUAs organizational platform	12 months June 2004 May 2005
Secondary level down to tertiary level	-FWUA leaders and staff -WUA leaders and staff -Village government staff	 Actual water distribution practices at secondary level down to farmers' fields Organizational link between FWUA-WUA and farmers 	12 months June 2004- May 2005
Farmers' fields	-Head-, mid-, and tail-end farmers	-Farmers' actual development needs in irrigation system management -Farmers' perceptions, knowledge on IMT, WUA/FWUA -Farmers' strategies in water distribution practices	1 month May 2005- June 2005

I pursued my field research in Jakarta, from November 2003 until the end of February 2004. Coinciding with the IMT policy struggles in September 2003. I focused my data collection on gathering different perceptions on IMT from government officials¹² at the central ministries (Kimpraswil, the MoA, MoHA and the NDPA). I did this through individual interviews, as well as direct observations and informal conversations with policy actors, conducted during both internal and external ministerial meetings, seminars, and workshops. I had semi-structured interviews with officials from the World Bank and the water sector officer from the Royal Netherlands Embassy in relation to the important role played by international donor agencies in promoting IMT formulation under WATSAL, Next, I directly observed both the formal and actual decision-making process within Commission IV of the parliament following the promulgation process of Water Act Number 7 of 2004. From these observations, I was able to link the different strategies adopted by government ministry staff, NGO representatives, and farmers in channeling their policy perceptions on IMT to the parliament members, Assisted by the heated policy situation. I was able to directly observe the way parliament members interacted with staff of different government ministries, as well as FWUAs and NGO representatives, during both formal parliamentary discussion forums and their informal meetings. In addition, I had the opportunity to catch a glimpse of farmer demonstrations arranged by several NGO representatives during that time of policy struggle.

After the promulgation of the new Water Act in February 2004, I continued my field research at the provincial level from March until the end of May 2004. At the provincial level, I collected data on policy actors' perceptions, strategies, and resources to shape IMT policy outcomes through individual interviews with provincial government staff from the Provincial Development Planning Agency and the Provincial Irrigation Agency in four provinces on Java (West, Mid, East Java and Yogyakarta province). Also, direct observation was made of the provincial government's role in channeling the policy struggle to the district level either through information dissemination (through regional workshops, seminars, and training on IMT policy in the post-WATSAL period) or indirectly through the halting of project funding. Next, I conducted in-depth interviews with both former and current project heads from four provinces on Java in relation to their important role in directing the actual implementation of IMT.

In June 2004, I started my field research at district and inter-system level down to the tertiary level. As this research was undertaken until July 2005, I was able to cover the full agriculture cycle and thus witness the annual water distribution pattern in the seven irrigation systems in Kulon Progo district. At this level, I used the same research methods (semi-structured interviews, focus group discussions, problem assessment, and direct observation). At the irrigation system level, focus group discussions were conducted with some of the FWUAs and WUAs. Furthermore, with regard to the organizational development of these FWUAs, I was able to witness the election process of two FWUAs. I also attended different inter-FWUA, FWUA, FWUA-WUA and WUA meetings on different aspects of irrigation management and IMT. I enriched my understanding about how FWUA/WUA staff viewed their relationship with the irrigation agency, and with other government staff involved in IMT implementation, NGO representatives and

farmers through issues discussed in these meeting (including FWUA/WUA staff elections, the actual management of the rehabilitation fund, ISF collection, water distribution arrangements, and the process of proposal making for systems rehabilitation). In addition, I also studied the role played by the newly formed Irrigation Committee in shaping and directing the district government's position towards Kimpraswil's demand to halt IMT policy implementation. At this level, I also monitored and observed the actual water distribution practices at the inter-system level, as well as between the secondary canals within a system. I attended the water distribution meetings conducted every ten days (tenday water distribution meetings) by the DWRS staff to gain insights on how water distribution was arranged by both the irrigation agency and FWUA after IMT. I linked FWUA/WUAs' involvement in irrigation system management with the overall intersystems coordination conducted by the DWRS staff, Based on this link, I analyzed the possibility for the development of an inter-FWUA/WUA decision-making platform. In addition, I focused my monitoring activities on the so-called points of intersection within and between the irrigation system(s). These points of intersection are specifically the Kemukus and the Beji division structures.

At first, I did not intend to go below the tertiary level. However, from my field research from the inter-system level down to the tertiary level, I was quite overwhelmed by the degree of rural elite domination in both FWUA and WUA organizational composition. Hence, at the end of my field research, I added a small-scale random 'survey', involving thirty-two farmers spread over the seven technical irrigation systems. Through this survey, I focused my data collection activities on farmers' opinions, knowledge, and involvement in IMT, as well as their actual water distribution practices. Linking this survey data with the way FWUA/WUA organizational functioning was directed by the rural elite's interests, I elucidated the different ways farmers could channel their needs through their relationships with the elite.

I used key informant analysis to guide and cross-check the data I gathered from observations and interviews with the policy actors. At the national level, my key informants consisted of senior officials from the MoA, and some mid-level officials from the NDPA, MoHA and Kimpraswil. At the regional level, I relied on my key informants from the PIA and the PDPA in Yogyakarta province, as well as on some staff from the DWRS in Kulon Progo district. My key informants at the irrigation system level down to farmers' fields included some FWUA staff as well as farmer leaders¹³ from the seven irrigation systems. At the end of my field research, I took an additional month to discuss my research findings with my key informants at the national level. Included in this discussion was the historical analysis presented by these key informants with regard to irrigation policy development and the establishment of the irrigation agency's bureaucratic identity.

1.9 Research limitations

One major limitation of this research is that I gathered my data on bureaucratic mechanisms from interviews primarily with government officials and other policy actors.

Hence, it can easily be argued that my analysis of the rent-seeking practices in the irrigation sector's development is not based on hard evidence such as the actual financial audit of project fund. I have not even seen the account book in which the irrigation agency registers its non-budgetary expenses. However, despite this lack of hard evidence, I am confident that this research provides valuable data on the bureaucratic identity of the irrigation agency, namely, in relation to how this identity governs the agency's position and strategies towards the proposed policy reform. Similarly, I use the international literature on rent-seeking by public agencies as my frame of reference in describing the government agency's actual functioning during the New Order government, because this type of literature is lacking in the Indonesian context. This lack of public discourse at the national level was due to the oppression of the free press during the past thirty-two years of the New Order reign.

I also failed to link some of the analysis on the transitional characteristics of the Indonesian state (with regard to 'political party partisanship') to the wider literature because I based this analysis primarily on first-hand information from the policy actors directly involved in the process of state transformation. These policy actors included university staff, NGO leaders, and government officials at the national level. I am confident, however, that this information is a valuable contribution to the wider research on the Indonesian state, given these informants' knowledge of the ongoing process of reform and their experience in shaping these processes. Other researchers may find it interesting to interpret the findings presented in this thesis in that broader context.

Another limitation of this research relates to the absence of actual flow measurements in my water distribution analysis. I gained an overview on how irrigation water was distributed between the systems, and between the different hydraulic levels in the systems primarily through direct observation in the field and from the actual discussions or conflicts that took place during the ten-day water distribution meetings. However, without actual flow measurements, this research lacks the technical evidence either to support my understanding of the water distribution practices, or to pose questions. Nevertheless, this does not mean that this research is unable to provide a technical explanation of how irrigation water is distributed to farmers' fields.

Neither did I include actual rainfall data in my water distribution analysis. Theoretically, I could only detect unequal water distribution practices, if the water scarcity problem resulting from this unequal distribution was not compensated for by the rainfall in the area. For example, despite the unequal water distribution practices, tail-end farmers would not complain as long as their crop water needs could be adequately met by the actual rainfall. Put another way, the absence of conflicts over water distribution practices did not necessarily mean that irrigation water had been distributed equally. In short, this research lacks the technical evidence to show whether unequal water distribution is caused by poor systems management or by the reduced amount of rainfall due to severe droughts. Yet, despite this limitation, I am confident that I show water control adequately (given that my research priority is on the politics of IMT policy) because I was able to gain insights on

the way policy actors shaped the actual water distribution practices, and thus how their strategies could eventually affect the overall systems management.

In addition, I could only include a small number of farmer respondents during the last month of my field research because I did not anticipate that the rural elite's involvement in directing the organizational functioning of FWUA/WUA would be so overwhelming. At each hydraulic level, down to the tertiary, WUA/FWUA management is dominated by the rural elite. In turn, it might be argued that the general picture of how farmers perceive IMT and deal with their irrigation practices cannot be based only on the information I obtained from those thirty-two farmer respondents.

Finally, in focusing my field research on irrigation systems on Java, I limit the characteristics of my research respondents and situation (such as the irrigation agency, FWUA/WUA and the irrigation system) to those on Java only, and more specifically to Yogyakarta. Because of this, perhaps it can be argued that my research analysis does not give a complete picture of the way IMT policy in Indonesia has been shaped by its policy actors. For example, it is logical that the channeling of the irrigation agency's bureaucratic identity and mechanisms was much more apparent in those provinces and districts on Java than elsewhere in Indonesia, given the location of central government ministries on Java. Nevertheless, as the objective of this research is to reveal the actual meanings of IMT policy for both farmers and the irrigation agency, I am confident that insights gained from this research can help us better understand the issues at stake with regard to IMT policy (re)conceptualization in other parts of Indonesia, and potentially more broadly.

1.10 Structure of the thesis

After this introduction, Chapter 2 starts with a literature review on the changing characteristics of the Indonesian state. This chapter highlights the forces that shaped the process of political reform in the country, following the fall of the New Order government in 1998 and the widespread application of regional autonomy. Highlighting the importance of the project approach in the present day sectoral development in Indonesia, it illustrates the origin of the adoption of the project approach in the late 1960s and how this still shapes the present bureaucratic mechanisms of government ministries. In the irrigation sector, it focuses on the incorporation of the project management units into the regional government structure, and how this affects the rent-seeking practices that are rooted in project procedures and regulations.

Chapter 3 analyzes the bureaucratic identity of the irrigation agency, and how this identity evolved, as a consequence of the organizational restructuring of the agency that took place from 1998 to 2003. In 1998, the former Ministry of Public Works was abolished, following the country's political reform. In 1999 the Ministry of Settlement and Regional Development (Kimbangwil) and the State Ministry of Public Works (Meneg PU) were formed. Later, these ministries were united under the Ministry of Settlement and Infrastructure Development (Kimpraswil).

Chapter 4 reviews the literature on irrigation policy research in Indonesia, and how this is linked to the manifestation of IMT policy as the 'new' international policy trend in irrigation management during the 1990s. This chapter explores IMT policy concepts and their origins (such as how the IMT problem is defined), as well as the evolution of the defined policy assumptions and lines of reasoning (both from irrigation research and previous policy definitions). I analyze IMT policy evolution by relating the present development approach with earlier approaches (technical approach in the late 1960s, organizational approach at the beginning of the 1980s, and the institutional approach in the 1990s).

Chapter 5 gives a detailed overview of IMT policy formulation and implementation in Indonesia. Starting from the formulation of the IOMP 1987 policy statement, this overview continues with the extended implementation of IMT under the JIWMP-IDTO in 1996 and the reformulation of IMT under WATSAL in 1999. A central element in this chapter is a policy analysis of the IMT legal framework under WATSAL, compared with that under the IOMP 1987 policy statement. Elements of policy controversy in IMT are highlighted. This chapter shows how the vague formulation of the IMT legal framework is rooted in the way policy makers neglected the decisive role played by the irrigation agency in directing actual policy formulation.

Chapter 6 gives a detailed explanation and analysis of policy actors' perceptions, interests, and strategies in relation to IMT within the context of the IMT policy struggle that occurred in 2003. It highlights how Kimpraswil's attempt to redirect the policy path towards recentralization was challenged by a new bureaucratic force, led by the mid-level officials from the Ministry of Home Affairs and the National Development Planning Agency. The promulgation process of the new Water Act became the central stage of this struggle. In this chapter the legal contradiction between the new Water Act and the earlier issued government regulation on irrigation is highlighted. Further, this chapter sheds light on the decisive mechanisms that shaped the actual decision-making process at both the parliamentary and the bureaucratic level. It also maps the evolution of policy network alliances during the entire promulgation process of the new Water Act.

Chapter 7 deals with the role played by provincial and district governments in channeling Kimpraswil's demand to halt IMT implementation in the seven technical irrigation systems located in Kulon Progo district. This chapter focuses on the district government's decision to continue with IMT implementation. It explores the regional government's strategies and maneuvers to cope with the fact that IMT funding was halted in the aftermath of the policy struggle. Furthermore, it also highlights how the irrigation agency at district level and FWUA/WUA cooperated with each other to ensure the continuation of IMT.

Chapter 8 highlights the actual water distribution practices in the seven technical irrigation systems in Kulon Progo district, and how these practices were linked to the overall process of management transfer. In this chapter, the dominant water distribution patterns and alliances are identified. In addition, this chapter focuses on the relationship between

farmers and water user organizations formed at each hydraulic level of the irrigation system; this relationship created the possibility to establish an inter-system decision-making platform, consisting of system-level WUAs and staff from the district irrigation agency.

Chapter 9 provides the conclusions of the study. It highlights the IMT policy conceptual paradox, and thus the need for its re-conceptualization. It argues that IMT policy reformulation should not be based on assumptions made by international policy makers, but rather on how farmers and the irrigation agency view the present policy concept of IMT.

¹ In the irrigation literature, this policy is also referred to as Irrigation Management Turnover, Participatory Irrigation Management (PIM) (Vermillion, 1997) or Irrigation Management Reform (IMR) (Zawe, 2006).

² There is evidence that IMT policy adoption by developing country governments was often urged by their fiscal needs, rather than by their motivation to conduct policy reform (International E-mail Conference on Irrigation Management Transfer organized by FAO and INPIM, 2001; Lele, 2000).

³ The fact that the agency's resistance was never concretely addressed is also influenced by the common rule applied by international donor agencies of not getting involved in a country's political situation. In this context, addressing an agency's bureaucratic resistance is perceived as political intrusion towards developing country governments.

⁴ Leaders of civil society movements, staff from the international donors agencies as well as staff from the different government ministries.

⁵ This task force was set up by the National Development Planning Agency (NDPA), shortly after the fall of Suharto's government. With the formation of this task force, decision making in irrigation development was shifted from Kimpraswil to the inter-ministerial forum coordinated by the NDPA.

⁶ Several state-centered studies on irrigation management analyze the role of the irrigation agency in sector development. See for instance studies conducted by Mick Moore (1989) and Robert Wade (1982, 1985) that highlighted the state's decisive influence in directing irrigation system management in Taiwan and South India respectively. Also see studies conducted by Uphoff, Ramamurthy and Steiner (1991) that shed a light on irrigation bureaucracy in Sri Lanka. However, focusing mainly on the state's role, these studies describe the irrigation agency's bureaucratic mechanisms only in general terms.

⁷ This is despite the important role played by the irrigation agency in directing actual policy implementation in the sector.

⁸ See also Egeberg's (1999) criticism of how studies on public administration were primarily focused on the behavior and attitude of the bureaucratic agents without relating them to the bureaucratic structure within which they had to operate.

⁹ Within policy network analysis, networks are not created by policy actors, but rather reproduced or transformed from what is already made in the continuity of praxis (Giddens, 1984).

¹⁰ With reference to the definition, this study emphasizes more the concept of rules-in-use rather than rules-in-form.

¹¹ Unlike the general perception in IMT studies, in addition to the irrigation agency and FWUA/WUA, the IMT process under WATSAL was shaped by a wider range of actors (including donors, NGOs, academics, different government ministries, parliamentary members, and farmer organizations).

¹² It was through my interviews with retired government officials that I gained many insights on how sensitively the IMT policy had been perceived by the irrigation agency.

¹³ I use the terms FWUA staff and farmer leaders to distinctly highlight the fact that, in practice, farmer leaders are not always synonymous with FWUA staff. Similarly, despite the assumption in IMT policy that FWUA staff represent farmers, in practice, FWUA staff are not necessarily farmer leaders.

2. The Indonesian state in transition

2.1 Introduction

This chapter explores the unchanged characteristics of the Indonesian state. The Indonesian state continued to function as a rentier state (Mahdavy, 1970), even after the political reform in 1998. The fall of the New Order government did not automatically eliminate the foundation for rent-seeking practices rooted in the political relationship between the president and his/her ministers. Rather, this relationship continued to govern the process of state (re)formation in post-Suharto Indonesia.

The characteristic of the Indonesian state as a rentier state becomes evident from both the massive penetration of the project approach in Indonesia's sectoral development, and the government's dependency on foreign loans. Originating in the adoption of the project development approach in the late 1960s, this dependency remains apparent in the present Indonesian government.

Further, the chapter illustrates how the regional autonomy concepts failed to change the center-regions relationship because at the national level the application of regional autonomy has been resisted by the central government. Also, at the regional level, regional autonomy has been hampered by widespread corruption practices within and outside the government structure.

In addition, this chapter discusses how Indonesia's sectoral development has been shaped by the adoption of the project approach in the late 1960s, and how the adaptation of government organizational structure and its financial regulations since then have had a profound effect on the development of the state irrigation agency.

This chapter is organized into five sections. Section 1 discusses the characteristic of the Indonesian state as a rentier state. Section 2 illuminates the role of the 'political party partisanship system' in (re)shaping state characteristics. Section 3 illustrates the formal changes incorporated in the emergence of regional autonomy concepts and their effects on the organizational restructuring of the irrigation agency at the regional level in 2001. Section 4 discusses the overall application of regional autonomy prior to 2005. Section 5 illuminates the role of the project approach in shaping Indonesia's sectoral development.

2.2 The Indonesian state as a rentier state

The present discourse on the characteristics of the Indonesian state after the fall of the New Order government is shaped by two dominant propositions. Following the political reform in 1998, some of Indonesia's political observers consider that the state has entered a transitional phase from authoritarian rule towards a new democratic system of government in which civil society will play a more prominent role (Schulte Nordholt in Hanneman and Schulte Nordholt, 2004). Others who are less optimistic, on the other hand, think that the Indonesian state is transforming from a bureaucratic interventionist developmental state into a messy criminal crony state (Siegel, 1998). The word 'messy' implies the increased practice of both high-level and petty criminality, the spread of political violence, widespread corruption, and short-term opportunism (see Schulte-Nordholt in Hanneman and Schulte-Nordholt, 2004).

In this research, I use the rentier state concept to highlight the unchanged characteristics of the Indonesian state (Ramsay, 2006). According to Susetiawan from Gadjah Mada University, political reform in 1998 was stalled in the state of political euphoria. Reacting to the fall of the New Order government, political actors from the reformist front (groups of activists from civil society movements, independent university experts, moderate government officials, and uncoopted religious leaders) were constantly engaged in endless socio-political discussion. Little or no attention was given to the formulation of strategies to counteract the existing bureaucratic mechanisms inherited from the New Order. Hence, in my opinion, the fall of the New Order government did not necessarily mean that the Indonesian state transformed from an authoritarian state towards a more democratic or a messy criminal crony state (see also Kaviraj's (1999) on what happened or rather did not happen to the British Raj bureaucracy after Indian independence). Rather, I emphasize the still dominant presence of New Order mechanisms in shaping the overall application of regional autonomy and how efforts to reform government mechanisms are hampered by the institutionalization of the New Order's mechanisms both within and outside the government structure (see for instance Peters, 1984; Batley, 1983; Cohen, 1965 on the tenacity of bureaucratic procedure and culture).

A rentier state¹ is defined as a state where rents are paid by foreign actors, where revenues accrue directly to the state and its leaders, and where most of society is only involved in the distribution or utilization of the profits (Ramsay, 2006). Prior to and after the political reform in 1998, foreign loans remained the central government's strategic resources to direct the country's development. Under Suharto's government, while loans were used to finance the country's sectoral development (to reach self-sufficiency in rice), they had also become one of the New Order's financial resources to generate legitimacy for the regime's political power (Rachbini, 2002). Similarly, in the post-New Order era, the state-citizen relationship continues to be shaped by the government's decision-making authority in development fund disbursement. In this way, the government could direct the country's development independently from the people's popular demands by relying on funding support from foreign donors. Put differently, the government of Indonesia (GOI) lacks the incentive and motivation to improve its bureaucratic capability to respond to local development needs because it does not need to raise revenues from the national economy,

as long as donors are willing to continue their funding support². This lack of incentive and motivation is often referred to as the moral hazard effect³ of loan dependence (Brautigam and Knack, 2004). In turn, foreign loans sustain bureaucratic patrimonialism (see also Eisenstadt, 1963 on how this patrimonialism resulted in the formation of an 'empire' state) and allow the continuation of corruption practices within the government bureaucracy in the post-New Order era. Directed primarily by the government's ability to distribute its resources (usually in a trickle down manner) to the local population, the state-citizen relationship remains characterized by patron-client networks⁴ as it was before Suharto's fall (Cole, 2001). Similarly, despite the abolition of the New Order government, its rules and main mechanisms continue to govern the present government bureaucracy (Hadiz, 2003). Composition of the bureaucratic elites changed (from military to civilian, or from actors with a strong governmental background to those with a non-governmental formation), yet, the same bureaucratic mechanisms are applied. For example, even in the present-day Indonesian state, good political connections remain indispensable to ensure one's access to government's contracts, as well as to obtain preferential regulatory treatment (such as early or decisive information on certain tendering procedures) (Wantchenkon, 2002).

In the irrigation sector, the characteristic of the Indonesian state as a rentier state is evidenced from the way the central government remained in charge of directing regional development through its foreign-funded projects. Irrigation sector development continued to be directed through projects, despite the overall application of regional autonomy in 2001. The IMT program under the Water Sector Adjustment Loan (WATSAL) was implemented by the Ministry of Settlement and Regional Development (Kimbangwil) from 1999 to 2001, and later by the Ministry of Settlement and Infrastructure Development (Kimpraswil) from 2001 onwards under the World Bank funded projects (JIWMP and IWIRIP). In 2004, the IMT program continued to be funded by the World Bank through its Water Resources and Irrigation Sector Management Project (WISMP).

Irrigation sector development continued to be directed by project fund disbursement from the central ministry regardless of the regional government's development needs. Regional governments would accept whatever project was given by the central government regardless of the actual development role of such a project, as happened in Yogyakarta province in 2004 (see Chapter 7 for further explanation on how regional governments positioned their role in regional development in relation to the central ministry's access to the sectoral development fund). Like before, project funds continued to be managed exclusively by the project head and his/her supervisor at the central ministry. Project activities were defined and evaluated by the central ministries following the rigid, step-bystep project planning, the so-called development blueprint (Kapur, Lewis and Webb, 1997). Even when project activities were not in line with the local population's development needs, as happened in Kulon Progo district in 2004, central government insisted that project activities were to be conducted according to the predefined plans, primarily to ensure consistency between budget proposal and budget spending. The project head from the Ministry of Home Affairs insisted on the continuation of Community Organizer (CO) recruitment, despite the district government's and FWUA

members' lack of interest in continuing with the CO program.

2.3 The political party partisanship system and the Indonesian state (re)formation

Despite the fall of Suharto's government in 1997, the characteristic of the Indonesian state as a rentier state remains unchanged because the regime's basic structure of power, which is centered on the president and his/her inner circle of power (the head of state enterprise, regional governor, but most importantly his/her ministers) remains intact⁵. In 1999, Abdurrachman Wahid's government attempted to reactivate the role of the parliament (legislative body) in directing the country's development by shifting the decision-making authority for development fund allocation from the National Development Planning Agency (NDPA) to the parliament. In practice, this shift not only failed to eliminate corruption practices within the government ministries. It also failed to reshape the relationship between the president and his/her cabinet ministers from a political to a bureaucratic/professional one.

After the fall of the Suharto government, the (re)formation process of the Indonesian state continued to be governed by corruption practices because the political relationship between the president and his/her ministers remained shaped within the context of the political party partisanship system⁶. This relationship between politicians and bureaucrats as a power nexus⁷ was also described by Kothari and Roy (1969). According to Transparency International (1998), Indonesia was ranked number 80 of the 85 countries on its corruption perception index. Similarly, Indonesia was ranked as the most corrupt country in Asia by the Political and Economic Risk Consultancy Ltd. (1998).

Under the political party partisanship system (as established by Suharto during the New Order government), the ministerial position functions primarily as the president's political resource, that is to sustain and reproduce his/her political power. This function is linked primarily with the minister's illegal access to development funds (or foreign loans), which can be channeled to finance the president's political campaigns during the country's national election. As a general rule, a minister's access to sectoral development funds is the president's crucial weapon to direct the overall outcome of the election, as elections are primarily steered by the practice of money politics (both legally and illegally) (Antlov and Cederroth, 2004). This political party partisanship system was also described to a certain extent in Wade's study on the market for public office in India (1985), in which he shows the higher ranking officials' and politicians' strategy to sustain corruption practices at the government ministries, in relation to their interest in using the corruptly acquired funds for electoral support.

In this thesis, I combine Bayley's public-office centered (1970) and van Klaveren's market-centered (1970) definitions of corruption. Corruption is defined as "the misuse of authority as a result of considerations of personal gain, which need not be monetary". In this context, public office is viewed as a business and reduced to the so-called maximizing unit, in which a corrupt civil servant can maximize his income (Heidenheimer, 1970). In

the Indonesian context, this definition includes the three elements of corruption, as widely described in the acronym KKN (korupsi, kollusi, nepotisme) (King, 2005; Kompas newspaper, 15 October 2003). In addition, this study looks at corruption practices and bureaucratic rent-seeking primarily as decisive mechanisms which shape the actual performance of the government bureaucracy, regardless of the negative connotations generally linked to these practices. Having said this, I do not intend to link my research findings with any attempt to moralize about the government bureaucracy or the irrigation agency's position on the subject.

Within the political party partisanship system, both the president and his/her ministers have a direct interest in sustaining the continuation of corruption practices within the government ministries. Put differently, government ministers do not have any reason to fear that the president will report corruption practices within their respective ministry to the parliament or the Supreme Audit Agency, knowing that the president receives direct benefits from it. Similarly, the president does not have any reason to eliminate rentseeking practices within the government ministries because s/he relies on the delivery of a certain amount of rents from his/her ministers to sustain his/her political power (see also the explanation on upetism in Chapter 3). As argued by McLeod: "Under Suharto, corruption was not an unintended consequence of a highly interventionist state. Rather, a system of government intervention was consciously put in place for the purpose of generating the rents that Suharto presumably wanted for their own sake, but also needed in order to first attain and then maintain a position of virtually unchallenged authority" (McLeod cited in World Bank, 2003: 6). Consequently, the way sectoral development funds are managed by both the president and his/her ministers necessitates the continuation of development fund disbursement from foreign loans because these loans have become their source of political power.

In the past, Suharto used his close relationship with his 'ministers' to channel sectoral development funds to feed Golkar (the ruling political party during the New Order government), which primarily functioned as the government's political machinery in sustaining its political power from one election to another. This regular but illegal fund channeling was possible primarily because, in practice, both the State Audit Agency (BPKP) and the Supreme Audit Agency (BPK) lacked power and authority to counteract the president's power⁸, and thus corruption practices became rooted in the relationship between the president and his/her ministers.

After the fall of the New Order government, the new ruling political party withdrew sectoral development funds to finance its extensive political campaigns. Later, sectoral development funds were disbursed directly from the ministerial level to each presidential candidate, following the introduction of direct presidential elections in 2004. At grassroots level, these political campaigns included the actual realization of different types of development activities (such as rebuilding road infrastructure and schools, as well as delivering harvest machinery and pumps to farmers). In addition, political parties also distributed cash to the local population during their campaigns. For example, during my field work, I discovered that the ruling party was distributing pumps to the FWUAs in

Kulon Progo district, and in doing so was using these FWUAs as an entry point to gain votes among the rural population.

Within the political party partisanship system, the president would select his/her ministerial staff based on party loyalty rather than work performance. The president would give his/her political allies strategic positions in the cabinet, while at the same time replacing those who belonged to the political opposition group. For instance, under Suharto, key bureaucratic positions often went to the military officers loyal to the president. In the 1990s, the domination of Suharto's inner circle of power in government top positions was so obvious that other government officials cynically referred to them as graduates of the Cendana University⁹ (World Bank, 2003). In addition, the president would position his/her most loyal allies in those ministries¹⁰ with huge development budgets, such as the former Ministry of Public Works (MPW) or the present Ministry of Settlement and Infrastructure Development (Kimpraswil). As expressed by some officials from the NDPA, the Ministry of Agriculture (MoA) and the Ministry of Home Affairs (MoHA): "During the country's national election, the Ministry of Public Works became one of those ministries informally referred to as the president's 'milk cows'" (interview with officials from the NDPA, the MoA and MoHA, 2003, 2004).

In the irrigation sector, the political relationship between the president and his/her ministers is evident from the way both President Abdurrachman Wahid and President Megawati Soekarnoputri appointed members of their political alliance¹¹ as, respectively, the head of the Ministry of Settlement and Regional Development (Kimbangwil) in 1999 and the head of the Ministry of Settlement and Infrastructure Development (Kimpraswil) in 2001.

Similarly, at the ministerial level, each minister would define his/her staff based also on political partisanship. This nested political partisanship is important especially if the minister has to cover his/her financial misconduct in supporting the president's political campaign. In this context, the minister's power is defined by his/her ability to build his/her personal and political alliance within the formal organizational structure of the ministry. For example, when MPW was abolished and replaced by the Ministry of Settlement and Regional Development (Kimbangwil) in 1999, the new Kimbangwil minister introduced new policy actors belonging to her alliance into the Kimbangwil organizational structure. Similarly, when Kimbangwil and the State Ministry of Public Works (Meneg PU) were united into the Ministry of Settlement and Infrastructure Development (Kimpraswil) in 2001, the new Kimpraswil minister replaced Kimbangwil's ministerial staff with officials belonging to his alliance (a more detailed explanation about the abolition of the MPW and the formation of Kimbangwil and Kimpraswil will be given in Chapter 3). In 2004, when a new minister of Kimpraswil was appointed (due to the presidency changing from Megawati Soekarnoputri to Susilo Bambang Yudhoyono), this minister again reshuffled the higher officials within the ministry. The new minister replaced the Director General of Water Resources Development (whom he viewed as a loyal follower of the former minister), with a new one, who had been in conflict with the former minister.

In **short**, both the preserved political relationship between the president and his/her ministers, and the continuation of fund disbursement from foreign loans allowed the transfer of the New Order government's bureaucratic mechanisms into the present-day government ministries.

2.4 Regional autonomy and the fall of the New Order government

After the fall of Suharto in 1998, the Indonesian state reformed. The people's distrust of the central government and their demand to abolish the New Order government's system gave birth to the concept of regional autonomy. Only five months after the downfall of the Suharto government, impelled by mounting political pressure from student movements, the concept of regional autonomy was legally promoted in the decree of People General Assembly. Through this decree, the power concentration at the central government level was dissolved, in support of regional self-government. In 1999, the decree was succeeded by the promulgation of a Regional Autonomy Act (Regional Autonomy Act Number 22 of 1999). With this promulgation, the country's political reform was directed towards decentralization¹² of government structure and decision-making authority. Here, a distinction should be made between decentralization, which involved transfer of decisionmaking authority from the central to regional governments and deconcentration, which involved only the transfer of government functions to the lower administrative level (Walker, 1991). Firstly, I summarize the formal changes incorporated in regional autonomy. Secondly, I discuss the irrigation agency's organizational restructuring at the regional level, as a consequence of regional autonomy.

2.4.1 Regional autonomy: a concept

Theoretically, regional autonomy would empower regional governments and reduce the power of the central government at the regional level. In 1999, decision-making authority to direct regional development was formally transferred from the central to regional governments with the promulgation of the Regional Autonomy Act (Regional Autonomy Act Number 22 of 1999). Later, a Fiscal Decentralization Act (Fiscal Decentralization Act Number 25 of 1999) was promulgated to accompany the Regional Autonomy Act. With the promulgation of these acts, regional governments were not only authorized to formulate and define their regional development plans, but they were also in charge of managing their own development fund. An overview of the formal changes brought by regional autonomy is presented in Table 2.1.

Firstly, district governments had complete autonomy and were fully authorized to direct their regional development with regional autonomy. With this complete autonomy, the central government was not allowed to interfere in district matters, except for monetary, foreign relations, judiciary, defense, religious and other nationally strategic issues (Haris, 2005). Unlike district governments, provincial governments remained the central government's formal representative at the regional level, though the provincial government's role shifted towards inter-district development facilitator and coordinator. Prior to the formulation of the Regional Autonomy Act, discussion on regional autonomy

was focused on whether to transfer the authority to district or provincial government. Authority transfer to provincial government¹³ was first proposed because government officials at the national level thought that provincial government staff were more capable of directing the regional development than their counterparts at the district level. However, in the end, the central government agreed to transfer its decision-making authority to district government¹⁴ (instead of to provincial government) because it feared that the provincial government's power would replace the central government's important role in directing the country's overall development (Fane, 2003; Aspinall and Fealy, 2003). Similarly, central government feared that transferring decision-making authority to the provinces would eventually strengthen secessionist movements, whereas individual district government's territory and scope of power, on the other hand, was considered to be too small to be able to secede (Suparno, 2004). This decision reflects the fragmented opinions and positions of the government bureaucracy towards regional autonomy, which later had serious implications on the overall application of regional autonomy (Brodjonegoro and Asanuma, 2000).

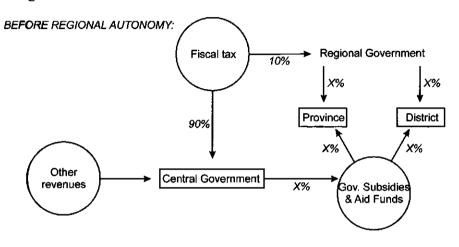
Table 2.1: Overview on the formal changes brought by the Regional Autonomy and Fiscal Decentralization Acts

Issues	Before regional autonomy	After regional autonomy
Decision-making authority in regional development	Provincial, district, sub-district and village governments acted as central government's representatives	District government had complete autonomy to direct district development
The relationship between executive (government) and legislative (parliament) organs at the regional level	Regional development was dominated by executive organs, as the direct representative of the central government	Legislative organ's role in regional development was reactivated
Revenue collection	Central government got ninety percent of the tax revenue, while regional governments received only ten percent	District government took ninety percent from the total tax collection, while central government received only ten percent
Development fund disbursement	Centralized fund disbursement by both MoHA (for administrative expenditures) and the sectoral ministries (for sectoral development activities) to provincial down to village government	Fund disbursement through general and special purpose grant systems (DAU and DAK), covering expenditures for both administrative and sectoral development activities
Personnel and administrative	Central ministries were represented by their regional offices, located at the provincial level	Regional offices of sectoral ministries were abolished

Secondly, the local parliament's decision-making role in regional development was reactivated. Previously, local parliament members were no more than the central government's political representatives (Rasyid, 2005). They hardly played any role in regional development. In the regional autonomy era, the local parliament members were

in charge of defining the regional development plan and budget, together with the executive organ, that is the provincial government staff under the governor. They were also in charge of monitoring the regional government's performance. In addition, the local parliament members were in charge of electing ¹⁵ both district heads and governors.

Thirdly, the district government became authorized to define their revenue and take ninety percent from the total tax collection. The procedure and regulation of fund disbursement from the central to regional governments before and after regional autonomy is presented in Figure 2.1.



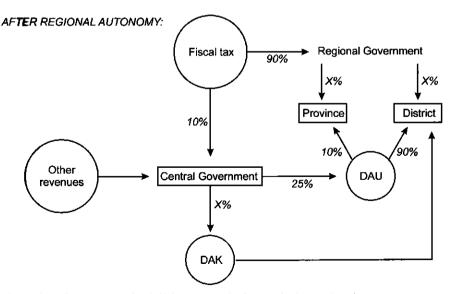


Figure 2.1: Government fund disbursement before and after regional autonomy

Prior to regional autonomy, a district government received only ten percent of the total tax revenue, while central government got ninety percent of it. After regional autonomy, a district government became entitled to add new forms of local taxes to increase their revenue.

Fourthly, the concept of the general purpose grant (DAU) and special purpose grant (DAK) was introduced with regional autonomy. With this introduction, the central government remained the financial contributor to the regional development. However, their influence in directing the whole set-up of regional development was reduced. Theoretically, both DAU and DAK would enable regional governments to conduct sectoral development, independent from the central ministries' interference, because they were authorized to manage both funds¹⁶ according to their needs. The DAU formed twenty-five percent of total state revenue, and was supposed to be disbursed directly from MoHA to regional governments. Ten percent of the disbursed fund was preserved for the provincial government, while ninety percent of it was transferred to the district government (Brodjonegoro and Pakpahan, 2003). The DAK, on the other hand came from sectoral funds from each ministry, and was supposed to be disbursed by the sectoral ministries to the district governments regardless of sectoral earmarking.

Last but not least, the central ministries' offices at the regional level were abolished with regional autonomy. Staff from the regional offices were transferred either to the central ministries or incorporated as part of provincial/district government staff.

2.4.2 Regional autonomy and the irrigation agency's organizational structure

In the irrigation sector, regional autonomy resulted in the abolition of the Ministry of Public Works' regional offices. Following this abolition, project management units were disbanded and later incorporated into the regional government structure. The incorporation is presented in Figure 2.2. At the regional level, irrigation projects were incorporated into the Provincial Irrigation Agency (PIA), while other projects were included in other organizational units within the Provincial Water Resources Services (PWRS).

Unlike before, the project head functioned under the direct supervision of the PWRS head. For irrigation projects in particular, the project head was appointed by the head of the PIA. Theoretically, this new decision-making line enabled the PIA head to direct the project head's conduct toward the regional government's development needs. The PIA head could choose the project head as the candidate¹⁷ he thought would represent the regional government's interest. Prior to regional autonomy, the project head was appointed by his/her supervisor at the central ministry, and was not responsible to either the PIA or the PWRS head. Hence, the project head did not need to take into account the head of the PIA's or the head of PWRS's perception and opinion with regard to the planned/conducted project activities.

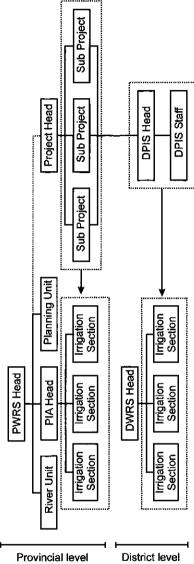


Figure 2.2: Incorporation of project management unit into the structure line of the PWRS

In addition, fund allocation from the sectoral ministry was to be disbursed to the head of PWRS through the governor, following the incorporation of project management units into the PWRS. Later, this fund would be disbursed by the head of the PWRS to each unit within the organization. Theoretically, this change in the financial disbursement line increased the regional government's (the heads of the PWRS and the PIA in particular) decision-making authority in directing the overall regional development activities. Unlike before, the PWRS and PIA heads were in charge of managing the sectoral development

fund from project funds. Prior to regional autonomy, the project fund was distributed directly through the project structure, involving primarily the project head and his/her supervisor at the central ministry in Jakarta.

2.5 The application of regional autonomy before 2005

In practice, regional autonomy was only widely applied in early 2001. Firstly, I illuminate how the central government's interest in preserving its importance in regional development handicapped the overall application of regional autonomy. Secondly, I illustrate how regional autonomy has been hampered by systemic rent-seeking practices. In addition, I discuss the prospect of regional autonomy reshaping the center-regions relationship.

2.5.1 Regional autonomy and the preservation of fiscal dependency

In practice, regional autonomy has been resisted by the central government. The central government continued to hold its grip on the main sources of the regions' revenue following regional autonomy. As of 2007, central government still controls eighty percent of income tax, value-added tax, import duties, and export taxes, as well as foreign aid disbursement (World Bank, 2003). Regional governments, on the other hand, have only been allowed to levy a modest number of local taxes (such as the tax on motor fuel and vehicles) (Widjaja, 2002).

Apart from the central government's resistance, in practice, the application of the general purpose grant (DAU) was hampered by the political lobbying conducted by resource-rich regions towards both the Ministry of Finance (MoF) and the Ministry of Home Affairs (MoHA) (Suparno, 2004) (see also Bahl and Tumennasan, 2002, on how revenue from natural resources should be shared). This lobbying concerned the general formulation of DAU distribution, which in turn only advantaged the resource-rich regions at the expense of other regions (Kompas newspaper, 6 December 2001). Theoretically, central government distributed twenty-five percent of total state revenue to the regions, and kept seventy-five percent of the fund at the national level. In this way, DAU was meant primarily as an additional budget to fill the fiscal gap¹⁸ in regional revenue. In practice, the calculation of DAU in 2001 did not take into account variations in local shares of revenues. Similarly, for DAU from 2002 onwards, shared revenues were included but not fully. For instance, only seventy-five percent of the total share of natural resource revenues was included (Lewis, 2003; World Bank, 2003). In addition, resource-rich regions also managed to force the central government to adopt a new clause in the calculation of DAU, which in turn ensured that rich regions received the same amount of DAU as the previous year, despite their increasing share of revenues (Fane, 2003). Hence, resource-rich regions sustained their high share of DAU, despite the regions' financial capability to conduct their own regional development.

In turn, except for regions with rich natural resources, other regions remained dependent on central government for their regional development. The disbursed amount of DAU was not sufficient to cover both routine expenditure and regional development activities (Fane, 2003). Regional government could not rely on this additional budget if their access to collect tax revenue was limited only to local taxes (Saad, 2001; Kelly, 2004). As stated in the report made by the Asia Foundation, local taxes formed only seven percent of the regional income in 2002 (Asia Foundation, 2002). Put another way, despite regional autonomy, regional development remained subsidized by the central government. Besides, the regional governments' inability to direct their own sectoral development was also related to the fact that the special purpose grant (DAK) system (which is formulated to compensate regional governments' financial capability to conduct sector specific development) was not applied until 2005. Hence, sectoral development continued to be tackled by the central ministries through their projects. In addition, regional government often had to pay central government staff salaries, which in 2007 are now formally incorporated as district government's staff (Usman, 2002). For instance, after the transfer of the personnel and physical assets of the nine decentralized ministries, regional civil servants accounted for 66.7 percent of a total of 3.9 million civil servants in 2001, compared to 12.2 percent in 1999 (World Bank, 2003).

In short, regional autonomy gives district governments the formal legal basis to formulate their regional development programs, without the necessary resources to implement the defined programs. As stated by Fane: "The changes in grant allocation among regions have been less revolutionary than the 1999 decentralisation legislation envisaged. There has not been much increase in autonomy for the regions that have few natural resources because no major tax was decentralized (Fane, 2003: 159).

Central government's resistance also shows in the way it delayed the formulation of legal regulations to support and direct the actual implementation of regional autonomy. Formally, more than 1,000 government regulations, presidential decrees and presidential instructions were to be revoked following regional autonomy, which was applied very slowly (Suparno, 2004). In practice, regional autonomy was applied without any proper guidelines. Besides, in Rasyid's¹⁹ words: "A negative campaign on regional autonomy was launched, even before the concept was applied in 2001" (Rasyid, 2005: 15). Issues such as national disintegration and the danger of regionalism were often presented as arguments to halt the application of regional autonomy (Rasyid, 2005).

In the later stage of regional autonomy, central government's resistance became evident in MoHA's efforts in 2003 to revise both the Regional Autonomy and Fiscal Decentralization Acts (Usman, 2002). The revision was based on MoHA's perception that regional governments were not ready to carry out regional development (Brodjonegoro and Asanuma, 2000). According to MoHA officials, regional governments lacked the capability to form their own opinion. They lacked the vision on how they should direct regional development because they were used to their past role of accepting and following whatever was given and instructed by the central government. As expressed by one of the officials: "For instance, during a training exercise on how to make a development fund proposal, regional government representatives were unable to define and plan their development proposal. Instead, they kept asking for possible reference with regard to the

central government development projects" (interview with officials from MoHA, 2004). Interesting to note here is the way the central government accused the alliances of district government at the national level of being politically subversive, when the alliances demanded their direct involvement in the revision process. In addition, the central government recommended the alliances to wait to respond on the revision, until it was finalized by MoHA, and channeled to the parliament (Rasyid, 2005).

In the irrigation sector, the incorporation of the project management unit into the PIA was not followed by the actual integration of project activities into the PIA because the change in line of command was not followed by a change in financial disbursement line. Following the non-application of DAK, project funds continued to be disbursed from the sectoral ministry at the national level to the project head. Like before, the project fund continued to be managed exclusively by the project head and his/her supervisor at the ministerial level. Even in the regional autonomy era, the project head remained more influential in directing regional development through project activities than the head of the PIA or even the head of the PWRS. Project activities continued to be implemented exclusively by project staff under the project head. As stated by one of the officials from the PIA: "After regional autonomy, project activities continued to be conducted like before. The project head remained the main actor in directing regional development" (interview with PIA officials from Yogyakarta province, 2004).

2.5.2 Regional autonomy and bureaucratic rent-seeking

Regional autonomy is hampered by corruption practices, once concentrated at the national level and now widely applied at the regional level. The percentage deviations of both routine (covers primarily government staff salaries and administrative expenditure) and development funds at respectively central, provincial and district level are presented in Table 2.2.

At the regional level, corruption practices were concentrated in the relationship between regional government officials and local parliament members (Schulte-Nordholt, 2003). Local parliament members used their budgetary power to force the district governments to provide them with other various benefits (such as luxurious cars, visits to foreign countries for comparative study on certain issues, or increased social benefits) in return of district government development proposals (Suara Pembaruan newspapers, 29 August 2003 1 and 24 November 2004). In turn, regional government staff would prepare the budget proposal for development with a substantial degree of up-marking (50-100%) because they were confident that local parliament members would approve whatever proposal they made, if only because they would share the financial 'benefits' from the management of the regional revenue (Schulte-Nordholt, 2003). For example, Matsui's report on decentralization in Indonesia stated that the salaries paid for the members of the local parliament accounted for more than half of the regional governments' revenue (Matsui, 2003). Further, Emilia showed that, in 2001, the local parliament in West Sumatra province received an additional fund of Rp. 11 billion from the regional government (Emilia, 2005). Later, this fund was distributed among its members in the form of these members' financial support to their privately-owned NGOs.

Type of funds	Percentage deviations in 2001	Percentage deviations in 2002
National level	13.6	16.1
Routine funds	20.5	9.8
Development funds	6.4	15.6
Provincial level	3.7	27.9
Routine funds	1.8	8.1
Development funds	5.1	30.7
District level	12.7	21.8
Routine funds	13.8	21.6
Development funds	11.6	22.0

Source: Chairperson of BPK Welcome Speech at the Presentation of the Audit Results for Semester II of Fiscal Year 2002, Jakarta, February 2003 in World Bank, 2003

In the irrigation sector, corruption practices continued to be applied around project procedures and regulations (see Chapter 3). Regional autonomy did not change the way sectoral development was conducted through the project structure and mechanisms. The project fund continued to be managed as an administrative exercise between the project head and his/her supervisors (see section 2.4. for further explanation of this administrative exercise). Perhaps the only difference was that, with regional autonomy, the project head's supervisors could also be held accountable for any financial misconduct by the project head. This meant that if the project head was charged with corruption practices, the same charges could also apply to his/her supervisors (both the head of the PIA and the supervisor at the ministerial level).

2.5.3 The prospect of regional autonomy

Nevertheless, regional autonomy reshaped the relationship between central and regional governments. As expressed by the head of the PIA in Yogyakarta: "Regional autonomy should be viewed as increased opportunities for regional government instead of absolute decision-making power. Prior to regional autonomy, central government decided everything. With regional autonomy, regional governments could propose their development program to the central government. Though of course the central government was the one who had to approve this proposal" (interview with the head of the PIA in Yogyakarta, 2004).

The changing relationship between central and regional governments lay in the regional governments' ability to first link their proposed development program with the central government's projects and reshape the approved program afterwards, in such a way that it coincided with regional development needs. With regional autonomy, formally, central ministries have had to base their budget allocation on the regional governments' development proposals. In practice, the approved proposals were those which had a strong

connection with development projects formulated by the central ministries. Hence, before a regional government proposed its development program to the central ministries, it would first screen the existing projects of each particular ministry and link its proposed program with the existing activity titles defined by these central ministries. In the Indonesia Water Resources and Irrigation Reform Program (IWIRIP) for instance, a regional government would have to propose fund allocation for inter-FWUA meetings or FWUA forum coordination under the activity title²⁰: "consultation and project coordination" (IWIRIP progress report, 2003). In turn, once the fund for the proposed development was allocated, this fund could be distributed according to development priorities defined by the PIA independent from the central ministries' development preferences. As stated by an PIA official in East Java: "In more extreme cases, the PIA could even use part of a development fund which was meant for construction to cover funds for FWUA training and other farmer empowerment activities" (interview with PIA officials in East Java, 2004).

In 2004, there was still ongoing discussion on these handicaps on regional autonomy and on changing the procedure in development fund disbursement back to the 'authorization letter' system. This system was applied prior to the adoption of the project approach in the late 1960s. According to this system, development fund allocation could only be negotiated between the sectoral ministries and the MoF and not between the potential donors and the sectoral ministries. In 2004, the reformulation of the authorization letter system focused on the inclusion of foreign loans as development funds that should be disbursed by the MoF. Assuming that the MoF would only accept loans which were economically feasible, government policy makers thought that overspending could be avoided. Furthermore, unlike before, the sectoral ministries would be held responsible for loan repayment. Similarly, regional government should also be included in the loan repayment agreement if the allocated loans were to be disbursed to the regional government. In this way, government policy makers thought that both central and regional governments would be more careful in receiving, respectively, foreign loans and central government's projects because they also carried the responsibility to repay these loans. However, until 2007 this ongoing discussion has not led to any reformulation of government regulation on development fund channeling.

2.6 The project approach and Indonesia's sectoral development

The way the project approach has been applied in Indonesia (both prior to and after regional autonomy) has allowed the continuation of corruption practices within the government bureaucracy (World Bank, 2003). Yet, even in 2004, the advantages of the project approach (as first presented by Professor Widjojo Nitisastro on national television in the late 1960s) were given as the reason for the continuation of the approach. As expressed by officials from Kimpraswil: "The project staff could handle a larger amount of development activities in a relatively shorter time because they work more effectively through its integrated management unit. Besides, a project head could easily direct, monitor and register both the actual implementation of project activities as well as the actual budget spent on these activities towards the realization of predefined project

targets through the step-by-step project procedure" (interview with officials from Kimpraswil, 2004). This was despite the fact that the project approach failed to solve the managerial problems in Indonesia's sectoral development. See also the general criticisms on the project approach by Hulme (1995) and Rondinelli (1983) and how alternative structures to translate policies into policy programs continue to be lacking (Cernea, 1991).

Firstly, I illustrate the adoption of the project approach in the late 1960s. Secondly, I describe the formation of project structure from national down to district level parallel to the organizational structure of the government ministries. Thirdly, I discuss how, until 2007, the changes applied in development fund management, and the way project activities were directed, monitored, and evaluated through step-by-step project procedures, resulted in systemic rent-seeking practices within the government ministries.

2.6.1 The origin of the project development approach

The project development approach was introduced by the World Bank to the NDPA in the late 1960s (Rachbini, 2002). In the irrigation sector, the project approach was first applied through Projek Irigasi Daerah or PROSIDA (Irrigation Project funded by the International Development Agency) in 1969 (Pasandaran, 2003). PROSIDA lasted until 1984. After that, irrigation sector development was directed through another World Bank funded project, the Irrigation Sub-Sector Project (ISSP I and II), up to 1996, before the Java Irrigation Improvement and Water Resources Management Project (JIWMP) was started in 1997. Unlike in PROSIDA, project activities in the ISSP and JIWMP were focused on system operation and maintenance (O&M) (though construction and rehabilitation programs remained apparent in both projects). In 2000, the JIWMP was extended into IWIRIP (Indonesian Water Resources and Irrigation Reform Implementation) following the formulation of IMT under the Water Resources Sector Adjustment Loan (WATSAL). In 2005, the WISMP was started as a follow up to IMT implementation under the IWIRIP. All JIWMP, IWIRIP, and WISMP programs were funded by the World Bank.

The adoption of the project approach²¹ was impelled by the New Order government's attempt to address the country's lack of financial resources to direct its sectoral development. After hyperinflation destroyed Soekarno's government in the 1960s, the new government focused its strategy to recover the country's political stability through massive economic development (Rachbini, 2002; Booth, 1988) (for a more detailed explanation of the political reasons behind the adoption see Anderson, 1990). In the irrigation sector in particular, with the adoption of this project approach, foreign loans became the financial source for the country's sectoral development. Project activities became the country's development engine.

Further, the project approach was adopted to eradicate corruption practices within the government ministries. Prior to the introduction of the project approach, the use of development funds was hardly monitored by the respective ministries. With the adoption of the project approach, government officials in the NDPA believed that budget spending could be controlled and monitored more easily through rigid, step-by-step procedures in

project fund management²² (Kapur, Lewis and Webb, 1997). In the project setting, each budget spending item for every development activity was to be registered separately, under the project activities list (the so-called DIP). For instance, in the IWIRIP, the development budget for training activities was differentiated into a series of different types of training (financial audit, water management, O&M, and organizational management). Later, the budget spent on each activity was to be monitored by the project head in relation to actual progress in the field. Furthermore, the central government could link project activities from national down to district level through an integrated project management unit (see next sub-section for a more detailed explanation). The development plans defined by the central ministries were implemented and monitored by the project head at the regional level through this unit. In addition, development activities were focused on the realization of the predefined development goals and objectives. Project activities were defined and implemented towards the realization of the predefined project targets.

2.6.2 The project development approach and government's organizational structure

The adoption of the project approach was followed by the formation of a project structure, or the so-called project management unit, at both the national and regional levels. The way project management units were linked to the government's organizational structure resulted in the distinction between 'structural' and 'functional' lines within the government ministries. 'Structural staff' referred to government staff that were stationed within the government ministries. Formally, these staff were not involved in project activities. 'Functional staff' were government staff assigned to conduct project activities. They were also referred to as project staff. Formally, project staff were not involved in the overall decision-making process within the ministries.

The project management units symbolized the central government's presence at the regional level. These units were run by a project head, who was directly appointed and supervised by the minister or the director general. At the provincial level, a project head was only responsible towards his/her supervisor at the national level. Consequently, project staff within the former MPW regional office were not linked to the PIA. Similarly, project staff at district level were not linked to the DWRS. A DPIS head (the project representative at district level) was only responsible to the project head at the provincial level. In general, the project management unit consisted of planning, implementation, financial units, a general assistance unit and treasurer. In some cases, a project head also appointed sub-project heads, responsible for the program implementation. Each sub-project was again equipped with financial and monitoring units.

The overview of structural and functional lines in the government organizational structure is presented in Figure 2.3.

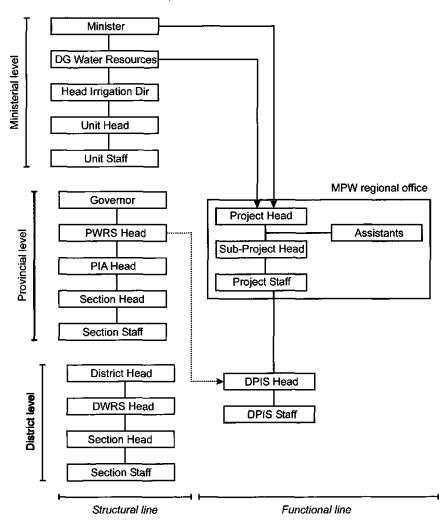


Figure 2.3: The coexistence of structural and functional lines in the government organizational structure

The overview of the project management unit is presented in Figure 2.4., using the structure of the IMT project (under the IWIRIP) at the provincial level as an example.

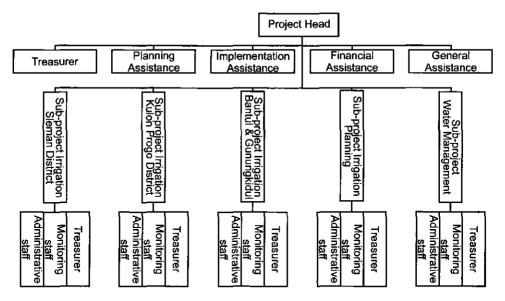


Figure 2.4: Overview of the project management unit under the IWIRIP at the provincial level

The relationship between the MoF and the sectoral ministries was reshaped with the adoption of the project approach. Prior to the adoption, the MoF defined the allocation of development funds into each sectoral ministry (as proposed by the sectoral ministries) based on the country's fiscal balance. In this way, overspending of state revenue was prevented because the amount of development funding disbursed to the sectoral ministries could not exceed the available government revenues. Following the adoption of the project approach, sectoral ministries depended primarily on donor support for their budget allocation. Furthermore, the sectoral ministries' interest lay in pulling in as many loans as possible because they were not directly responsible for the repayment of the loans²³. As expressed by one of the officials in the MoA: "The way the sectoral development fund was disbursed from foreign loans did not encourage the sectoral ministries to limit their budget spending. Sectoral ministries would never limit their loan proposals or refuse any loan offers from the donors because they were relieved from any responsibility to repay the loan" (interview with officials from the MoA, 2003). In the irrigation sector, the MPW's interest was primarily to collect as many loans as possible, regardless of their capability to repay the disbursed loans. Formally, the MoF was entitled to reject a loan agreement proposed by the sectoral ministries if the loan was viewed as economically unfeasible (considered too much for the government to be able to repay it). In practice, the MoF always approved any loan proposal because it viewed the proposed loan as the country's main development funds resource²⁴.

The procedures for development fund proposals and allocation as applied before and after the adoption of the project approach are presented in Figure 2.5.

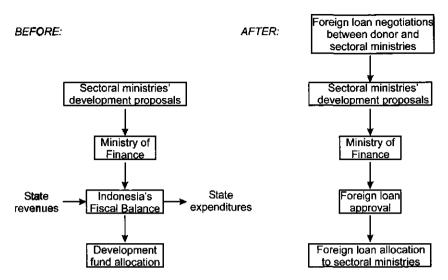


Figure 2.5: Formal procedure in fund proposal and allocation (before and after the adoption of the project approach)

Last but not least, with the adoption of the project approach, development funds in government ministries were divided between routine and project funds (or development funds). Routine funds came from the state's taxes and were managed by the MoF. Project funds came from foreign loans and were managed separately by project heads under each sectoral ministry. Whereas project funds were used to conduct development activities, routine funds were primarily used to cover administrative expenses of the government ministries (including staff salaries). Furthermore, routine funds were continuously disbursed from the MoF to the sectoral ministries for each new fiscal year. Project funds, on the other hand, were disbursed from foreign donors to the sectoral ministries according to the loan agreement. Project funds were supposed to be fully spent before the project was completed. In addition, project funds were managed more flexibly than routine funds. At the ministerial level, each financial section within each directorate and directorate general was involved in the management of routine funds. This is in contrast to the way each project fund was managed almost exclusively by the project head and his/her bureaucratic supervisors.

2.6.3 The project development approach and systemic rent-seeking practices

In Indonesia, corruption flourished with the introduction of the project approach. Government ministries lacked the interest to use project funds effectively because project procedures encouraged complete spending of the project budget. According to the project's procedure, complete budget spending indicated optimal progress of project activities (see also Ferguson, 1997 and Hoebink, 2007 on how the relationship between complete budget spending and optimal project progress was often not justified). The tendency to spend fully the allocated project fund was also related to the way budget

planning was defined within the project approach. The planned allocation of project funds was based on project expenditure in previous years. In this way, when a project head was unable to spend the allocated project fund fully, s/he would receive a reduced amount of project funding for the following years (see Chapter 3 on how this decreased amount of project funding would negatively affect a project head's actual power). Consequently, a project head would rather 'waste' the allocated project fund than return the unused fund to the central ministry (World Bank, 2003). In turn, project funds were perceived as a gift. Nobody was concerned about the actual use of a project fund as long as it was fully spent. As stated by a former project head in Yogyakarta: "Project activities were conducted simply to spend the allocated project fund" (interview with a former project head in Yogyakarta, 2004). In practice, a project head focused his/her performance on the formal formulation of the financial report, matching the amount of project budget spent (as stated in the report) with the planned expenditure of the project funds, regardless of how these project funds were actually being spent (World Bank, 2003).

Widespread collusion between government audit systems both at the ministerial level (the inspectorate general and project head's supervisor) and above it (the State Audit Agency or BPKP and the Supreme Audit Agency or BPK) hampered the control mechanisms in project fund management and reduced project financial audits to administrative exercises. For instance, evidence from World Bank supervised projects and BPKP audits suggests that a project financial report²⁵ rarely included independent verification from third parties confirming the detailed quantities and specifications of goods delivered or works completed (World Bank, 2003). Put differently, project financial reporting did not reflect actual fund management. As stated in the World Bank report on corruption in Indonesia: "While there is no shortage of auditing, the audit process is flawed" (World Bank, 2003). Or, as expressed by officials from the MoA and MoHA: "The rent-seeking problem around project fund management lies in the cooptation of external financial auditors into the project system" (interview with officials from the MoA and MoHA, 2004). This collusion in project fund management was rooted in the relationship between the project head, his/her supervisors, and the contractors (see Chapter 3 for a more detailed explanation). As stated by officials from the MoA and MoHA: "A project head's role in monitoring the contractor's actual work became meaningless due to the close relationship between contractors, a project head and his/her bureaucratic supervisors. As both the project head and his/her supervisors would get financial benefits from the contractor's ability to build the proposed infrastructure with relatively lower costs (which often resulted in poor infrastructure quality), they tended to cover up the contractor's poor work²⁶" (interview with officials from the MoA and MoHA, 2004). Similarly, the project head would distribute some portion of the project funds to the government officials in charge of monitoring the project fund management (in both the respective ministry and in the BPKP and the BPK) to ensure their cooperation (see Chapter 3 for a more detailed explanation of the project head's role in distributing project funds to high government officials).

Next, the systemic delay in the actual allocation of the project fund created perverse incentives for government agencies to transfer this fund to other bank accounts outside the

control of the government and generate false documentation on project progress, leaving the door wide open for abuse (World Bank, 2003). This transfer was necessitated by the fact that any unused project funds would be lost (or returned to the central ministries) at the end of the year. Formally, project funds were supposed to be allocated to the regional level at the beginning of the fiscal year (January or February). In practice, this fund reached the regional level only in June or July, leaving the project head with less than half a year to conduct the planned development activities and spend the allocated funds. As stated by an official in the PIA who was also a former project head: "Due to the late budget release, the project head had less than six months to perform all the targeted works. Reacting to this rather unrealistic target, the project head often had to process different kinds of payments at the last minute before the end of the fiscal year. Sometimes. the project head had to process payments before project activities were even started" (interview with officials from the PIA, 2004), Recent World Bank supervision missions to a development project in one Indonesian city showed that for 16 civil works contracts a majority of the payments to contractors were processed by Government treasury offices in December, just days before the fiscal year-end, and often on the last day of the contracts without any direct control on work progress in the field (World Bank, 2003).

Furthermore, the exclusion of quality measurement aspects from the actual project evaluation allowed the project head to hide misconduct in the actual management of project funds. According to the project procedure, project activities should be evaluated, based on the following measurements²⁷: the quality and the quantity of works, as well as the deadline for completion. In practice, the quality aspect was often overlooked during project evaluation due to the difficulty of setting a standard or defining such qualitative measurements. Consequently, the project head could easily manipulate the project report, primarily to give the impression that project activities were directed towards the realization of the predefined project targets, even when these targets were only achieved on paper. In the irrigation sector, the project head could report the number and the size of the infrastructure built within the defined time target regardless of the quality of the built infrastructure²⁸, not to mention the fact that sometimes, when site visits were conducted by project evaluators (World Bank staff or its consultants), they often found out that this infrastructure had not even been built in the first place (World Bank, 2003).

In addition, the way a penalty system within the project structure was actually applied allowed the project head to continuously neglect quality assessment in project evaluation. Formally, the project head's supervisor would instruct the project head to confront the contractors to deal with any emerging project failures. In practice, the project head would never confront the contractors because if the contractors were charged for these failures, the project head's performance would also suffer. Ironically, a new project was often formulated as a standard response to 'reward' project failures, where the purpose of the new project was to deal with the poor quality of works undertaken in a previous project (Ferguson, 1997). As expressed by some officials in Kimpraswil: "As long as there is something to be built and rehabilitated, there is always a reason to formulate new projects" (interview with officials from Kimpraswil, 2004). Unsurprisingly, one project was followed by another because poor work quality was apparent in almost every project.

For example, most construction projects on Java were followed by rehabilitation projects, focusing on the replacement of the poorly constructed infrastructure.

Last but not least, central ministries often used their decision-making power to define project fund allocation as their bargaining weapon to demand a certain amount of informal financial contribution from the regional governments. This contribution was often referred to as upeti, which literally means tribute to the king from his followers (see Chapter 3 for a more elaborate explanation of upeti practices). As stated in the World Bank report: "Officials in project units and in regional government complain that release of project funds is subject to a variety of unofficial levies by central ministries to meet unspecified costs or simply as an inducement to expedite the transfer of funds, thus further tightening resources available to spending agencies" (World Bank, 2003: 50).

2.7 Conclusion

In 2007, the characteristic of the Indonesian state as a rentier state remains prevalent in the aftermath of regional autonomy. Firstly, the government remains dependent on foreign loans to conduct the country's sectoral development. Secondly, the state-citizens relationship continues to be shaped by the government's decision-making authority in development fund disbursement. Thirdly, corruption practices continue to flourish following the political reform in 1998.

The characteristic of the Indonesian state as a rentier state has remained unchanged because, even after the fall of the New Order government, the new governments continued to reproduce the state's basic power structure that is rooted in the political relationship between the president and his/her ministers. Put differently, the Indonesian state's foundation, as laid by Suharto in his thirty-two year reign, remains pretty much untouched by the political reform of 1998. Rather, the relationship between the president and his/her ministers, as crafted within the political party partisanship system, continues to govern the overall process of state (re)formation in post-Suharto's Indonesia. Consequently, bureaucratic mechanisms of the present-day government ministries continue to be shaped by patron-client relationships, centered on the president's position as the highest, if not the most important, patron.

The overall application of regional autonomy did not result in the transfer of decision-making authority from central to regional government because of the continued fiscal dependency. As before, regional development is shaped primarily by project activities from the central ministries, conducted directly by its representatives in the project structure. In the irrigation sector, centralized development remains apparent from the project head's unaltered position in directing the sector's development at the regional level. The project head continues to play a more influential role in directing regional development through project activities than the head of the PIA or even the head of the PWRS due to his access to project funds.

Regional autonomy did not eliminate the widespread corruption practices within the

government organizational structure because sectoral development continues to be directed through the same mechanisms rooted in the project procedures and regulations. In the irrigation sector, the alliance between project head and his/her supervisors remains intact. Like before, the project financial report is prepared by the project head and his/her supervisors, primarily as an administrative exercise.

With the adoption of the project development approach, rent-seeking practices within the government agency have gone into the fabric of the bureaucracy. These practices have been internalized into bureaucratic procedures, rooted in the applied project procedures and mechanisms and therefore very difficult to change. The government's organizational structure and its bureaucratic procedures (primarily concerning the regulations in project fund disbursement) have been adapted in such a way as to sustain and reproduce these rent-seeking practices. Together with the application of the political party partisanship system, the way the project approach is applied in Indonesia has allowed the preservation of bureaucratic patrimonialism within the government agency; this will be the topic of the next chapter.

¹ From the political science literature, the concept of a rentier state is mainly applied to resource-rich (mainly from oil and mining) countries in the Middle East. The concept was first developed by Mahdavy in 1970, while studying the economic problems within the Iranian government during the 1960s (Mahdavy, 1970). A rentier state is often referred to as prebendal politics or a predator state (Bayart, Ellis and Hibou, 1999).

² This lack of accountability is rooted in the so-called taxation effect (Yates, 1996). This effect highlights that government is less likely to tax the country's citizens if it derives sufficient income from the available rents (foreign loans in the Indonesian case). In turn, when local populations pay less tax to the government, they are less likely to demand accountability from their government. Using Yates' words: "There can be no representation without taxation" (Yates, 1996).

³ See also Moss, Pettersson and van de Walle (2006) on how the continuation of foreign loan discourages state revenue collection.

⁴ The continuation of bureaucratic patrimonialism was also highlighted by Schulte-Nordholt in his analysis on the Indonesian state as an 'octopus' state, in which he points out the existence of the 'real' state, next to the presence of the formal state. This real state consists of a formal set of bureaucratic institutions that coexists with a shadow state in which bureaucrats, businessmen, politicians and criminals interact on a regular basis (Schulte Nordholt in Hanneman and Schulte-Nordholt, 2004).

⁵ See also the concept of bureaucratic polity (Jackson and Pye, 1980; King, 1979), and the application of bureaucratic patrimonialism (either cum military or cum corporatist) (MacIntyre, 1994; Crouch, 1986) with regard to the domination of judicial and legislative bodies by the executive body during the New Order government.

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⁶ This political party partisanship system was briefly mentioned in the World Bank report (2003), in which the relationship between the president and his/her ministers was presented as the relationship between the 'chief franchiser' and the 'franchisee'. In this thesis I base my analysis on interviews with policy actors from universities, NGOs, and government officials who have been directly involved in the overall process of state (re)formation following the political reform in 1998.

⁷ See also Huntington (1970) for the functional role of corruption to maintain a political system or strengthen political parties and Scott (1970) on the discussion on systemic corruption as part of the state's political 'machine', whose function is to secure office for its leaders and distribute income to those who run it and work for it

⁸ Formally, government ministries' staff were only accountable to the president. This meant that legal and

administrative sanctions could only be applied if the president chose to apply them.

⁹ Cendana is the road where Suharto's family lives in Jakarta. This reference also symbolizes the patron-client relationship between Suharto and his officials.

10 Similarly, related to its scope of authority, the position of MoHA minister was always held by officials with

close connections to the president.

¹¹ Erna Witoelar belonged to Wahid's inner circle of power. This was evident in her immediate resignation from the minister's post when Wahid was forced from office in 2001. Similarly, Soenarno was a member of PDI as the ruling political party under the Megawati presidency.

¹² Decentralization was not a new phenomenon in the country's political history. Decentralization policies were formulated during the late colonial period as well as during both the Soekarno and Suharto presidency (Holtzappel, Sanders, and Titus, 2004; Malley, 2003; Legge, 1961). Yet, prior to regional autonomy, decentralization was never widely applied.

13 Interviews with officials from MoHA, 2003, 2004.

¹⁴ The decision to transfer authority to district government was also supported by the past experience of decentralization (Devas, 1997). In 1995, a two-year pilot project on district autonomy was introduced by the New Order government. Through this pilot project central government's selected functions were transferred to 26 district governments, or ten percent of all district governments in Indonesia at that time.

26 district governments, or ten percent of all district governments in Indonesia at that time.

15 Prior to regional autonomy district heads and governors were appointed by the central government through

MoHA.

¹⁶ Prior to regional autonomy, the central government defined and managed the actual fund allocation to the regional level through its subsidies, development aid and project funds (Mahi and Adriansyah, 2003). Government subsidies (also referred to as routine funds were disbursed primarily to cover regional government staff salaries (both at provincial and district level). During the New Order government development aid was allocated based on instructions given by the president, hence the name 'Inpres' fund (Inpres means literally presidential instruction). Unlike subsidies and government aid funds, the project fund was not transferred to the regional government, but to project staff at the central ministries' regional offices.

¹⁷ Though again this decision was to be approved at the ministerial level. However, in most cases, both the

minister and the director general would approve the candidate proposed by the head of the PIA.

¹⁸ While the DAU was designed to eliminate vertical fiscal imbalances (between the central and regional governments), in practice, DAU application has been less equalizing due to its role in creating horizontal fiscal imbalances (between regional governments). The way DAU was applied advantaged the resource-rich regions, as only those producing regions, or regions with higher tax bases, would receive a much bigger share than regions that were poor in term of natural resources and tax bases (Brodjonegoro, Paddue and Sato, 2003).

¹⁹ Ryam Rasyid was the minister of MoHA at that time and a prominent supporter of regional autonomy.

²⁰ Officially this activity title includes activities such as coordination meetings on IMT, discussions on annual budgets, national workshops, consultation with central government, and regional financial workshops.

²¹ With this adoption, the shaping of the Indonesian state as a developmentalist, interventionist state began (Anderson, 1984).

²² Interviews with officials from the MoA and MoHA, 2004.

²³ Interviews with officials from the MoA, MoHA and Kimpraswil, 2003.

²⁴ In some cases, the MoF would approve the loan proposal, but only to be able to pay the interest on the previous loans.

²⁵ In general, the project financial report provides primarily an internal document called a BAP (Berita Acara Pembayaran) which gives details of the payment request and confirms that this requested payment has been fulfilled.

²⁶ Publicly, the contractor's low actual accreditation was often mentioned as the reason behind the poor quality of works. Yet, the same lowly accredited contractors could win the project tender again and again. According to a PIA official in Yogyakarta, one contractor often won the tender due to the fact that the existing mechanisms in project tendering focused on registration, which meant that the basic criteria to select a contractor focused on written accreditation only. In practice, as this written accreditation could be easily manipulated by everybody who had enough money to bribe the institution that provided the accreditation (usually a non-governmental construction organization), the project head was trapped when s/he based his/her decision on the written accreditation. Generally, when a lowly accredited contractor delivered poor quality of work, a project head could not report this low quality, because that would negatively affect the project head's performance evaluation. Hence, the project head would work together with the contractor to find ways to hide this poor quality of work.

In my opinion, this accreditation problem could never by itself preserve the continuation of poor quality of works conducted within the project setting.

When a project failed to meet these targets, this failure was considered as the result of the project head's poor performance

28 Similarly in IMT implementation the project head a subject to the project head's poor performance.

²⁸ Similarly, in 1MT implementation, the project head could report the number of FWUAs formed within the defined timeframe regardless of the FWUAs' actual organizational functioning.

3. The irrigation agency's bureaucratic identity contested

3.1 Introduction

This chapter explores the irrigation agency's bureaucratic identity, and how this is sustained and reproduced by core policy actors¹ interests and strategies. It highlights the importance of the project approach in sustaining and reproducing the irrigation agency's bureaucratic identity. The chapter describes the agency's main structural properties, which are its professional orientation towards infrastructure development and its focus on bureaucratic rent-seeking. These mutually reinforcing drivers of agency behavior are translated into specific management rules and procedures in and around the project approach.

Further, the chapter illustrates how the agency's identity was contested by the shift in international policy trends in the late 1980s and later by the political reform in 1998. It discusses the major changes in the organizational structure of the irrigation agency, as a new Ministry of Settlement and Regional Development (or Kimbangwil) was formed in November 1999, to replace the Ministry of Public Works' role in directing development in the irrigation sector.

The main findings of this chapter are:

- The irrigation agency's bureaucratic identity is rooted in infrastructure-oriented development
- The institutionalized corruption within the irrigation agency is a product of bureaucratic capitalism, rooted in the political party partisanship system
- Rent-seeking rules within the agency are crafted in the formal procedure of project fund management
- The bureaucratic reform undertaken in 1998 proved that the actual outcome of the reform was defined by the ability of the internal forces within the agency to confront the core policy actors' importance
- Policy change in the irrigation sector can only take place when this is accommodated by changes in the irrigation agency's bureaucratic identity

This chapter is divided into five sections. Section 1 discusses the irrigation agency's bureaucratic identity as the product of 'bureaucratic capitalism'. Section 2 illustrates how the agency's organizational foundation is based on infrastructure-oriented irrigation development and discusses how the irrigation agency's bureaucratic mechanisms are shaped by the practice of bureaucratic rent-seeking. Section 3 illuminates how rent-

seeking rules were established in the actual management of project funds. Section 4 illustrates how the policy trend shift in irrigation systems management from construction and rehabilitation to system O&M, farmer empowerment, and later to IMT was hampered by the core policy actors' resistance to change. Section 5 discusses how the core policy actors' bureaucratic power was diminished with the abolition of the Ministry of Public Works in 1999 and later restored with the formation of the Ministry of Settlement and Regional Infrastructure (or Kimpraswil) in 2001.

3.2 The irrigation agency's bureaucratic identity

In this thesis, I define the irrigation agency's bureaucratic identity as the product of accelerated bureaucratization, or what Evers calls 'run-away bureaucratization' (Evers, 1985). According to Evers, the process of bureaucratization in Indonesia resulted in retarded Weberian bureaucracy, where the rapid growth in government personnel was not accompanied by a growth in their ability to perform the assigned bureaucratic tasks as defined by Weber (1921). In contrast to Weberian bureaucracy, the Indonesian bureaucracy is characterized by the increasing use of informal rules, and the unification of official and private life. As stated by Robison: "The Indonesian bureaucracy is a product of patrimonial bureaucratic authority, in which the demarcation between public service and private interest is at best blurred" (Robison, 1978: 24).

Indonesian bureaucracy resembles the characteristics of 'bureaucratic capitalism²¹, in which the government bureaucracy works as the medium to integrate the existing power structure into a modern capitalist economy (Riggs, 1966). Under bureaucratic capitalism, bureaucratic position becomes the means to provide government officials with patronage for themselves, their families, and the political factions to which they owe their authority. In Indonesia, this was evident in the way high bureaucratic officials (mostly from the military in Suharto's New Order government) extended their control into the national economic sphere (Jackson and Pye, 1980).

With reference to bureaucratic capitalism, the irrigation agency's bureaucratic identity is shaped primarily by high officials in the agency, or the so-called core policy actors³ (see Sabatier and Jenkins-Smith, 1993, for a definition of core policy actors). Within this core group are found both retired and bureaucratically active high officials with close connections to the present and former minister (such as present and former director generals, project heads as well as secretary generals and inspector generals). The power of these bureaucratically active high officials resides in their authority to regulate bureaucratic positions in the agency. For instance, they can promote and replace certain officials to strengthen their alliance in the agency through their formal decision-making power (Wade, 1985). Furthermore, they can use their access to project funds as financial means to shape the decision-making process in the agency, relying on their position as project heads' supervisors. The retired officials' power, on the other hand, resides in their role as policy broker to negotiate policy ideas from lower level officials, regional governments, or NGO representatives in relation to the irrigation agency's formal policy guidelines. The power of these officials relies primarily on their ability to exert influence

on the bureaucratic leadership, and thus indirectly steer the decision-making process within the agency at its highest level in relation to proposed policy ideas. For instance, it is very likely that the present director general, or even the minister, used to be on the staff of these retired high officials in the past. What is more, these retired high officials can direct their strategies more flexibly because they are no longer formally connected with the agency. For example, they could directly suggest to the minister that certain policy steps needed to be taken, without being afraid about the future of their own bureaucratic career. In addition, through their broad bureaucratic connections, retired officials also play an important role in negotiating the inter-sectoral working relationship.

In the next section, I discuss the irrigation agency's main structural properties in the context of bureaucratic capitalism.

3.3 The structural properties of the irrigation agency

Firstly, I illustrate how the irrigation agency's organizational foundation is based on infrastructure-oriented irrigation development. Secondly, I discuss how the agency's bureaucratic mechanisms are shaped primarily by the practice of bureaucratic rent-seeking.

3.3.1 The irrigation agency and infrastructure-oriented development

Starting from the late 1960s, Indonesian irrigation sector development was focused on the construction and rehabilitation of physical irrigation infrastructure to support the country's food policy on rice self-sufficiency (Jatileksono, 1987). With the introduction of high yielding varieties and the green revolution, infrastructure-oriented development was focused on the construction of technical irrigation systems and on the upgrading of the existing non- and semi-technical irrigation systems into technical ones. Technical irrigation systems are those systems that have a permanent dam, networks of (partial) concrete irrigation canals, and are equipped with different kinds of water control or measurement devices (such as sluice gates, weirs, siphons and in some cases Cippolettis). They are operated by specialized staff. Non-technical irrigation systems are village irrigation systems that have temporarily or semi-permanent infrastructure (mostly earthen dams and canals). Non-technical systems are operated by farmers. Semi-technical irrigation systems are those systems that have some permanent infrastructure but are not yet fully technically developed. Unlike non-technical and technical systems, semi-technical irrigation systems are operated by the irrigation agency and farmers.

The strong emphasis on construction and rehabilitation can clearly be seen in the country's investment pattern in the irrigation sector. An overview of budgetary expenditure on irrigation development from Repelita I to IV (the five year development plans from 1969 to 1983) is presented in Table 3.1.

Table 3.1: Total irrigation development expenditure by type of development, Repelita I through IV

	Rehabilitation	New construction	Swamp tidal	River and flood control	Total		
Repelita I (1969-1973)							
Percentage distribution	42.3	22.3	29.1	5.7	100.0		
Current cost Rp (billion)	50.0	25.0	33.1	6.4	114.4		
Real cost* Rp (billion)	73.7	38.3	50.0	9,9	171.9		
Repelita II (1974-1978)							
Percentage distribution	23.8	31.9	8.8	35.7	100.0		
Current cost Rp (billion)	147.6	197.3	152.3	219.9	617.1		
Real cost* Rp (billion)	138.8	185.7	50.1	207.8	582.3		
Repelita III (1979-1983)							
Percentage distribution	28.8	39.2	6.0	26.0	1 0 0.0		
Current cost Rp (billion)	556.3	759.8	109.7	483.4	1,908.2		
Real cost* Rp (billion)	263.4	358.0	54.6	237.2	913.1		
Repelita IV (1984-1988)							
Percentage distribution	24.0	42.2	5.0	28.8	100.0		
Current cost Rp (billion)	550.5	967.6	115.2	661.3	2,294.6		
Real cost* Rp (billion)	179.5	315.5	37.6	215.6	7 4 8.2		

Source: Ministry of Public Works, DGWRD 1988

Note: *constant 1975/76 rupiah

Investment in irrigation infrastructure grew dramatically through the first three Repelitas (Pasandaran and Rosegrant, 1995), For instance, in the third Repelita, the total amount of development funding spent on the construction of new irrigation systems reached Rp. 358 billions or nearly ten times the budget spent on construction during the first Repelita. Similarly, the total amount of development funding spent on rehabilitation in the third Repelita reached Rp. 263 billion, which was three times that spent in the first Repelita. This dramatic budget growth during the first three Repelitas was made possible by foreign loans. According to Ringskog⁴ (2001), the Indonesian government received about US\$ 1 billion from the World Bank between 1969 and 1997, US\$ 100 million was lent during the 1970s, US\$ 300 million during the 1980s, and US\$ 600 million during the 1990s. During the first Repelita, development funds for the irrigation sector primarily originated from PROSIDA (Irrigation Project of the International Development Association), a project funded by the World Bank. The project focused on the construction and rehabilitation of irrigation infrastructure on Java. It started in 1969 and was finalized in 1989 (see Chapter 2 on how irrigation sector development was directed through a series of World Bank funded projects).

During the 1970s, budget growth in the country's overall development resulted in the formation of a massive government bureaucracy. In general, the number of government staff grew from less than half a million in the mid 1970s, to at least three million in the mid 1980s (Cole, 2001). In the irrigation sector, the Ministry of Public Works (MPW) was equipped with extensive organizational units (organizational structure of the Ministry of Public Works, as stated in Ministerial Decree Number 21 of 1984). The minister was supported by a ministerial advisory team, an inspector general, a secretary general, and

four directorate generals (for housing, irrigation, road infrastructure, and research). The inspector general was equipped with six inspectorate units, with each unit responsible for a specific development region. The Directorate General of Irrigation consisted of three Sub-Directorates, specializing in river, swamp, and irrigation development. Each of these Sub-Directorates was equipped with a Sub-Sub-Directorate of Technical Planning, Sub-Sub-Directorate of Implementation in the east, west and mid Regions, Sub-Sub-Directorate Maintenance, and a separate administrative and financial unit. An overview of these units is presented in Figure 3.1.

Following the implementation of the PROSIDA project, project management units were incorporated into the organizational structure of the Directorate General of Irrigation. A special Sub-Directorate (Sub-Directorate Irrigation 2) was formed under the Directorate General of Irrigation in the MPW to deal with the implementation of irrigation projects under PROSIDA. In addition, the Directorate General of Irrigation consisted of Sub-Directorate Program Guidance, which was responsible for the preparation of project planning and funding arrangements in general. The Sub-Directorate Program Guidance consisted of five Sub-Sub-Directorates, dealing with project evaluation, inter-sectoral cooperation, foreign loan administration, irrigation and river development planning. An overview of organizational units within the Sub-Directorate Program Guidance is presented in Figure 3.2.

With the incorporation of project management units into the irrigation agency, the agency's technical expertise became directed more and more towards a project management role. The fact that irrigation development was mediated through the project approach urged the engineers in the agency to expand their knowledge and experience outside their technical training. For example, as project head, one had to be able to manage all different kinds of project activities, to monitor the progress of each activity, to meet the defined targets, and to deliver satisfactory project reports. Furthermore, the bureaucratic career of engineers in the agency depended more and more on their ability to undertake project management in addition to their professional and technical responsibilities. This tendency towards project management was clearly visible in the reorganization of the irrigation agency in 1984, when the Sub-Directorate River, Swamp, Irrigation 1, and Irrigation 2 were replaced by the Sub-Directorate Program Guidance, Sub-Directorate Technical Guidance, and Sub-Directorate Implementation Guidance. With this replacement, the technical expertise (in, respectively, river, swamp, and irrigation) of the agency's staff was intermingled and restructured according to the project management needs. Sub-Directorate Program Guidance was responsible for planning and managing program implementation, primarily those funded by foreign loans. Technical Guidance was responsible for preparing technical designs for construction and rehabilitation. Implementation Guidance was responsible for project implementation in the mid, west and east regions (organizational structure and working framework of MPW, as decreed by the minister of MPW, Number 211 of 1984).

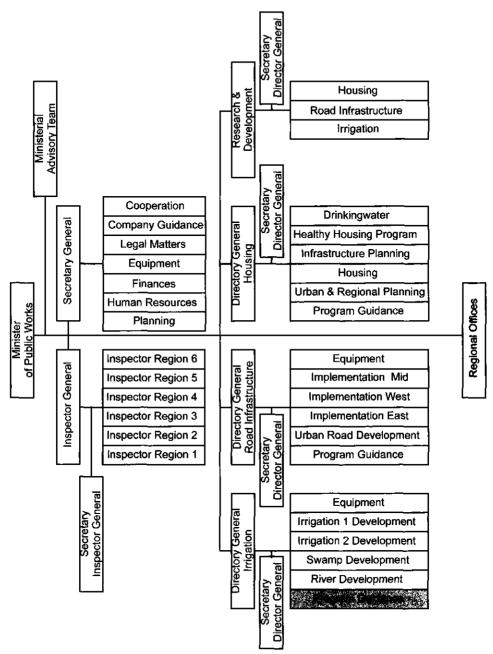


Figure 3.1: Extensive organizational units within the Directorate General of Irrigation in the MPW (1969 to 1984)

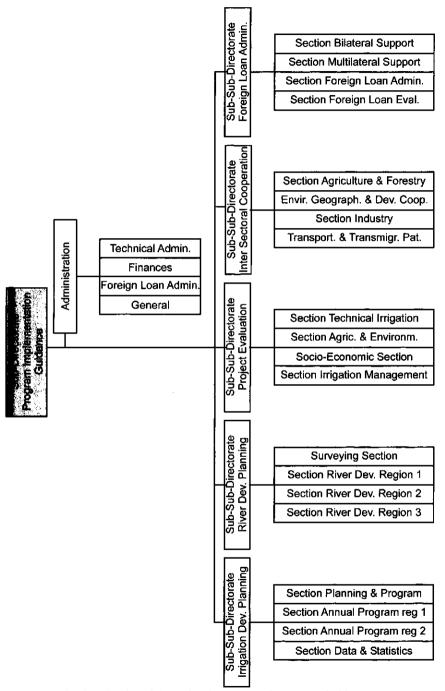


Figure 3.2: Organizational units of the Sub-Directorate of Program Guidance

3.3.2 The upeti system and bureaucratic rent-seeking

Bureaucratic rent-seeking, or upetism was already operational within the government ministries in Indonesia prior to the introduction of the project approach and continued to flourish afterwards. As stated in Prakoso and Suryati: "Upetism is a widespread problem within the Indonesian government. Corruption practices were institutionalized with the establishment of the upeti system" (comments from parliament members in Prakoso and Suryati, 1986: 27). Upetism comes from the word upeti, which literally means: tribute to the king from his followers. The practice of *upetism* was rooted in the feudal period, when a king's power was legitimated by the amount of tribute he received from his followers (Wertheim, 1970). In return for tribute, the king would protect the local population from outside threats (such as foreign invasion). In modern-day Indonesia, upetism is embodied in government officials' interests in gaining as much private gain as possible (primarily in the form of financial enrichment but not limited to it) from their bureaucratic positions. As mentioned by some retired officials from the irrigation agency: "These days, government agency staff's work orientation is directed primarily by their interest in increasing their personal wealth using their bureaucratic positions" (interview with retired officials from the irrigation agency, 2003).

Upetism practices are rooted in the political relationship between the president and his/her ministers (see Chapter 2). With reference to the political party partisanship system, government ministers have to sustain rent-seeking practices within their ministries because they are obliged to deliver a certain amount of *upeti* to the president⁵, which is later used by the president as a resource to sustain his/her political power during the country's national election (Harahap, 1999). As stated by Wade: "If the chief minister cannot continue to supply the center with the funds he promised as a condition of taking the job, he too will be dismissed" (Wade, 1985: 473). In accepting the position, a minister informally agrees to use his/her position as the president's direct access to development funds. In other words, hardly any government official would have either the interest or the intention to abolish bureaucratic rent-seeking practices, because this is enforced by the bureaucratic leadership. For instance, Alatas (1986) suggests that the most important factor in combating corruption is leaders' moral and intellectual stature. Similarly, as stated by a senior official from the MoA: "One cannot pursue a bureaucratic career, if one does not want to join the common conspiracy within the government ministry, which is rooted in the practice of mass corruption" (interview with senior official from the MoA, 2004). In practice, almost every official is involved in corruption practices, either directly or indirectly, partly because the existing bureaucratic mechanisms make it almost impossible for officials not to be caught up in the corruption networks (see also Wade's 1985 study on the trade of public office in India).

The widespread existence of the practice of upetism within Kimpraswil was evident from the Kimpraswil minister's speech given during the formal inauguration of ministerial staff from echelon 2, on 6 November, 2003. This speech was titled: "No obligation to deliver 'upeti' to high officials". The minister emphasized the need to eliminate corruption practices rooted in the upeti system. In the Minister's words: "I hereby emphasize that the obligation to deliver upeti to high officials should be abolished. Upeti should be

forbidden" (the speech given by Kimpraswil minister, as reported in Suara Pembaruan national newspaper, 7 November 2003).

Within the irrigation agency, the practice of upetism was rooted in a patron-client relationship between the high officials and their staff. As in feudal times, the decision making within the irrigation agency, and within the MPW in general, has taken the form of a bureaucratic patriarchy (see also Wertheim, 1970, on how this bureaucratic patriarchy was rooted in the eighteenth century colonial bureaucracy in Java). The bureaucratic leaders' words and decisions became the legitimate bureaucratic rules⁶. As stated by officials from the National Development Planning Agency (NDPA) and the Ministry of Agriculture (MoA): "Direct guidance and hints given by the minister are far more important than the formal bureaucratic rules" (interview with officials from the NDPA and the MoA, 2004). Similarly, as expressed by some officials in Kimpraswil: "In practice, the decision-making line within the irrigation agency does not really work. Everything is still defined by the bureaucratic leaders" (interview with officials from Kimpraswil, 2003). In this context, a minister or a director general could approach his/her staff to conduct specific tasks regardless of the formal bureaucratic rules. In return, these bureaucratic leaders would reward their followers for their loyalty or outstanding 'performance'. As stated by some officials in Kimpraswil: "Once, I travelled with my wife to Europe. The cost for this trip was all covered by the minister. I received this privilege because I had saved almost Rp. 400 billion in dam construction. Through my design, a much cheaper dam was built" (interview with the globe trotter and other officials from Kimpraswil, 2003).

Bureaucratic patriarchy is most apparent in the relationship between a project head and his/her bureaucratic supervisor. The high officials use their bureaucratic decision-making power as a resource to trade bureaucratic positions and ensure upeti delivery from their staff. The lower officials, on the other hand, focus their bureaucratic career on delivering upeti for these high officials, in return for a good job position or a position that will give them direct access to development funds (Wade, 1985). For instance, officials in the irrigation agency would have to deliver money, luxury goods, and additional services to their supervisors in order to get a project head position because the position was considered as one of the best⁸ in the agency due to its access to project funds (see also Wade's definition of desirable and undesirable posts). Similarly, officials in the agency would 'donate' generously or even participate in arranging an extravagant wedding ceremony for a high official's child. Furthermore, when one such supervisor went abroad for work-related trip, his followers would also give him a certain amount of money to cover his 'informal' expenses. These expenses could include personal gifts for his family, a holiday package trip, and overnight stays in luxury hotels9. Following their appointment, project heads focus on manipulating the management of project funds in such a way that they can use these funds to deliver an even higher amount of upeti, to ensure further bureaucratic promotions¹⁰. For instance, Ramly from Econit Advisory Group estimates that thirty percent of the total amount of foreign loans received by the Indonesian government (that is almost US\$ 13 billion) has been lost through corrupt avenues (Bisnis Indonesia newspaper, 3 September 1998a).

The reproduction of bureaucratic mechanisms in the irrigation agency is directed towards the preservation of these high officials, 11 bureaucratic importance, with regard to their access to both development funds and decision-making authority to direct program implementation. Firstly, the high officials in the agency ensure their upeti collection by appointing their followers as project heads, and thus strategically use the project head positions as their 'service point' for upeti delivery. In addition, these officials can contact the project head whenever they need additional funds to cover the incidental nonbudgetary expenses apart from the regular amount of upeti they receive, such as the financial costs involved in receiving foreign donor delegations as part of the formal ministerial proceedings (see the next sub-section for the description of non-budgetary funds). For this reason, officials in the agency refer to the project head as the high official's ATM¹³. Secondly, the high officials in the irrigation agency can indirectly steer the irrigation sector development also by appointing their loyal followers as project heads. In this context, the project heads' access to project funds is used as a financial medium to direct program implementation in the irrigation sector. For example, high officials in the agency are able to redirect IMT implementation under the Water Sector Adjustment Loan (WATSAL) towards a construction-oriented program (see Chapter 5 for a more detailed description of IMT implementation under WATSAL) relying on their close connection with the project heads. In short, as expressed by some officials in Kimpraswil: "Your bureaucratic power is linked to your access to development funds. Access to a large amount of development funds will render you the bureaucratic authority and vice versa" (interview with officials from Kimpraswil, 2003).

In the next section, I illustrate how institutionalized rent-seeking practices within the irrigation agency are rooted in the management of project funds.

3.4 Rent-seeking rules in project fund management

Systematic rent-seeking practices within the government ministries are evident in the way project funds are divided into budgetary and 'non-budgetary funds' in their actual use. The budgetary fund is an officially registered project fund that is supposed to be used to conduct project activities. The non-budgetary fund, on the other hand, is a part of the project fund that is informally used by the irrigation agency to cover its bureaucratic expenses, without being officially registered. As explained by an official in the MoA: "In general, government ministries in Indonesia have both formal and informal financial systems. The management of this informal financial system varies between ministries, depending on the inter-personal relationship within the particular ministry. Yet, the management of both non-budgetary and budgetary funds is conducted like the two sides of a coin" (interview with official from the MoA, 2003 and 2004). In addition, a separate book-keeping system is maintained next to the formal book-keeping. The main difference between the book-keeping for budgetary and non-budgetary funds expenditure is that the record of non-budgetary fund management is never presented to the public.

Within the irrigation agency, rent-seeking rules around the management of project funds are incorporated in project procedures on construction and rehabilitation activities. This

incorporation is linked to the fact that, during PROSIDA and later on, project activities focused primarily on physical development. The alliance between the project head, his/her supervisor, and the contractors is established within the context of systems construction and rehabilitation (see Chapter 2). For instance, the strategy of marking up the unit costs was mainly developed to cover rent-seeking in construction and rehabilitation activities. As expressed by officials from the MoA and MoHA: "The irrigation agency's technical knowledge and experience enabled them to manipulate the project financial report concerning physical development, in such a way that it is almost impossible for an outsider to discover that the report had been manipulated" (interview with officials from MoHA and the MoA, 2003). Similarly, as stated by some officials from Kimpraswil: "Between the late 1970s and early 1980s the irrigation agency increased the unit costs for systems construction and rehabilitation by replacing proportional division structures and field intakes in almost all irrigation systems on Java with more expensive sluice gates" (interview with officials from Kimpraswil, 2003). Furthermore, the huge amount of project funds for systems rehabilitation fueled cycles of rent-seeking in and around infrastructure development.

In general, non-budgetary funds act as a social security system within the irrigation agency. Apart from the upeti for the president, the irrigation agency covers health, education, and social expenses of its staff (such as when some officials are severely ill, need support to finance their children's higher education, or extra cash to celebrate a wedding ceremony) from the non-budgetary fund. However, these bureaucratic services are only granted to those officials whose conducts is in line¹⁴ with the irrigation agency's general priorities, as defined by the director general. Further, non-budgetary funds are used to cover the costs of official visits made by the minister and other high level officials to different regions. It includes all the costs involved in arranging official meetings with the regional government and conducting field visits (such as overnight stays in hotels, transportation, consumption, meeting-room reservation, the use of technical devices, etcetera). In addition, non-budgetary funds are used to cover the transaction costs involved in the loan negotiation process because these costs (such as the cost of booking a meeting room in a five star hotel, or arranging dinners for foreign delegates) are not covered as part of project expenditure and because like the former MPW, Kimpraswil lacks the financial resources to cover them from its own ministerial budget.

The distribution of non-budgetary funds within the irrigation agency is based on the so-called echelon system¹⁵. Formally, the echelon system was created to represent the 'modern bureaucratic state' (Weber, 1921). With reference to Weberian bureaucracy, the echelon system features a distribution of authority arranged systematically in accordance with generally applicable rules, and a hierarchy of offices that corresponds with a fixed order of procedural affairs dealt with according to the defined regulations. The echelon system is applied in all government ministries and their representatives at regional level. According to the echelon system, officials in the irrigation agency are categorized into echelon 1 (minister and his/her advisory team), echelon 2 (director generals, directors, secretary general and inspector general), echelon 3 (head of sections within the directorate), and echelon 4 (the remaining staff).

With reference to the echelon system, the project head¹⁶ plays an important role in shaping the distribution of non-budgetary funds from the project fund. In general, s/he would take ten percent from the total project fund for him/herself, while disbursing¹⁷ another twenty percent of the fund to the high officials within the agency (mostly from echelon 1 and 2, including the secretary general and inspector general in Kimpraswil) regardless of their involvement in project activities. At the provincial level, between ten and fifteen percent of the remaining funds are directly distributed to the head and his close staff in the Provincial Irrigation Agency (PIA). Similarly, at the district level, the project heads unofficially disburses another ten percent of the remaining funds among officials in the district irrigation agency. By the time project activities are about to be implemented, almost fifty percent of the project fund have already evaporated. The overview of project benefits distribution is presented in Figure 3.3.

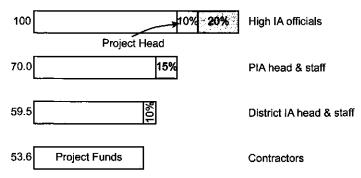


Figure 3.3: Overview of the distribution of project benefits

In practice, the percentage received by each actor varies from one project to another, depending mainly on the way the project head negotiates this share with his/her supervisor and the appointed contractors. For example, the contractor would agree to channel twenty percent of the fund to the high officials within the irrigation agency if the project head agreed to 'ignore' the marking up in the contractor's proposal. In another case, the contractor might agree to channel only ten percent of the fund to the high officials in the agency¹⁸ when the negotiation between the contractor and the project head is tiresome, and the project proposal is made strictly, with less possibility for marking up. This negotiation usually takes place during project tendering, prior to the contractor's appointment. In this way, the project head's selection of the contractors is based on the highest percentage of project fund re-disbursement to the irrigation agency, as agreed by the contractors. In addition, the project head usually chooses the contractors who tender the lowest price for the proposed development activities because s/he will get the highest amount of 'benefits' from project fund management by marking up this lowest price offer to the maximum project expenditure. In addition, only contractors who have close connections with the project head or his/her supervisor are allowed to enter the project tendering process.

In the next section, I briefly illustrate how until recently the reform of irrigation sector

development policy, as indirectly proposed by international donors through their projects was resisted by the core policy actors in the irrigation agency.

3.5 Bureaucratic identity and resistance to new policy trends in irrigation

During the late 1980s and mid 1990s, the shift in international policy on irrigation from construction and rehabilitation to O&M and later to farmer participation and IMT, as promoted by international agencies in Indonesia, did not result in actual policy change in post-Suharto Indonesia because the core policy actors in the irrigation agency could effectively resist the proposed policy reform. This resistance was rooted in the way the core policy actors perceived the proposed reform as a threat to their privileged position. They thought that the proposed shift could remove their access to development funds and bureaucratic power because it could change the rent-seeking rules as established in infrastructure-oriented irrigation development. As expressed by some retired officials from the irrigation agency: "The focus in irrigation sector development has changed several times. However, in practice, nothing changed. The irrigation agency continued to concentrate its development efforts on infrastructure development because the reproduction of its bureaucratic mechanisms relied on construction and rehabilitation activities" (interview with retired officials from the irrigation agency, 2003). Also, the core policy actors feared that the proposed policy shift would be followed by a shift of bureaucratic power to a new group of officials specialized in O&M.

In Indonesian irrigation, the formation of a separate organizational unit responsible for farmer empowerment (PTGA) within the irrigation agency did not result in the establishment of a segment within the agency which could redirect the existing infrastructure-oriented irrigation development towards systems O&M, greater farmer participation, or IMT. The PTGA was formed within the Directorate General of Irrigation as part of the loan agreement for the Irrigation Operation and Maintenance Project (IOMP) 1987 statement. Officially, the PTGA was responsible for creating one common language between the engineers in the irrigation agency and farmers, with regard to irrigation systems O&M. As stated by one of PTGA official: "PTGA put farmers, instead of irrigation infrastructure, as the focus of development" (interview with PTGA officials in Yogyakarta, 2004). In practice, as mentioned by one of the senior officials from the MoA: "Officials in the irrigation agency did not see how their bureaucratic interests could be linked to systems O&M. Firstly, unlike construction and rehabilitation, O&M activities involved lesser amounts of development funds. Secondly, this fund was disbursed as a routine fund, through government bureaucracy and not through project structures, which meant that more barriers had to be removed to manipulate the management of O&M funds. Thirdly, and perhaps the most important reason, O&M activities were perceived as the intrusion of a structural approach represented by construction and rehabilitation activities. In other words, the irrigation agency lacked 19 the interest to promote O&M because a successful O&M program could possibly break the vicious cycle of bad construction/deferred maintenance/early rehabilitation, and thus destroy the very foundation of the agency's existence" (interview with senior officials from the MoA, 2003, 2004). Consequently, the domination of civil engineers in the irrigation agency

resulted merely in the PTGA's incorporation into infrastructure-oriented irrigation development. The PTGA failed to meet its designed role in promoting greater farmer involvement in irrigation systems management. On the contrary, farmer empowerment was instituted primarily to direct farmers' behavior with regard to the operation and maintenance of the irrigation infrastructure according to the engineers' perceptions. Farmers' perceptions on how the infrastructure should function remained unclear.

In short, policy change in the irrigation sector could only take place if the proposed change was in line with the way the irrigation agency perceived its role in the development of the sector. Put another way, policy change would have significant impact only if the agency was confident about the need for such change.

In the next section, I illustrate how the new Indonesian government handled the problem of institutionalized corruption within the irrigation agency through its anti-corruption movement in 1998. This movement was manifested in the abolition of the Ministry of Public Works as one of the most corrupt government ministries at that time (World Bank, 2003).

3.6 Bureaucratic reform in the irrigation agency

In 1999, the MPW was abolished following the anti-corruption movement²⁰ in Abdurrachman Wahid's presidency. The movement focused on the abolition of corrupt government ministries. Among these ministries was the MPW. Firstly, I discuss how the core policy actors' decision-making authority in the irrigation sector's development was reduced by this abolition. Secondly, I illustrate how the importance of core policy actors in the irrigation agency was reestablished through the formation of the Ministry of Settlement and Regional Infrastructure (Kimpraswil) in 2001.

3.6.1 The abolition of the Ministry of Public Works

With the abolition of the MPW in 1999, the core policy actors in the irrigation agency were excluded from the overall decision-making process in water sector development. The Ministry of Settlement and Regional Development (Kimbangwil) was formed in the same year. Unlike before, the bureaucratic leadership in Kimbangwil was held by a minister with a strong NGO background. Prior to her position as minister, she was actively involved²¹ in different civil society movements. After her appointment, she recruited her new staff in Kimbangwil mostly through her NGO connections. In addition to the formation of Kimbangwil, the abolition of MPW was followed by the formation of the State Ministry of Public Works (or Meneg PU). Unlike Kimbangwil which was run by a new minister, Meneg PU consisted primarily of "one hundred brightest officials²²" selected by the high officials from the former MPW. Unwilling²³ to join Kimbangwil, the core policy actors managed to represent their position to sustain the status-quo through the formation of Meneg PU. The formation of Meneg PU²⁴ in the aftermath of political reform in 1998 reflected the fragmented decision making of state apparatuses in post-Suharto Indonesia and the core policy actors' strength in defending their bureaucratic position.

Nevertheless, the core policy actors failed to sustain their decision-making authority to direct the sector's development through the establishment of Meneg PU. Apart from its role in policy formulation²⁵, Meneg PU was not authorized to manage sectoral development funds or to handle development activities in the irrigation sector. In other words, apart from its function to shelter the core policy actors in the irrigation agency, Meneg PU did not play any role in irrigation sector development.

Within Kimbangwil the bureaucratic importance of the irrigation agency was diminished. The Directorate General of Irrigation was abolished. Irrigation sector development was incorporated into the Directorate General of Rural Development under the Directorate of Rural Irrigation, as a separate directorate (see Figure 3.5.) (organization and working procedure of the Ministry of Settlement and Regional Development, as decided by the Minister of Settlement and Regional Development on 10 December 1999). Furthermore, the technical guidance unit (Bina Teknik) was abolished²⁶. The unit was one of the most powerful and most corrupt directorates under the Directorate General of Irrigation in the former MPW. Its power was derived from its ability to technically cover the marking up made by the project head. The organizational structure of the MPW and Kimbangwil are presented in Figure 3.4 and Figure 3.5.

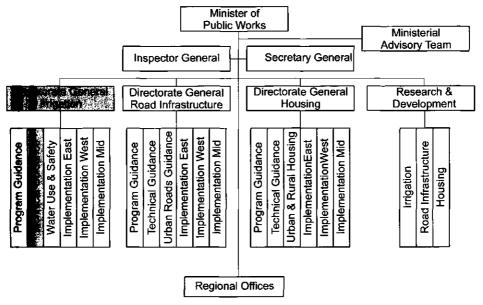


Figure 3.4: Organizational structure of the Ministry of Public Works (from 1984 to 1999, prior to its abolition)

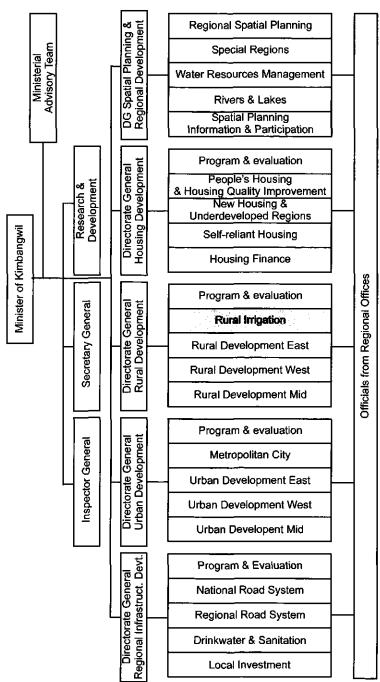


Figure 3.5: Organizational structure of Ministry of Settlement and Regional Development or Kimbangwil (from 1999 to 2001)

Apart from the above changes, in general, Kimbangwil's organizational structure remained pretty much similar to that of the former MPW (see Egeberg, 1999, on the role of bureaucratic structure in shaping bureaucratic choices and decision making). At the ministerial level. Kimbangwil was equipped with an inspector general (to monitor the ministerial program), secretary general (to coordinate and plan the sectoral program within the ministry) and director generals (responsible for program implementation). Like the former MPW, each director general was directly responsible to the minister. At the level of its directorate generals, irrigation development was incorporated as part of rural development. Further, three new directorate generals were formed in Kimbangwil in addition to the other two remaining directorate generals²⁷. These new directorate generals were the Directorate General of Urban Development, the Directorate General of Rural Development, and the Directorate General of Spatial Planning and Regional Development. In addition, the Sub-Directorate Program Guidance (Bina Program) was replaced by the Sub-Directorate of Program and Evaluation, However, this new Sub-Directorate had similar tasks and responsibilities to the Sub-Directorate Program Guidance, which was to plan program implementation and manage development funds. Similarly, the Sub-Directorate Implementation Guidance (or Bina Pelaksana) was changed into the Sub-Directorate of Rural Development under Kimbangwil. As before, the new directorate was responsible for program implementation in, respectively, the east, west, and mid regions of Indonesia.

In practice, former MPW officials who staved in Kimbangwil did not consider the Kimbangwil minister as their new bureaucratic leader. As expressed by some of these officials: "She is not the person who can represent the irrigation agency. Firstly, she did not have sufficient technical knowledge to direct irrigation sector development because she is not a civil engineer. Secondly, she does not come from the 'right environment'. Her NGO background does not fit with the bureaucratic environment in the agency" (interview with some of the former MPW officials positioned in Kimbangwil, 2003). Former MPW officials were also disturbed by the new Kimbangwil staff's background as NGO staff. As stated by one of these officials: "NGO people should not interfere in the irrigation sector development. They lacked the experience and knowledge in irrigation development. They always said that they represented farmers' needs. In fact, their interest lay in pulling in as many job contracts as possible. Furthermore, the way officials in the irrigation agency viewed farmers' capability would always be different from the way NGOs viewed it. NGO representatives would promote greater farmer involvement in irrigation system development because they thought farmers were able to take over the systems management. Officials in the irrigation agency, on the other hand, would sustain the agency's role in systems development because we think farmers were unable to take over the systems management. It is like you view a glass as half full, another can view it as half empty" (interview with former MPW officials who were positioned in Kimbangwil, 2003).

Nonetheless, strong bureaucratic support from the new Kimbangwil minister enabled the key policy makers²⁸ in WATSAL to accelerate the speed of IMT policy formulation and implementation. The new minister was very open in accepting policy suggestions made by

the key policy makers in WATSAL. She also cooperated in the transfer of decision-making authority in IMT formulation from a sectoral (within the irrigation agency) to an inter-sectoral decision-making platform (within the National Development Planning Agency). Through this shift in the decision-making structure, former MPW officials who remained functional under Kimbangwil could not halt IMT policy formulation under WATSAL. Lacking any policy guidance from the core policy actors, these officials felt confused about their position on the inter-sectoral decision-making platform. Furthermore, confronted by officials from other government ministries, these officials failed to direct the actual decision-making process in IMT policy formulation. In addition, several NGOs were included in the overall process of IMT policy formulation (see Chapter 5).

Last but not least, *upetism* continued to be practiced within the organizational structure of Kimbangwil. The abolition of the Ministry of Public Works did not eliminate corruption practices within the government ministries, rooted in the relationship between the high officials in the irrigation agency and their followers (positioned as project heads). In practice, systematic corruption²⁹ continued to be applied in the overall management of project funds with or without the involvement of the core policy actors. For example, key policy makers in WATSAL often received informal financial requests³⁰ from high officials in Kimbangwil while directing the overall process of IMT implementation through the IWIRIP project under WATSAL.

3.6.2 The reemergence of the core policy actors' importance

In 2001, both Kimbangwil and Meneg PU were amalgamated into Kimpraswil (Ministry of Settlement and Regional Infrastructure) following the presidential change from Abdurrachman Wahid to Megawati Soekarnoputri. Formally, the lack of bureaucratic experience and knowledge of Kimbangwil's new staff and its broad development coverage was presented as the main reason behind the decision to unite the two ministries. According to my informants, however, the main reason behind the unification lay in the change of president, though Kimbangwil's bureaucratic performance also played a role in triggering the unification. In Indonesia, a minister's position is linked to his/her political position (see Chapter 2 on how the relationship between president and his/her ministers is shaped by the political party partisanship system). Each new president would appoint his/her new cabinet ministers, based mainly on their political loyalty towards the ruling political party. Like the president, the new Kimpraswil minister was a party cadre of the ruling political party at that time. In addition, the unification was conducted because the newly appointed Kimpraswil minister belonged to the core policy actors in the irrigation agency. With the appointment, the core policy actors' position was represented by the bureaucratic leadership within the Kimpraswil. Hence, Meneg PU's objective of sustaining the bureaucratic importance of the core policy actors in the irrigation agency became meaningless.

The organizational structure of Kimpraswil is presented in Figure 3.6.

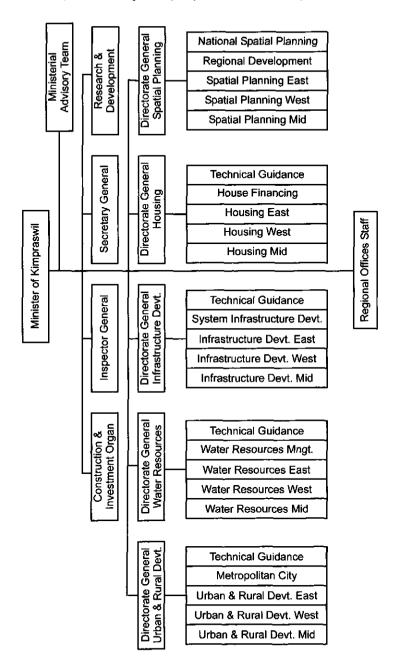


Figure 3.6: Organizational structure of Ministry of Settlement and Regional Infrastructure or Kimpraswil (from 2001 to the present)

With the formation of Kimpraswil, the core policy actors in the irrigation agency regained³¹ their bureaucratic power within the agency and resumed their role of directing sectoral development. The Kimpraswil minister removed the former Kimbangwil staff from their decision-making position and replaced them with officials belonged to his inner circle of power. This strategic replacement became more apparent during the IMT policy struggle, when the minister removed officials who were supportive towards IMT from their bureaucratic position and replaced them with officials who were against IMT.

The core policy actors' successful effort to regain their bureaucratic power was reflected in Kimpraswil's organizational structure, which resembled that of the former MPW. Structurally, no traces can be found of the bureaucratic reform conducted in 1999. The Directorate General of Irrigation in Kimpraswil was reestablished under a new name: Directorate General of Water Resources. Also, the other two Directorate Generals (Housing and Road Infrastructure) were restored³². At the level of the Directorate General of Water Resources, the technical directorate (Bina Teknik) was brought back to life. In addition, the former MPW's organizational logo was reintroduced as Kimpraswil's logo.

In my opinion, the success of the core policy actors' effort to regain their bureaucratic importance derived from the fact that, after the abolition of the MPW, 'bureaucratic reform' within Kimbangwil was limited to the appointment of a pro-reform person as Kimbangwil's minister. Under Kimbangwil, policy reform was formulated and implemented, primarily through strong bureaucratic support from the Kimbangwil minister, represented in her decision-making power to approve the proposed policy reform. The majority of former MPW officials who had positions in Kimbangwil, on the other hand, continued to favor infrastructure-oriented irrigation development. This despite the abolition of the MPW and the redeployment of the core policy actors to Meneg PU. As regards officials who were supportive towards reform, their role was important in channeling policy information to the Kimbangwil minister. Nevertheless, they were unable to inculcate their pro-reform development perception in other officials in the agency. Consequently, the resumption of bureaucratic leadership by the core policy actors was welcomed by the majority of officials in Kimbangwil.

3.7 Conclusion

The irrigation agency's bureaucratic identity is rooted in infrastructure-oriented development. PROSIDA (Indonesia's first infrastructure program funded by the International Development Agency) formed the irrigation agency's organizational foundation, based primarily on the physical development of the irrigation infrastructure and continuous disbursement of foreign loans (in the form of project funds). Until recently, the irrigation agency continued to direct irrigation sector development towards construction and rehabilitation of technical irrigation systems (that is, systems with permanent dams and equipped with concrete irrigation canals and different kinds of water control and measurement devices), relying primarily on a series of World Bank funded irrigation projects (see Chapter 2).

The institutionalized corruption within the irrigation agency is a product of bureaucratic capitalism, rooted in the political party partisanship system. The practice of mass corruption within the agency is sustained, reproduced, and enforced by the political relationship between the president and his/her ministers. Politically, non-budgetary funds are used to ensure the president's power. In this sense, the funds are used to ensure electoral support during the country's elections and to nurture the president or the ruling party's political constituents between elections. Administratively, non-budgetary funds act as the minister's or the director general's resources to govern the decision-making process within the bureaucracy. In this context, the funds are used to sustain and strengthen the bureaucratic mechanisms, based on patriarchy. This patriarchy is evident in the way high officials in the irrigation agency trade bureaucratic positions in return for *upeti* delivery.

Rent-seeking rules within the agency are crafted in the formal procedure of project fund management. The practice of *upetism* is rooted in the relationship between the project head and his/her bureaucratic supervisors in and around the actual use of project funds. The position of project head is one of the most desirable positions in the irrigation agency, due to the project head's access to project funds, and his/her role in shaping the actual redistribution of these funds. In addition, the way project heads manipulate the management of project funds and later redistribute these funds to high officials in the irrigation agency shows the bureaucratic conspiracy around the management of project funds.

The unrolling of the bureaucratic reform conducted in 1999 shows that the actual outcome of the reform is defined by the ability of the internal forces within the agency to confront the core policy actors' importance (though the role played by mid-level officials from the National Development Planning Agency in initiating the reform should not be underestimated). In the early stage of reform, the formation of Kimbangwil and the sidelining of the core policy actors in the irrigation agency into the inactive Meneg PU allowed the officials in the agency (those supporting reform) to promote policy reform in irrigation. These officials played an important role in channeling policy initiatives to the pro-reform Kimbangwil minister. However, with the reemerging importance of the core policy actors in 2001, these pro-reform officials were unable to redirect the agency's strong re-orientation towards infrastructure development because they could not counteract the core policy actors' position in the agency. In the newly formed ministry, being a merger of Kimbangwil and Meneg PU, with an organizational structure almost identical to the earlier MPW, the core policy actors resumed their bureaucratic position and importance in directing irrigation sector development.

The exclusion of the core policy actors from irrigation sector development and Kimbangwil's poor bureaucratic performance highlight a dilemma in bureaucratic reform. The core policy actors' knowledge and experience remains an important asset to direct development within the sector. The main question is how knowledge transfer can be promoted without accommodating the space for the continuation of the agency's patrimonial and corrupt bureaucratic mechanisms.

A conclusion that suggests itself is that policy change in the irrigation sector can only take

place when this is accompanied by changes in the irrigation agency's bureaucratic identity. In turn, the irrigation agency's bureaucratic identity can only be changed by confronting the core policy actors' interests. This opinion is in contrast to the general idea in policy making, which assumes that an agency's bureaucratic identity will be changed, following the formulation and implementation of policy reform. See also how the idea of treating bureaucracy as a neutral instrument to propose change is challenged by Toye (1988) and van Ufford (1988). As stated by van Ufford: "Bureaucracy itself is not an instrument of policy because bureaucracy is an independent generator of ideas, goals and interests" (van Ufford 1988; cited in Mosse 2005: 103). In Indonesia, this general idea of policy making was apparent from the way international donors promoted the adoption of IMT policy (first under the Irrigation Operation and Maintenance or IOMP in 1987, and later under the Water Resources and Sector Adjustment Loan or WATSAL in 1999) by the Indonesian government, regardless of the irrigation agency's perception of the proposed policy reform, not to mention the fact that IMT policy was formulated without taking into account the previous approaches to irrigation sector development in Indonesian irrigation (which also had been shaped by the earlier donor-driven irrigation policies). The relationship between IMT policy and the dominant policy narratives in Indonesian irrigation will be the topic of my next chapter.

¹ These core policy actors include former and bureaucratically active high officials in the irrigation agency.

² The term bureaucratic capitalism was also used by Riggs (1966) to describe the figuration of economy, society and politics in Southeast Asia.

³ See also the term 'strategic group' used by Evers (1973, 1982) to describe the role of high officials in the government bureaucracy in shaping the overall bureaucratic mechanisms.

⁴ Ringskog was a leading water specialist at the World Bank in Indonesia in 2001.

⁵Apart from this obligation, financial gains from rent-seeking practices were used primarily for private consumption (Evers, 1985).

⁶ Even when officials in the agency thought differently from their supervisor, they would follow whatever was instructed by their supervisor because they did not want to risk being perceived as disloyal followers.

⁷ This position is often referred as a 'wet place' (interview with officials from the NDPA, MoHA, Kimpraswil, 2003). Referring to the importance of water in the life cycle, a 'wet place' connoted fertile ground.

⁸ Interview with officials from Kimpraswil, the MoA, MoHA, 2003, 2004.

⁹ Interview with officials from Kimpraswil, 2003.

¹⁰ The position of Director General and directors are mainly held by former project heads (usually from big projects).

¹¹ The important role played by the high officials in the irrigation agency in shaping the agency's bureaucratic mechanisms is evident in the "yes sir" attitude, where officials in the agency focused their bureaucratic performance on learning different strategies to please their supervisors. In Indonesian, this attitude is abbreviated as ABS (Asal Bapak Senang).

¹² The term 'service point' for *upeti* delivery came from my interview with officials from the MoA, the NDPA and MoHA in 2003.

¹³ Interview with officials from the NDPA, MoHA and Kimpraswil, 2004.

¹⁴ During the policy struggle over IMT (see Chapter 6), some of the to-be-retired officials were not granted access to Kimpraswil's retirement clubs because they continued to promote IMT implementation, despite both the minister's and the director general of water resources' demand to halt IMT implementation. These clubs consist of former officials from the MPW, Meneg PU, and Kimpraswil. In most cases, such a club was established formally within the organizational structure of the irrigation agency. However, in some cases, this

club could also be established as an NGO. In the latter case, club membership is not limited to officials from the irrigation agency.

- 15 The echelon system originated from the military organizational system and was first applied by the New Order government. It emphasizes the importance of bureaucratic hierarchy in government ministry. Officially, inter-ministerial interaction could only take place between two officials from the same echelon.
- 16 A project head's access to project funds indirectly made him/her a powerful actor in the irrigation agency. In some cases, huge amounts of project funds could make the project head so powerful that his/her bureaucratic power overshadowed the importance of the minister as the bureaucratic leader.
- 17 Non-budgetary funds from project 'benefits' were directly channeled to a particular, non-personal bank account. In some cases, a project head would even channel the 'benefits' in cash, carrying all the money in his suitcase (interview with officials from MoHA, 2003).
- 18 The degree of marking up allowed by the project head was defined by the power of his/her supervisor within the irrigation agency. The degree of marking up accepted reflected his/her confidence that nobody would challenge his/her power.
- 19 This lack of interest was evident from the way the irrigation agency transformed IMT implementation under the IOMP 1987 statement into a construction-oriented program (see Chapter 5).
- 20 Despite its notorious corruption status, the National Development Planning Agency was not abolished. Instead, its decision-making authority to define development fund allocation for each government ministry was reduced
- 21 Before joining the government, Erna Witoelar led the Indonesian Consumer Foundation (YLKI), founded and led both the Indonesia Forum for the Environment (WALHI) and Friends of the Environment Fund (DML). Following her resignation from her ministerial post in 2001, she continues to be involved as a board member of several civil society organizations both at national and international level. For instance, she chairs the Foundation for Local Governance Innovation (YIPD) and serves as advisor to both the Indonesian Association of Municipalities and the Association of Districts.
- 22 The way the selection procedure was conducted (through general exams) implied these officials' technical capability. However, the selection process was also defined by their relations with the high officials in the former MPW.
- 23 Kimbangwil formation was resisted by the core policy actors from the former MPW. This resistance was apparent during the early stage of its formation in 1999 when they proposed the incorporation of MPW's director general of irrigation into the organizational structure of the Ministry of Agriculture (MoA), instead of being included as part of Kimbangwil's organizational structure. The proposed incorporation was arranged by senior officials in the MPW and the MoA. Later, the proposal was accepted by President Abdurrachman Wahid and legally supported by the promulgation of a Presidential Decree. However, due to unknown reasons, the incorporation was canceled at the last minute.
- 24 According to my informants, the formation of Meneg PU was tolerated simply to smoothen the bureaucratic restructuring of the MPW (interviews with officials from the NDPA, MoHA, 2003).
- 25 How this policy formulation was linked to the directorate of irrigation's activity in Kimbangwil was never clarified either.
- 26 The abolition of the unit represented the reform group's attempt to change the irrigation agency's bureaucratic identity.
- 27 The two remaining directorate generals were given different names. The Directorate General of Road Infrastructure was replaced by the Directorate General of Regional Infrastructure Development. Similarly, the Directorate General of Housing was replaced by the Directorate General of Housing Development.
- 28 These key policy makers include mid-level officials from the National Development Planning Agency.
- 29 Persistent *upetism* practices proved that bureaucratic mechanisms within the irrigation agency were governed by the agency's bureaucratic interest, and not by its belief system (Sabatier and Jenkins-Smiths, 1994).
- 30 Interview with officials from the NDPA, MoHA, 2003.
- 31 In the aftermath of the policy struggle, the actual development fund channeling for IMT implementation to the regional level was halted because the core policy actors in the agency had resumed their bureaucratic importance (see Chapter 7).
- 32 With reference to the organizational structure of Kimbangwil, Directorate Generals of Rural and Urban Development were merged into one directorate general. The Directorate General of Spatial Planning and Regional Development was reduced to the Directorate General of Spatial Planning.

4. Irrigation Management Transfer: A policy narrative

4.1 Introduction

This chapter explores the relationship between IMT policy and the dominant policy narratives in Indonesian irrigation, as they existed over time. I argue that, like the bureaucratic identity of the irrigation agency, policy elements in IMT are shaped by concepts, strategies, and outcomes of the preceding irrigation policies. The chapter focuses on analytical discussion of the following questions: What is the policy origin of IMT and in what way does IMT differ from previously defined irrigation policies? What are the factors and forces that urged its formulation? How were these factors and forces incorporated in the IMT policy framework and how does IMT relate to dominant networks of interest in the irrigation sector?

Further, the chapter illustrates how the adoption of IMT policy in Indonesia was linked to the international policy trend in irrigation. In my analysis, I refer to the key conceptual ideas in IMT and the previous irrigation policies as defined by the international policy makers attached to international donor agencies (such as the World Bank), who have played an important role in promoting IMT policy adoption in Indonesia.

The main findings of this chapter are:

- IMT policy in Indonesia remains trapped in the infrastructure development paradigm
- International policy makers formulated IMT as a policy strategy to address international donors' interests and concerns in Indonesian irrigation sector development in isolation from the actual management situations in government irrigation systems as experienced by both farmers and the irrigation agency
- International policy makers took for granted farmers' capability in systems management and their willingness to take over the irrigation agency's role in systems operation and maintenance (O&M)

This chapter is organized into six sections. It starts with a brief explanation of the dominant policy narratives in Indonesian irrigation, showing the way policy problems and their strategies have been defined in the technical, O&M, organizational, and institutional approaches, using these approaches as the lines of the dominant narratives. Section 2 illustrates how the technical approach has defined the management characteristics of government irrigation systems. Section 3 illuminates the establishment of infrastructure-oriented development in the O&M approach. Section 4 highlights the origin of farmer

participation in the organizational approach and discusses the conceptual flaws behind the transfer of the farmer participation concept from the farmer-managed irrigation systems (or FMIS) to government irrigation systems. Section 5 discusses the application of reform models in relation to IMT implementation worldwide. Section 6 presents my analysis of IMT policy.

4.2 Dominant policy narratives in Indonesian irrigation development

In Indonesian irrigation, the dominant policy narratives³ have always been shaped by the infrastructure development paradigm. Arising during the productive discourse in the early 1970s, and later consolidated in the O&M approach, infrastructure development remained pre-eminent in both the organizational and the institutional approaches. Although new policy strategies have been defined in both approaches, the absolute need to maintain good condition of physical infrastructure remained unquestioned (Letter of Sector Policy 1999; IOMP 1987 policy statement).

The conceptual foundation of IMT policy also remained rooted in infrastructure development. The formulation of IMT policy was connected to the way problems in irrigation management had been defined in the preceding irrigation policies, this constituting the path of policy dependency in Indonesian irrigation. Here, general reasoning with regard to policy continuation, infiltration and disruption can be traced by observing the way problem definitions and policy strategies were (re)defined in four dominant approaches. Given the country's financial dependency on foreign loans, as shown in Chapter 3, the path of policy dependency in Indonesian irrigation followed the international policy trend set by major donors, such as the World Bank. Consequently, national irrigation policies were formulated according to the defined loan conditions, rather than through internal policy learning within the irrigation agency⁴.

The policy problems and strategies, as defined in, respectively, the technical, O&M, organizational, and institutional approaches, are presented in Table 4.1.

In the following sections, I discuss the line of these narratives in irrigation development policies in more detail, using the four dominant discourses of production, performance, community development and neo-liberalism embodied within the technical, O&M, organizational and institutional approaches. Beneath the dominant policy narratives, the origin of IMT policy formulation in Indonesia can be traced back to the colonial irrigation policies. The perceptions and interests of the international policy makers are discussed in relation to the changing policy strategies in the four development approaches.

Table 4.1: The path of dependency in irrigation policy development

	Technical approach	O&M approach	Organizational approach	Institutional approach	Remark
	1960s-70s	1970-80s	1980s	Late 1980s-present	
Defined	Lack of physical	Poor systems	Persistent poor systems	Persistent poor systems Persistent poor systems Infrastructure	Infrastructure
problem	infrastructure to	performance due to	performance due to	performance due to	development remains
	convey irrigation water	deferred maintenance	deferred maintenance	deferred maintenance,	pre- eminent
			and lack of social	lack of social	
			organization	organization and	
				government agencies	
				incapability to manage	
				the systems	
Policy	Construction of	Formulation of	Formation of WUA to	Transfer of	Focus on O&M of the
strategy	physical irrigation	systems O&M plan	take part in O&M of	responsibility to	infrastructure
	infrastructure		the infrastructure	conduct O&M of the	
į				infrastructure to WUA	
Farmers'	Cultivate HYV with	Follow government	Organize WUA to	Accept management	Farmers are perceived
role	use of improved water	instructions on O&M	improve systems O&M	transfer to improve	as instrumental
	systems			systems O&M	development recipients
				j	and policy objects

4.3 The technical approach to irrigation development and resulting management inconsistency in government irrigation systems

In Indonesia, technical irrigation development⁵ began in the late colonial period⁶. For instance, it was during the 'cultivation system' (1830-1870) that irrigation development focused on the design and construction of irrigation infrastructure (van Doorn, 1983). Urged by the colonial state's interest in increasing sugarcane production for its sugar industry, technical development was conducted to ensure irrigation water supply⁷ for sugarcane cultivation (Weijs, 1913, 1898). Later, with the formulation of 'ethical policy'⁸, the first technical irrigation systems were constructed (van Doorn, 1994; Lamminga, 1910; Weijs, 1900). Among these early constructed irrigation systems were Pemali, Pekalen Sampean, Pategoean and Demak.

In the period following Indonesia's independence, technical development was set at full speed by the New Order government. The government's strong preference for technical development was evidenced by the way the irrigation agency (now under the Ministry of Public Works) classified the existing irrigation systems into three different categories: technical, semi-technical, and non-technical (see also Chapter 3 for the definition of these categories). With reference to this classification, the agency's efforts were focused on upgrading non-technical or semi-technical irrigation systems. Hence, irrigation development was focused on the technical improvement of the infrastructure, from simple to more advanced. It was during this period that proportional division structures in irrigation systems on Java were replaced by the more technically advanced sluice gates and Cipolettis (Horst⁹, 1994). In addition, the construction of five major dams¹⁰ on Java was decisive in ensuring irrigation water supply for the large-scale irrigation systems.

The rapid construction and rehabilitation of technical irrigation systems in post-independence Indonesia was related to the New Order government's food policy. With reference to the country's overall development objective to achieve self-sufficiency in rice, the country's development planning was focused on both the irrigation and the agricultural sector (Gany, Mahdi and Pasandaran, 2004). However, it was the global attempt to promote agricultural intensification programs worldwide that accelerated the degree and magnitude of technical development in the irrigation sector¹¹. With the introduction of a high yielding rice variety, irrigation development became one of the top priorities in Indonesia's development plan (see Chapter 3). As these seeds needed a greater amount of water for growth, immediate improvement of the existing irrigation infrastructure was required. This rapid technical development was conditioned by the close economic relationship between the New Order government and the major donor, namely the World Bank. For instance, it was through a World Bank funded project, PROSIDA, that technical irrigation systems on Java were constructed and rehabilitated (NEDECO reports, 1974)¹².

In turn, technical irrigation development resulted in centralized systems management (Ambler, 1991). Prior to technical development, farmers irrigated their fields through seasonal, impermanent weirs and earthen ditches. Farmers had the autonomy to arrange

their water distribution activities according to their actual crop water requirement, as they irrigated directly from the water source (Duewel, 1995). In the aftermath of the green revolution, this autonomy was infringed (Booth, 1988; Jatileksono, 1987). The concept of hydraulic levels increased farmer dependency on main systems management, as it increased the distance between farmers' fields and the source of water.

Later, centralized systems management was followed by an exponential growth in the irrigation agency (see Chapter 3). With the construction of large-scale, technical irrigation systems, the farmers' role in systems management was replaced by the agency's massive presence at almost all levels of the irrigation systems (Ministerial Decree Number 211 of 1984 on the organizational structure of the Ministry of Public Works). The agency evolved from the technical experts of the late colonial period, to more of a state bureaucracy in the New Order government. In the late colonial period, the agency consisted mainly of civil engineers, specialized in the design and construction of irrigation infrastructure (Ravesteijn, 1998; van Doorn, 1983). In the New Order government, though civil engineers continued to dominate the agency, their orientation was no longer towards the technical design of irrigation infrastructure. Instead, these engineers took roles as project managers, government administrative staff, and project supervisors, following the introduction of irrigation projects in 1969 (see Chapter 2 and 3 for further explanation of the irrigation agency's 'new' bureaucratic identity).

Further, the centralized systems management resulted in the marginalization of farmers' roles and the disregard of farmers' capabilities. This marginalization was due to the deep penetration of government influence at the grass-roots level, through the appointment of local representatives in irrigation systems management (such as the *ulu ulu*) as government staff (Ambler, 1991). Both prior to and in the aftermath of the green revolution, farmers were treated as the government's policy instruments and development recipients. Farmers were directed to adopt and apply the prescribed management rules, but no reference was made to farmers' actual capabilities and their development needs¹³.

Last but not least, centralized systems management resulted in management inconsistency in government irrigation systems. Although farmers were forced to adapt their irrigation practices to the changing technical landscape, they did this without adopting the prescribed management rules (Diemer and Slabbers, 1992). Hence, as both farmers and the irrigation agency operated the infrastructure independently, without any coordination, this resulted in an overlap and inconsistency in irrigation systems management¹⁴. As stated by Hunt: "Between the main infrastructure and the farmers' fields there is a physical and social space in which neither farmers nor the agency has sole operational control" (Hunt, 1989: 79). The management inconsistency in government irrigation systems manifested a major weakness and limitation of the technical approach. Inherently, technical irrigation systems demand centralized infrastructural operation and maintenance. However, as the actual situation did not always coincide with the design principles, control of the systems management could not automatically be obtained from the construction of the infrastructure. This weakness was never mentioned in the policy shift from the technical to the O&M approach.

4.4 The O&M approach and the establishment of infrastructure-oriented irrigation development

In the 1980s, the policy trend in irrigation development shifted from a focus on infrastructure design and construction towards systems O&M. This policy shift¹⁵ was urged by the growing concerns of the major donors about the real hazards of unsustainable physical investments (O'Mara, 1990). With reference to the rapid deterioration of the physical infrastructure, international donors considered that government irrigation systems performed poorly (World Bank, 1986).

In the O&M approach, international policy makers assumed that poor systems performance was rooted in the poor condition of the irrigation infrastructure. Following the defined causal relation, irrigation development was focused on the attempt to preserve the condition of the infrastructure. For instance, in a vicious cycle of bad construction/deferred maintenance/premature rehabilitation, poor systems performance was seen to be indicated by premature rehabilitation. Premature rehabilitation meant that systems designed for twenty years of performance had deteriorated to such an extent that rehabilitation was indispensable just ten or fifteen years after construction (World Bank, 1986). However, although premature rehabilitation was caused by both deferred maintenance and bad construction, the latter problem was hardly addressed in the policy shift. Instead, deferred maintenance was defined as the major problem in government-managed irrigation systems. In the O&M approach, major emphasis was given to the maintenance part, despite the policy focus on both systems operation and maintenance.

Further, international policy makers assumed that the deferred maintenance problem was caused by the failure of developing country governments to cover the costs of systems O&M. As the review conducted by the Operational Evaluation Development (OED) of the World Bank in 1986 confirmed that poor systems maintenance led to poor cost recovery, international policy makers assumed that better cost recovery would lead to better O&M (an assumption that in most cases is not justified) (Jones, 1995). Consequently, it was assumed that better systems cost recovery would solve the problem of poor systems performance. Based on the above assumptions, the policy shift was targeted to improve the ability of developing country governments to provide the required funds for systems O&M. According to the OED's 1986 review, the covenant requiring that cost recovery satisfy O&M funding had not been complied with in at least two-thirds of the projects reviewed (World Bank, 1986). This is in contrast to the Bank's lending policy, which requires developing country governments to recover all costs, or at a minimum complete recovery of O&M costs (Operational Policy Memorandum no. 2.61, March 1971). Hence, in the O&M approach, the development of an O&M plan was included as part of the loan conditions. Unlike before, the Bank required that adequate funding for O&M should be available at an early stage of the project cycle. Theoretically, this step forced developing country governments to reserve some of the project budget to cover O&M costs after project completion (O'Mara, 1990).

Following these shifts in international policy trends, the Indonesian government focused irrigation sector development on systems O&M (IOMP 1987 policy statement). With reference to the new loan conditions, detailed O&M guidelines for systems management were formulated by the irrigation agency (Ministry of Public Works, 1994a and 1994b). This guideline consisted of a list of O&M activities that should be conducted by the irrigation agency staff in the regional offices. Further, a separate O&M budget from project funds was disbursed directly to the provincial irrigation agency. With these funds, the agency was responsible for covering the costs of systems O&M. It should be noted that the policy shift to systems O&M hardly referred to the weakness of the technical approach or the management inconsistency in government irrigation systems (IOMP 1987 policy statement, background document point 3).

In practice, despite the policy shift to O&M, poor systems performance persisted, and the deferred maintenance culture continued. Systems maintenance remained neglected by the irrigation agency, despite the formulation of O&M guidelines. At the provincial level, the dedicated O&M budget was hardly used for systems O&M (Letter of Sector Policy, 1999). Reasons for this neglect are discussed in later in this chapter in the section on IMT policy analysis.

Nevertheless, the policy shift to O&M marked the establishment of infrastructure-oriented irrigation development in Indonesian irrigation. In the O&M approach, the engineers' preference to continue with infrastructure development reached a new momentum where technical development was conducted independently from the country's agricultural policy¹⁶. Hence, infrastructure development continued even after Indonesia reached self-sufficiency in rice in 1984. The irrigation agency questioned the data collected by the Ministry of Agriculture (MoA) with regard to the exact amount of rice production in that same year, as they felt threatened by the fact that infrastructure development would be halted, following the country's food policy achievement¹⁷. In the post-green revolution era, no link was made between the financial costs of infrastructure development and the increased amount of rice production, as both the irrigation agency and the MoA no longer exchanged their data¹⁸.

4.5 Farmer participation and the organizational approach

In the late 1980s, the concept of farmer participation was introduced to cope with the persistent poor performance of government irrigation systems (Subramanian, Jagannathan and Meinzen-Dick, 1997; World Bank, 1986; Bottrall, 1981). The introduction marked the emergence of the organizational approach in irrigation development. Unlike previous approaches, the organizational approach emphasizes the important role played by farmers in shaping the actual systems management. It focuses on farmers' capabilities with regard to systems management, and thus their potential role in improving the overall performance of government-managed irrigation systems. Following the shift in the international policy trend from the O&M to the organizational approach, farmer participation was encouraged through the formation of Water User Associations (WUAs) (Coward, 1986a; Lowdermilk, 1986). In Indonesia, the importance of WUA formation in

irrigation systems management was underscored by the issuance of a presidential instruction (Presidential Instruction Number 2 of 1984 on Water User Associations). Later, this presidential instruction served as the general guideline for WUA organizational development.

The shift from the O&M to the organizational approach was encouraged by the emerging importance of community-based development studies¹⁹ in the mid 1980s (Ostrom, 1990; Coward, 1984; Esman and Uphoff, 1984, 1982). These studies pointed out the importance of social organization in irrigation systems management, based on the common perception that government irrigation systems had grown faster than the institutions that had to regulate them (Freeman, 1989). Later, international donors conceded that farmer participation might contribute to increased project effectiveness, referring to the successful outcomes in the farmer-managed irrigation systems or FMIS. The FMIS²⁰-WUA analogy is indeed attractive. As Hunt jested: "If the farmers would only participate, the thinking goes, then the ditches would be constructed, the water would be allocated, and most important of all, the maintenance would be done" (Hunt, 1989: 79).

The inclusion of a community-based development perspective in the policy agenda of the international donors was generated by mounting criticisms from anthropological and sociological studies in rural development (Ambler, 1991; Eggink and Ubels, 1984). In general, these studies criticized the development projects that were implemented through a top-down approach. The criticisms concerned the deterioration of 'common property resources' and the impoverishment of the rural community due to government policy interventions. Later, suggesting a bottom-up approach these studies urged the inclusion of farmers in the formulation and implementation of government development policies (Chambers, 1988; Cernea, 1991).

Nevertheless, bounded by the O&M approach, international policy makers seemed to perceive WUA formation primarily as a policy strategy to solve the deferred maintenance problem. In the organizational approach, farmer participation was trapped in the realm of infrastructure development and systems cost recovery. WUA organizational activities were directed solely towards systems maintenance and the collection of irrigation service fees (ISFs) to cover the costs of systems O&M. In Indonesia, the WUAs' main activities were focused on organizing farmer contributions for regular maintenance and systems rehabilitation in the form of labor and construction materials through the so-called participatory design and construction program.

In Indonesia, the way farmer participation was applied using the organizational approach resulted in the formation of WUAs as government-induced farmer organizations. WUAs' organizational characteristics did not represent the organizational strength (that is, their capability to manage the system financially, technically, and socially) of farmer organizations under FMIS. The distinct organizational characteristics of WUAs as compared with farmer organizations in FMIS were highlighted by Hunt in his study on the irrigation community (Hunt, 1989). Referring to the organizational dimensions used in his study, I compare FMIS' organizational characteristics²¹ with those of WUAs in Table 4.2.

WUA formation did not result in improved systems O&M or better cost recovery. On the contrary, systems maintenance continued to be neglected and farmers remained reluctant to pay ISFs (Sindorf and Suhardiman, 1998). In my opinion, this neglect derives from the fact that although a new role in systems management was added through the formation of WUAs, this new role was not calibrated with both the irrigation agency's and farmers' existing roles in systems management. In practice, WUAs' organizational development was impeded by the agency's resistance to share its decision-making authority (Freeman and Wilkins-Wells, 1989). The concept of farmer participation remained subject to manipulation by the irrigation agency (Bruns and Atmanto, 1992), as bureaucratic reform remained obscured in the policy agenda of both the national government and the international donors. Similarly, farmers' reluctance to pay ISFs was related to the fact that, whereas WUAs were in charge in collecting ISFs, farmers remained dependent on the irrigation agency for their water supply. In practice, WUAs' role in ISF collection was hampered by unreliable water supply on the part of the agency not to mention the fact that in some cases the irrigation agency also collected their private rent, in addition to the ISF. In addition, farmers' reluctance was also related to the fact that, in practice, there was no link between ISF collection and systems O&M. Once collected, ISFs were channeled into the government's general revenues. Not knowing how to get access to the funds collected and realizing that paying ISFs did not necessarily improve their water supply, farmers did not see any reason why they should pay ISFs.

Apart from the way international policy makers perceived farmers' involvement as a policy strategy to counteract the deferred maintenance problem, I argue that neither the managerial nor the technical characteristics of government irrigation systems conditioned WUAs to develop the same caliber of farmer organization as FMIS. Studies conducted by different scholars on WUAs prove that the organizational property possessed by the irrigation community cannot be transferred to the government-managed irrigation system simply through the formation of WUAs (Bromley and Cernea, 1989; Coward, 1986b; Freeman and Lowdermilk, 1985) not to mention the fact that, in order to cope with the management problem in government irrigation systems, a WUA had to develop other capabilities. After all, there is no evidence that the farmer capability that evolved in FMIS would be able to solve the management problems²² in the government irrigation system.

In my opinion, the translation of the farmer participation concept under FMIS into government-managed irrigation systems is problematic. In the first place, a WUA's organizational autonomy is challenged by the centralized management in government irrigation systems. Unlike in FMIS, where farmers are in charge of controlling the water source, as well as of arranging the overall water distribution, a WUA's role in government-managed irrigation systems is limited to the tertiary level. Consequently, a WUA's organizational development depends on the management rules defined by the agency, as it relies on the irrigation agency for its water distribution practices. In this context, farmer capability is to be developed in accordance with government policy interventions and defined management rules, rather than in terms of the WUA's organizational autonomy.

Table 4.2: Organizational distinction between FMIS and WUAs

ble 4							
1221	Fragile and fragmented. It is divided between water users and the irrigation agency. While Water users (not necessarily farmers) are in charge of the operation of the infrastructure, the agency Remains the one who holds decision-making authority for systems management.	Inter-organizational coordination became very essential in preventing systemic disintegration as responsibility for different tasks is held by different organizations. Internal relation between the subunits depends highly on the coordination. -Tasks are mainly related to duties alone, with no rights, no control, and no rewards system. Its tasks are focused on systems maintenance and fee collection.	Divided and yet overlapping social links between those roles belonging to water users and the irrigation agency, which results in a fragile relationship with regard to their accountability. Roles are distinct and fixed.	Long and parallel. Formal and administrative communication channels predominate. Yet, this does not prevent informal management arrangements to taking place.			
DAGE	FMIS Solid and integrated. Farmers possessed both operational and decision-making authority	-Systemically related. Simultaneous responsibility for different tasks is held by a single organization. This organization could consist of different but interrelated sub-units. -Tasks are related to the systems of rights and duties. Conducted work is directly linked to a rewards system. While the central tasks are focused on water allocation, this remains multiply linked with other tasks.	-Intertwined social links between the different roles. Accountability of each role extends to every member of the systems. -Roles rotate and overlap.	Short and circular, with multiple communication channels to enable the use of short-cut management route.			
	Organizational characteristics Charter of authority (the source of legitimacy for the authority)	Tasks (i.e. construction, water allocation, maintenance, conflict resolution, and accounting)	Role (i.e. leaders, members, workers, users)	Size (line of information and authority)			

For instance, Uphoff questions the way accountable leadership could be attained by a WUA whose formation had solely become part of a government policy intervention (Uphoff, 1981). In practice, WUA leadership²³ in Indonesia did not always represent farmers' actual needs, as they lacked the decision-making authority to define their own organizational development.

Further, WUAs' involvement in systems management is confronted by the existing management inconsistency in government irrigation systems. Unlike in FMIS, where systems management is arranged and fine tuned between farmers' fields and the water source, WUA have to deal with both farmers' and the agency's diverging perceptions and interests in respect of systems management not to mention the fact that in contrast to FMIS, where farmers are both water providers and water users, in government irrigation systems the relationship between water provider (the irrigation agency) and water users (farmers) is fragmented and more complex.

Also, the translation of the farmer participation concept under FMIS into government irrigation systems is hindered by a scaling problem (Turral, 1995). Within the context of a highly technical, large-scale, government-managed irrigation system, the irrigation system is no longer well bounded in the physical and membership sense of FMIS. Still related to Uphoff's point on the leadership issue (Uphoff, 1981), according to Turral, a key organizational problem appears here about how to establish greater autonomy and accountability in large-scale irrigation systems with not only more complex technical/operational interdependencies, but also a larger number of farmers. As the number of actors and linkages involved dramatically increases, there is an increased probability of rule breaking and at the same time a decreased probability of detection and sanctioning.

In addition, as a government irrigation system has different technical characteristics, it also requires a different type of management. Unlike in FMIS, a WUA's involvement in the overall systems management is bound to a different set of technical requirements not to mention the increased complexity of the constructed irrigation infrastructure (see for example the installation of sluice gates and weirs) and the fact that some of the applied technical combinations of the infrastructure are almost impossible to manage (Horst, 1998, 1994).

Last but not least, the way in which the farmer participation concept is applied in the organizational approach implies that, regardless of a farmer's hydraulic position in the system, a WUA should have a uniform function and meaning for both head-end and tailend farmers. Differentiated by their position in the irrigation network, head-end and tailend farmers have different ideas on the way the WUA should conduct its water service provision²⁴. For instance, head-end farmers prefer loose water control, and thus limited WUA involvement. Tail-end farmers, on the other hand, prefer the WUA to play a greater role in the water delivery service. Tail-end farmers see the WUA's potential role in ensuring their irrigation water supply because they are often disadvantaged by head-end farmers' water-taking activities (I return to this issue in Chapter 8, where I discuss the observed field reality).

4.6 The institutionalist approach and IMT: a new policy remedy?

In the early 1990s, IMT became the new international policy trend in irrigation development. Referring to the successful implementation of management transfer in Mexico (as perceived by the World Bank), international policy makers hailed the Mexico model as the reform model for irrigation development (Johnson III, Svendsen and Gonzalez, 2004; Rap, 2004). Later, the Bank adopted IMT as one of the cornerstones of its water management policy (Groenfeldt and Svendsen, 2000). The IMT implementation worldwide was promoted through this World Bank defined reform model.

Following this policy formulation, the irrigation agency's role in systems management was to be replaced by WUAs. IMT policy formulation marked the policy shift in irrigation development from the organizational to the institutional approach. Unlike the organizational approach in which farmer participation was limited to increased farmer involvement in systems management, the institutional approach directed farmer participation towards greater farmer decision-making authority in the overall systems management.

The shift in policy discourse from farmer participation to management transfer was impelled by the neo-liberal discourse in development policy. This discourse promotes public-private partnership, and thus a greater role for the private sector in the overall context of development (Carney and Farrington, 1998). In the irrigation sector, the discourse is watered down to a strong belief in financial-economic incentives and arrangements in systems management (Dinar and Subramaniam, 1997; Moigne, Easter, Ochs and Giltner, 1992; Small and Carruthers, 1991). Viewing water as an economic good, the neo-liberal discourse highlights the need to shift financial responsibility for government irrigation systems from the irrigation agency to farmers as the direct beneficiaries. In this context, management transfer is proposed to reduce government expenditure in the irrigation sector, namely for irrigation O&M.

In the institutional approach, cost recovery is linked to the concept of financial autonomy (Svendsen, 1994, 1993; O'Mara, 1990). With reference to this concept, international policy makers perceived management devolution from the irrigation agency to the WUA as the key solution to solve the problem of persistent poor performance of government irrigation systems. They seemed to assume that, by giving WUAs financial autonomy²⁵, farmers would be able to recover the management costs of their irrigation system (though government would remain responsible for covering the costs of major repairs and rehabilitation works). International policy makers thought that a service link would be established through farmers' internal networks, as systems management would be undertaken by farmers for farmers. Similarly, farmers would no longer be reluctant to pay ISFs, as they would be able to access the collected fees when they needed to. In short, international policy makers attempted to eliminate the problem of unreliable water supply and the collection of private rent by the agency by giving WUAs financial autonomy, and thus linking ISF collection with systems O&M.

The formulation of IMT policy was also associated with the international policy makers' belief that farmers' involvement in systems rehabilitation would increase their sense of ownership towards the irrigation infrastructure. Here, management transfer is proposed to improve the poor condition of the irrigation infrastructure. This belief originated from the experience with the Gal Oya irrigation project in Sri Lanka, where the combination of physical rehabilitation and farmers' involvement resulted in the successful establishment of a farmer organization and a significant increase in water productivity (Uphoff, 1986). Consequently, it was thought that farmers' increased sense of ownership towards the infrastructure would automatically eliminate the problem of deferred maintenance, and thus solve the problem of persistent poor performance. Infrastructure development remained pre-eminent in IMT policy formulation (Vermillion, 2000). With IMT, the irrigation agency's inability to improve systems cost recovery was defined as the major problem in government-managed irrigation systems (though this was never formally stated in IMT policy papers) (Uphoff, Ramamurthy, and Steiner, 1991). This newly defined problem continued, however, to be linked to the problems of poor systems performance caused by the poor condition of the physical irrigation infrastructure.

In the late 1990s, IMT was linked to the good governance concept (Grindle, 1997) and civil society movements. Unlike before, the governance focus highlighted the important role played by the irrigation agency in shaping the proposed policy reform. Civil society movements, on the other hand, emphasized the need to involve the local population in all sectors of development (Khudori, 2006). In the irrigation sector, this movement was symbolized by attempts to increase farmers' decision-making authority in systems management. It was during this later stage of the institutionalist approach that farmer participation was linked to decentralization and democratization issues. Later, the term farmer participation was changed to farmer empowerment (World Bank, 2002: Goldensohn, 1994). In the later stage of the institutionalist approach, a WUA's organizational boundary vis-à-vis the irrigation agency's operational boundary became a much debated issue in the irrigation policy discourse²⁶ (see also Chapter 6 on how the IMT policy struggle in Indonesia centered on this issue). The question is whether WUAs should remain at tertiary/secondary level or be further upgraded to main system level. This relates to the fact that a WUA's organizational development is not linked to the irrigation agency's role in systems management.

In practice, studies on IMT in general remain focused on performance measures and outcomes (i.e. ISF collection rate, WUA formation and O&M budget expenditure) rather than on how such outcomes occurred as a result of different forces and interplay. Recent experience with IMT seems to suggest that there has been considerably more success in transferring management responsibilities in more advanced countries such as Turkey and Mexico than in the developing countries of Asia (Samad, 2001). Furthermore, studies on IMT in Nepal and India show a high degree of variability in IMT outcomes in relation to the size and condition of the irrigation system (Khanal, 2003; Narrain, 2003). However, the way IMT implementation has been directed towards management devolution or merely deconcentration of management tasks is hardly discussed.

In addition, I argue that the reform model does not represent the general pattern of policy outcomes (see also Mollinga and Bolding, 2003, on the substantial discrepancy between the defined reform model²⁷ -which they referred to as theory- and the actual practice during its implementation). Policy implementation is much more diverse and complex than it is prescribed by the model. For instance, Kikuchi's research findings show that even within one country (Sri Lanka), in subsequent irrigation projects, the positive lessons from Gal Oya have never been repeated (Aluwihare and Kikuchi 1991). Furthermore, the reform model does not investigate how the successful outcomes of IMT policy implementation developed over time and whether this success can be sustained in the longer term. For instance, Barker and Molle show that the successful outcomes of IMT for the communal system in the Philippines did not last because the NIA was unable to reproduce its bureaucratic leadership (Barker and Molle, 2000). Nevertheless, despite the conceptual failure of the model approach, IMT policy implementation worldwide continues to refer to success stories. In its later policy stage, IMT policy referred to successful management transfer in the state of Andhra Pradesh in India (Nikku, 2006).

4.7 IMT policy: an analysis

In my analysis of IMT, I refer to the characteristics of policy discourse, as defined by Mac Rae (1993). Mac Rae distinguishes between a consensual and an adversarial discourse, that is, when participants have common goals and values in the former, and opposing goals and values in the latter. Within a policy process, the consensual discourse is followed by the adversarial discourse in a later stage of policy formulation. This happens during the process of policy problem definition, and when policy makers are struggling to select a particular policy proposal from the given alternatives (after they collectively agree on the defined problem).

I argue that the policy discourse on IMT has stagnated at the level of consensual discourse. From the later stage of the technical approach until the formulation of IMT policy in Indonesia, international policy makers collectively agreed that the problem of government-managed irrigation systems was rooted in poor systems performance, caused by rapid deterioration of the physical irrigation infrastructure. In the context of this dominant causal argument, deferred maintenance was defined as the major problem in government-managed irrigation systems. Yet, apart from donors' reports, I cannot find any conceptual analysis or empirical evidence behind this dominant causal argument. The deferred maintenance problem was defined primarily by the international donors in relation to their concerns over the physical investments in the sector (Kessides, 1993; O'Mara, 1990). As for farmers, they were more concerned about the amount of irrigation water channeled to their fields than about the way systems maintenance and rehabilitation were conducted by the irrigation agency. For example, farmers hardly ever complained about the poor condition of their irrigation infrastructure as long as their water needs were met (see Chapter 8 for observed field realities). Similarly, the irrigation agency was more concerned with the continuous channeling of rehabilitation funds than with the actual impact of rehabilitation (Bruns and Atmanto, 1992).

I argue that deferred maintenance is merely a symptom of more chronic problems in the sector's development. In the first place, deferred maintenance is rooted in the problem of bureaucratic rent-seeking within the irrigation agency (see Chapter 3 for a more elaborate discussion and explanation of the agency's bureaucratic identity and interests). As far as construction and rehabilitation activities are concerned, the agency has little motivation to promote regular maintenance²⁸. The irrigation agency's role in preserving the vicious cycle in systems management is highlighted in Wade's studies on irrigation bureaucracy in India (Wade, 1982), and Levine's analysis of the economic rationality of deferred maintenance (Levine, 1999). For instance, Wade shows that, when irrigation officials were too busy with rent-seeking activities, they did not have time to think about how to improve systems performance²⁹. Levine, on the other hand, illuminates the irrigation agency's interest and strategy in relation to preserving a deferred maintenance attitude in what he called 'the significant advantageous elements for the operating bureaucracies'. He argues that apart from the agency's interest in preserving the vicious cycle in systems management, deferred maintenance is also used by the agency to mobilize political support for increased funding. Although neither of these studies is based on the Indonesian experience, they do reflect the way the irrigation agency in Indonesia strategically coped with the problem of deferred maintenance.

Deferred maintenance is perpetuated by both central and regional governments' interest in the actual use of the sectoral development budget³⁰. This mutual interest is rooted in the way the sectoral funds are divided between central and regional governments. According to the IOMP 1987 policy statement, the provincial government was responsible for systems O&M, while the central government remained in charge of systems construction and rehabilitation (IOMP 1987 policy statement, background point 4). In practice, relying on the central government's repetitive, if not regular premature rehabilitation, the provincial government neglected systems O&M and used the O&M funds primarily to increase government staff salaries³¹.

Further, apart from both central and regional governments' interest in preserving deferred maintenance, from the farmers' side there is little motivation to perform regular maintenance (Levine, 1999). Regular maintenance does not significantly increase the actual water flow in the canal, despite the link between maintenance and irrigation systems efficiency. In practice, farmers solve their water scarcity problem either by approaching the irrigation agency staff for additional water supply, or by arranging it illegally, rather than through regular maintenance (see also Chapter 8 for a more detailed discussion on farmers' water distribution strategies). Consequently, deferred maintenance persists when these more fundamental problems in the sector's development are neglected.

In addition, apart from the physical condition of the irrigation infrastructure, poor systems performance can be caused by many other factors (both social and technical) (Duewel, 1995; Ostrom, Schroeder, and Wynne, 1993). For instance, various studies in irrigation show that actual systems management depends on the farmer-agency relationship as much as on the condition of the physical infrastructure (Huppert and Wolff, 2002; Malano and Hofwegen, 1999). Put another way, the improved condition of the infrastructure will not

lead to better systems performance if both farmers' and the agency's role in systems management are not synergized or are in conflict with each other. As long as the actual functioning of irrigation infrastructure remains contested, farmers will continue to reconstruct the infrastructure's formal code of operation, even when this means that they have to damage the infrastructure (Mollinga, 1998).

At the level of policy strategy definition, the present policy discourse on IMT does not clarify the way management transfer could solve the problem of poor systems performance. For example, in relation to the cost recovery perspective in IMT, I do not see how poor systems performance could be improved through reduced government expenditure on the irrigation sector. Similarly, I do not see how the deferred maintenance problem could be solved through farmers' financial contribution not to mention farmers' reluctance to pay ISFs. Nonetheless, the policy discourse on IMT is focused on finding the most effective way to transfer systems management from the irrigation agency to WUAs (Johnson III, Svendsen and Gonzalez, 2002). For example, Vermillion focuses his analysis on IMT implementation worldwide mainly on how management transfer should be conducted (Samad and Vermillion, 1997; Vermillion and Garces-Restrepo, 1996; Vermillion, 1995). Similarly, policy reports on IMT are focused on identifying conditions for successful IMT. In addition, the World Bank arranged international seminars and workshops on IMT are focused on duplicating IMT implementation worldwide, from successful cases of IMT elsewhere.

The consensual nature of policy discourse on IMT is also evident in the policy's multifaceted character. The way popular development concepts (such as privatization, democratization, and decentralization) are combined into IMT highlights its multiple, different, and sometimes conflicting meanings. The complexity of the irrigation sector and the way international policy makers combine the above concepts seem to merge these concepts into a single yet disjointed policy, in which each claim is incorporated, with their conflicting nature temporarily resolved. Later, this conflicting nature emerges when international policy makers are confronted with combining the basic ideas of the above development concepts into a set of policy strategies. For instance, in contradiction of the basic idea of democratization, the degree of farmer empowerment in Indonesian IMT was defined primarily through farmers' financial contribution³². Similarly, the amalgamation of the ideas of decentralization and privatization confuses the reason behind the proposed management transfer³³. IMT is trapped in a deadlock of conflicting positions³⁴. In this context, IMT's multi-faceted character acts merely as a policy disguise. It becomes a policy mask, which can be put on and taken off according to the actual need of each policy occasion. For example, with reference to the issues of democratization and decentralization, the irrigation agency could use IMT implementation to legitimate its commitment towards sectoral reform. With reference to privatization, however, IMT implementation could also be used by the agency to justify its economic interest towards systems cost recovery.

Further, the consensual discourse on IMT highlights the hegemonic tendency in IMT policy formulation. The international policy makers' hegemonic perception is symbolized

in the different policy labels in IMT (Clay and Schaeffer, 1984). Here, labeling is defined as a way of referring to the process by which policy agendas are established and more particularly the way in which people, conceived as objects of policy, are defined in convenient images (Wood, 1985). The concept of policy labeling highlights the political nature in policy processes, and thus the not-so-neutral and objective perceptions of policy makers; their hegemonic tendency. As the rule of inclusion and exclusion is set in labeling, the asymmetrical and one-sided power relation between policy makers and their policy 'objects' becomes evident. Hence, although labels misrepresent and falsify the situation and role of those labeled, they also reveal the power relations between the giver and the bearer of a label³⁵.

In the first place, by labeling farmers as water users³⁶, IMT does not reveal farmers' actual role in irrigation management. Farmers' actual role is camouflaged and their farming/household strategy as a whole is ignored, as the designation relies upon a differentiation between farmers' many roles and the choice to focus on one of them. IMT tends to overestimate the importance of WUAs for farmers, as it overemphasizes the role of irrigation for farmers. Yet, international policy makers do not take into account the distinct characteristics between head-end and tail-end farmers in IMT policy conceptualization, despite their focus on farmers' role in irrigation.

In the second place, by labeling the irrigation agency's higher officials and their field staff as the irrigation agency, IMT does not reveal the different position of these field staff visà-vis their superiors, and thus their different role in shaping IMT formulation and implementation. Furthermore, the labeling does not reveal the different perceptions of both field staff and the officials in the agency, as well as their different interests and strategies in respect of IMT³⁷, rooted in their different access to resources (Bottrall, 1981).

By labeling farmers as water users and the field staff as the irrigation agency, the actual process of alignment between the main policy actors in IMT is reduced to their formal organizational boundaries (Mollinga and Bolding, 2003). The labeling dichotomizes the relation between farmers and the agency. Here, IMT is conceived as a zero-sum power relation.

Last but not least, by labeling irrigation systems management as systems O&M, the different aspects in irrigation management: water allocation, acquisition, distribution, drainage, design, construction, conflict resolution, rules of arrangement, and enforcement (Uphoff, 1986) are reduced to the regulation and maintenance of the physical irrigation infrastructure.

4.8 Conclusion

In Indonesia, IMT policy remains trapped in the infrastructure development paradigm this despite international policy makers' attempts to promote greater farmer decision making in IMT policy globally. The causal link between systems performance and the condition of the irrigation infrastructure remains pretty much present in Indonesian IMT.

Management problems in government irrigation systems continue to be approached from the infrastructural point of view. International policy makers continue to perceive the vicious cycle of bad construction/deferred maintenance/premature rehabilitation as the cause of poor systems performance rather than as symptoms of a more chronic problem in the sector's development.

International policy makers formulated IMT as a policy strategy to address international donors' interests and concerns about the development of the Indonesian irrigation sector in isolation from the actual management situations in government irrigation systems as experienced by both farmers and the irrigation agency. For instance, the need to remodel³⁸ the systems' technical characteristics was never dealt with in IMT in Indonesia.

International policy makers took for granted farmers' capability and willingness to take over the irrigation agency's role in systems management. They assumed that IMT policy coincided with farmers' development needs and capability to revitalize grass-roots development forces³⁹, with reference to the characteristics and capability of farmer organization under FMIS. In Indonesia, farmers were excluded from the overall IMT decision-making process.

Finally, the way sectoral reform is initiated by international donors highlights the irrigation agency's paradoxical role in IMT. The irrigation agency is viewed both as government agent, incapable of managing the irrigation system, and as reform agent, responsible for the formulation and implementation of IMT. As incapable government agent, the agency's role is to be replaced by WUAs. Yet, as reform agent, the agency is responsible for the implementation of IMT policy. Paradoxically, IMT is to be implemented not only by the very agency whose power and authority will be reduced by the policy, but by the very agency which was perceived as incapable of managing the irrigation system in the first place. In the next chapter I illustrate this policy controversy in IMT and how the agency's paradoxical role resulted in the national government's partial initiative towards IMT formulation and implementation under the Irrigation Operation and Maintenance (IOMP) 1987 statement.

¹ The term 'narratives' refers to the hermeneutic school in policy analysis (Roe, 1994). In this chapter, I use the phrasing 'dominant narratives' to emphasize the actual outcome of competing causal stories (Stone, 1989).

² The historical link was made mainly to underline the way problems in government-managed irrigation systems were defined by international policy makers and how this conceptual causation evolved over time.

³ Dominant policy narratives result from the active manipulation of images and conditions by competing policy actors (Roe, 1994). These conditions are defined as problems through the strategic portrayal of causal stories.

⁴ The incorporation of national irrigation policies into the international policy trend does not necessarily mean that an irrigation agency's perceptions and interests are always in line with those of the international donors.

- ⁵ Technical irrigation development embodies the engineers' idealized perception of the physical irrigation infrastructure, and thus their belief in its superior role to shape the overall system management. In the context of this idealized perception, an irrigation system can be managed only when it is equipped with the infrastructure appropriately designed and constructed for the defined purpose. Viewing irrigation development as solely a technical matter reduces systems management to design and construction of its physical infrastructure.
- ⁶ This period began with the introduction of the cultivation system in 1830 and lasted till Indonesia's independence.
- ⁷ The concept of water control (see Mollinga, 1998) in irrigation management was approached in a strictly technical sense. The preference for a technical approach was linked to the need to regulate and control the actual water flow to meet the calculated crop water requirements.
- ⁸ Because of the repeated occurrence of famines on Java, the objective of ethical policy was to increase the local population's economic welfare.
- ⁹ See also Horst's article with regard to the managerial consequences of this technical intervention.
- ¹⁰ These major dams are Jatiluhur, Karangkates, Sempor, Cacaban and Darma. Though the construction of Cacaban and Darma dams was started under Soekarno's government, the construction was completed only after the New Order government took power.
- ¹¹ This global attempt was connected to the productive discourse in the early 1970s (Booth, 1988). Rooted in the global concerns about rapid population growth in the developing countries worldwide, the productive discourse marked the beginning of the green revolution era.
- ¹² In general, direct allocation of development funds (both in the form of loans and grants) from international donors to the governments of developing countries not only stimulated rapid technical development in the sector worldwide, it also marked the emergence of the important role to be played by international donor agencies in defining policy trends in irrigation development policies. Despite the prominent role of the international donors in promoting these policy trends in irrigation, this research will only address their underlying interests in relation to the conceptual formulation of irrigation policies.
- ¹³ This was most apparent in the agricultural sector, where farmers were used as an instrument to ensure food security for the urban poor (Maksum, 2007). For instance, when price ceilings were set (to protect the urban poor), no floor price was defined to protect farmers. In short, while the green revolution increased yield production and contributed to preventing world hunger, in the Indonesian context, agricultural pricing policies prevented some of the benefits reaching farmers. They could only benefit from increased production, but not from increases in the price of rice. Farmers' well-being was important only in relation to their role as the country's food producers.
- ¹⁴ The management of tertiary gates clearly showed that this inconsistency was caused by diverging perceptions about systems management on the part of both farmers and the agency (Horst, 1994; van der Ploeg, 1991; Pfaffenberger, 1988). For the agency, irrigation water was to be delivered according to the defined schedule (supply-based), rather than to meet farmers' actual water demand. Hence, the gate is perceived as an instrument to control the water flow, to be opened or closed in accordance with an overall plan. Farmers, on the other hand, preferred a higher level of water security (on-demand) over engineered deliveries. Mainly concerned with the condition of their crops, farmers perceived the tertiary gate as a water allocation tool that could be flexibly opened and closed in accordance with the actual crop water needs.
- ¹⁵ This shift coincided with a decline in the international price of major irrigated crops and an increase in construction costs (due to the degree of expansion that was nearing saturation point) (Turral, 1995; Bhatia and Falkenmark, 1992).
- ¹⁶ This is in contrast to the technical approach, where infrastructure development was conducted mainly as the government's strategy to reach the country's overall development goal, which was to increase yields. It was during the green revolution era that both the irrigation and agriculture sectors worked together towards the country achieving self-sufficiency in rice.
- ¹⁷ Interviews with senior officials from the former MPW, 2004.
- ¹⁸ Interviews with senior officials from the MoA, 2004.
- ¹⁹ These studies were initiated by researchers from Cornell school. Later, more insights on farmers' irrigation practices were given by Ostrom in her collective action and common property resources theories (Ostrom, 1990). These studies form the onset of the institutionalist perspective in irrigation development.

- ²⁰ In FMIS, farmers' capability developed without any influence or intervention from the governments. As described by Hunt: "FMIS have run for centuries, without centralized bureaucracies, without engineers, and most important, with farmers doing all of the work" (Hunt, 1989: 79).
- ²¹ This comparative analysis presents the idealized version of farmer organization in FMIS. This idealized version tends to suggest that all FMIS work well and have solved all collective action problems. In practice, this is not always the case.
- This applies for both the problem of poor system performance as defined by international policy makers and the problem of management inconsistency.
- Although studies conducted by Kloezen (2002) and Narrain (2003) also show that in some cases WUAs have been proactive and were able to function in accordance with farmers' needs. Nevertheless, WUAs' good performance in these particular contexts (India and Mexico) did not automatically solve the conceptual problem in the translation of farmer participation under FMIS into government-managed irrigation systems in Indonesia.

 24 Although the different characteristics of head-end and tail-end farmers were highlighted by Uphoff (Uphoff,
- 1986), he did not directly link them with the basic organizational concept of a WUA.
- In Indonesia, it was only in 1999 (after the fall of Suharto's government) that WUAs were in charge of managing the collected ISFs, under the irrigation agency's guidance.
- ²⁶ In my opinion, this discourse highlights not only the agency-WUA dependency relationship, but also their complementary role in systems management.
- However, as this so-called model approach offers a standardized solution that promises the same results in relation to the management of every irrigation system worldwide, the approach seems to fit both the engineering and the conventional planner's mind.
- ²⁸ Construction and rehabilitation activities are the major factors in the formation of the irrigation agency's bureaucratic identity (see also Chapter 3 for more discussion on how the agency's identity developed during the technical approach).
- ²⁹ Bureaucratic rent-seeking perpetuated not only deferred maintenance, but also bad construction of irrigation infrastructure.
- 30 Interviews with provincial government staff and officials from the irrigation agency, 2004.
- ³¹ Interviews with officials from Kimpraswil, MoHA, the MoA and the PIA in Yogyakarta, 2003, 2004.
- 32 In the context of privatization, farmers' decision-making authority in systems management is related to their financial capability. In the context of democratization, on the other hand, farmers' involvement is targeted towards empowerment. Farmers' decision-making authority is promoted independent of farmers' financial capability.
- With reference to the decentralization concept, management devolution is proposed according to the subsidiary principle, or the decentralization of decision making to the lowest possible level, where knowledge is available. The rationale behind this principle is 'getting the incentives right', by getting people involved in the direct management of their affairs. With reference to the privatization concept, on the other hand, management transfer is proposed to reduce government expenditure in the irrigation sector.
- ³⁴ These conflicting positions emerge in the later stage of the policy process, mostly during implementation.
- 35 Policy labeling is rooted in the theory of policy utterance (Apthorpe, 1986). The theory emphasizes the process of policy formulation, which is highly dominated by policy makers' perceptions. It defines policy as no more than sheer reflection; it presents the part of the reality on which policy makers shed light.
- 36 The term water users was first introduced in the 1980s, parallel with the introduction of the concept of farmer participation in irrigation management. The term was defined in relation to the perceived policy need to involve farmers in systems management.
- ³⁷ This is not to say that IMT could also be perceived differently, among high officials and among the field staff. 38 Horst argues that transferring management to WUAs without adapting the system's technical design and
- characteristics will only result in further deterioration of the system (Horst, 1998). Taking into account that farmers perceive and use the infrastructure differently from the engineers in the irrigation agency, he requires a system's technical remodeling as a prerequisite for successful IMT.

 39 The present status of farmers' knowledge about systems management is never addressed in IMT in Indonesia.
- It must also be asked whether such revitalization is realistic. It is not hard to imagine that farmers' knowledge has hardly developed since the introduction of the technical approach, given that irrigation development was applied in a top-down way (ter Hofstede and Santbrink, 1979).

5. IMT in Indonesia: a changing policy game

5.1 Introduction

This chapter presents the policy controversy¹ in Indonesian IMT in more detail. It highlights how IMT policy, as this was defined under the Water Sector Adjustment Loan (WATSAL) in 1999, conflicts with the bureaucratic identity of the Indonesian irrigation agency. This conflict brings into focus the antagonistic relationship between IMT policy and the very agency responsible for its implementation. With IMT renewal in 1999, the pro-reform government officials attempted to remove the very foundation upon which the agency's existence and survival was based, that is infrastructure-oriented development and institutionalized rent-seeking in the irrigation sector. Initially, these pro-reform government officials² consisted primarily of mid-level officials from the National Development Planning Agency (NDPA). At the later stage of reform, I refer to them as WATSAL policy makers. They included the international experts appointed by the World Bank to reframe IMT policy, as well as mid and high-level officials from the Ministry of Home Affairs (MoHA) and the newly formed Ministry of Settlement and Regional Development (Kimbangwil) before it was abolished and replaced by the Ministry of Settlement and Regional Infrastructure (Kimpraswil) in 2001.

Using the evolution of IMT policy in Indonesia as a case study, I argue that as long as the antagonistic relationship is unresolved, the policy will continue to be contested by the irrigation agency. The chapter documents the way the agency transformed IMT under the Irrigation Operation and Maintenance Project (IOMP) 1987 statement into a construction program, evidencing its influence to direct and shape actual policy outcomes. Further, with reference to the policy controversy, the chapter also illuminates the WATSAL policy makers' strategy to hide the real implications of the WATSAL IMT program in 1999 from the irrigation agency.

The main findings of the chapter are:

- The national government's partial position on IMT policy formulation and implementation was evidenced by the way the Indonesian IMT was shaped by power struggles between the core policy actors in the irrigation agency and the WATSAL policy makers
- IMT policy characteristics are shaped by negotiation processes conducted by the policy elite within the different alliances at the central government ministries
- The unresolved policy controversy in Indonesian IMT overwhelmed the directives and aspirations of donor policies. This controversy deprived the policy of a

substantial foundation for its implementation

The chapter starts with a comparative overview of IMT policy evolution in Indonesia. Section 2 focuses on IMT policy as formulated under the IOMP 1987 statement, in which early formulation, implementation, and analysis of IMT are described, respectively. Section 3 gives a prelude to the IMT policy renewal in 1999. It highlights the role of Indonesia's 1998 political reform in accelerating the speed of reform in the irrigation sector. In this section, my analysis focuses primarily on the legal framework of the WATSAL IMT program. Section 4 presents and discusses the formal decision-making structure in WATSAL. Section 5 analyzes the way WUAs empowerment is used by the WATSAL policy makers as their strategy to eliminate institutionalized corruption within the irrigation agency. Finally, the implementation set-up for the WATSAL IMT program in 1999 is described in section 6.

5.2 IMT in Indonesia: a comparative overview

In Indonesia, IMT policy was first adopted in 1987, under the Irrigation Operation and Maintenance Project (IOMP) 1987 statement. As a statement, IMT under the IOMP was formulated primarily as part of a policy agreement between the irrigation agency in the Ministry of Public Works (MPW) and international donors, in this case the World Bank. Apart from this policy agreement, the government did not issue any legal regulations as a legal back-up for IMT.

In 1999, conditioned by the country's political reform, IMT policy was reformulated under the World Bank funded Water Sector Adjustment Loan or WATSAL. Under WATSAL, IMT policy renewal was focused on the formulation of its legal framework.

A major difference between IMT under the IOMP and the WATSAL IMT program lies in the way the farmers' role is projected. In the IOMP 1987 statement, farmer participation in the irrigation sector was focused on contributions (in the form of labor and material) for construction activities and irrigation service fee (ISF) collection. In WATSAL, on the other hand, farmers' involvement was geared towards empowerment, primarily by giving WUA direct access to manage operation and maintenance (O&M) funds. Furthermore, the incorporation of IMT policy into the regional autonomy program in WATSAL implied widespread policy implementation. Unlike before, the WATSAL IMT program was to be applied to all irrigation systems, regardless of their size, technical characteristics, and location. Under WATSAL, management transfer was not limited to the tertiary/secondary level. In addition, in the WATSAL IMT program, the formulation of the IMT legal framework was directed through an inter-sectoral decision-making platform under the leadership of the NDPA.

An overview of IMT policy evolution in Indonesia, from the IOMP 1987 statement to its policy renewal under WATSAL in 1999, is given in Table 5.1. Table 5.2 provides an overview of the new policy elements of IMT under WATSAL 1999 compared to the IOMP. Figure 5.1 presents the timeline of IMT development in Indonesia.

Table 5.1: The evolution of IMT policy in Indonesia

	IOMP 1987 statement	WATSAL 1999	Remarks
Forces behind IMT policy formulation:	Foreign donors' changing investment pattern	-Fiscal crisis in late 1997 -Political reform that led to the formulation of regional autonomy	In 1998, mid-level, pro-reform government officials in the National Development Planning Agency (NDPA) used the fiscal crisis and political reform in the country as their entry noint to initiate sectoral reform
Formal problem definition in IMT:	Deferred maintenance	Deferred maintenance	Infrastructure-oriented irrigation development is preserved
Policy reasoning in IMT:	Policy reasoning Cost recovery to meet O&M costs in IMT:	Cost recovery through farmer empowerment	Cost recovery path in IMT links IMT under IOMP and the WATSAL IMT programme
Informal problem definition in IMT:	Lack of development funds for system rehabilitation and construction (as defined by the irrigation agency)	Bureaucratic rent-seeking in government-managed irrigation systems (as defined by the pro-reform government officials in the NDPA)	In WATSAL, the decision-making domain is shifted from a sectoral irrigation agency to an inter-sectoral platform under the leadership of the NDPA
Hidden policy agenda:	From the irrigation agency's perspective: -IMT was adopted primarily to secure funds flow into the irrigation agency, and preserve infrastructure-oriented irrigation development	From the pro-reform government officials' perspective: -With IMT, WUAs' empowerment is used to counteract bureaucratic rent-seeking -Fiscal decentralization to facilitate sectoral reform	Under WATSAL, the pro -reform government officials' efforts to counteract the irrigation agency's rent-seeking attitude are focused on the shifted access of development funds from the agency to WUA
Policy characteristics:	-IMT as part of O&M program -Farmer participation as a strategy for systems cost recovery	-IMT as part of wider political reform in the context of regional autonomy -Farmer empowerment as a strategy to eradicate bureaucratic rent-seeking	WUA's role changes from government's recipients to government's grass roots weaponry

Table 5.2: Comparison of IMT under the IOMP 1987 statement and WATSAL of 1999

	IOMP 1987 statement	WATSAL 1999	New policy element
Implementing agent:	National irrigation agency and its representatives at provincial level (kanwil or regional offices)	National irrigation agency and MoHA together with district irrigation agency, which acte	-Decentralization of authority to district level. IMT as sectoral reform, nart of perional autonomy
		integration agency, which ares under the authority of district government	part of regional autonomy -MoHA's increased bureaucratic power in the irrigation sector, as IMT
Development funds channeling:	Centralized	Directly to district government	Kabupaten Irrigation Improvement Fund (KIIF) as additional short-cut in development funds disbursement
Focus in IMT:	-WUA formation -Participatory design and construction	-Actual management transfer -WUA's role in system O&M, through its direct access to O&M	The role of WUAs as the main agent in the proposed fiscal decentralization, as indirect counterforce against the
	-ISF collection	spunj	present centralized funding mechanisms
Degree of transfer:	Limited to the tertiary level (during ISSP I and II), and later tested at secondary level (during JIWMP)	Flexible, up to system level	The principle of one irrigation systemone management
Scope of IMT implementation:	Limited to irrigation systems smaller than 500 hectares, located in the pilot sites	Widespread, based mainly on district government's willingness to implement IMT	Sectoral reform as part of regional autonomy
The role of farmers/WUAs as projected in IMT:	As government instrument to improve system cost recovery	As government's agent for reform	WUAs is equipped with decision making authority
WUAs main activities:	-ISF collection -Participatory design and construction	-ISF collection -O&M training -Participatory design and	-WUAs are authorized to manage ISF -WUAs have access to propose the allocation of development funds
		construction -Organizational training (administrative and financial) -Develop proposal for development funds	•

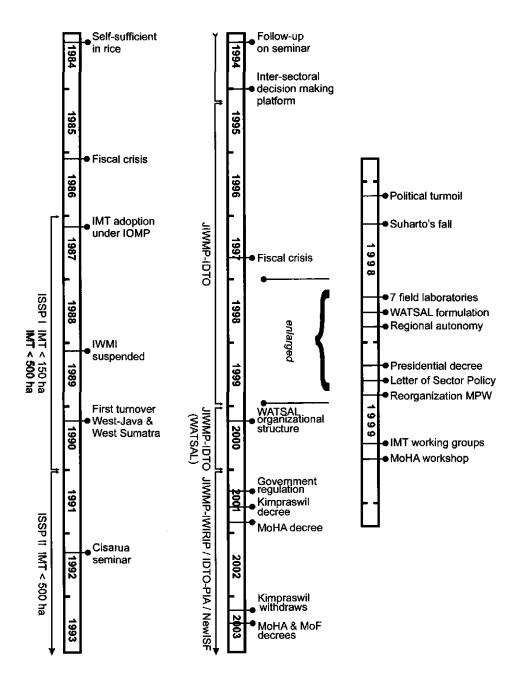


Figure 5.1: The timeline of IMT in Indonesia

5.3 IMT under the IOMP 1987 statement

5.3.1 IMT: a policy tool for funds mobilization

Under the IOMP, the irrigation agency perceived IMT as a policy tool to mobilize development funds (Vermillion, Samad, Pusposutardjo, Arif and Rochdyanto, 2000). The irrigation agency agreed to adopt IMT as part of donors' preconditions for further loan-funded projects, as it lacked any other funding resources. Ironically, IMT adoption was based on the governments' inability to meet O&M costs, rather than on increasing farmer involvement in irrigation systems management.

The government's economic motive in IMT adoption is evident in the following policy statements:

The government will rationalize expenditure programs in the irrigation subsector, and formulate and implement a more realistic irrigation investment strategy for the fifth five year development plan (IOMP 1987 statement: Policy statement 6)

It is necessary to mobilize new sources other than the present Central Government allocation, in the efforts to increase the O&M budget and eventually to reduce dependence upon Central Government budgetary support, from the beneficiaries of irrigation development in the form of an "Irrigation Service Fee", which again should be related to the quality of service provided (IOMP statement of 1987: Background point 5)

Further, the way IMT under the IOMP was adopted as the agency's attempt to balance the budget in irrigation management expenditure (especially through O&M budget restructuring) is also apparent in Soenarno's review paper on IMT in Indonesia (Soenarno, 1995). Soenarno was the former director of the irrigation agency at that time, a key government official from the Ministry of Public Works and one of the leading policy actors in the formulation of the IOMP 1987 policy statement. He argued that the adoption of IMT policy was impelled by regional governments' inability to provide sufficient funds for systems O&M.

Further, IMT adoption under the IOMP was conditioned by bureaucratic uncertainties inside the irrigation agency at that time. These uncertainties occurred shortly after Indonesia achieved self-sufficiency in rice in 1984 (see Chapter 4). Although this achievement legitimated the importance of irrigation systems for the country's agricultural policy (especially in the green revolution era), it also put into question the future role of the irrigation agency. This achievement envisioned that future increases in rice production would have to come through increases in cropping or irrigation intensity. As these increases would depend more on improvements in water management than on production inputs, many in the agency believed that the country's food self-sufficiency would have direct implications for the agency's strong focus towards infrastructure development and

affect the agency's identity. As stated by Bruns: "The formulation of the IOMP 1987 statement was conducted as a secret (confidential) process between government and major donors, without public consultation and with little publicity" (Bruns, 2003: 148).

In the context of the IOMP 1987 statement, all irrigation systems smaller than 500 hectares were supposed to be gradually turned over to WUAs (over a period of fifteen years). Implementation began in 1987 with pilot turnover projects in West Java and West Sumatra. The initial emphasis was on systems smaller than 150 hectares³. Prior to this turnover, systems rehabilitation was conducted using different terminology, the so-called special maintenance⁴ (Bruns and Atmanto, 1992). This special maintenance was done to ensure effective water delivery and adequate preventive maintenance after the turnover.

5,3,2 From cost recovery to construction program

In practice, the irrigation agency transformed IMT under the IOMP 1987 statement into a construction program. The agency shifted the emphasis from turnover to construction works, by strategically redefining the systems classification for turnover (Bruns and Atmanto, 1992). Based on the formally defined system classification, construction works were to be done only in irrigation systems which had government-built infrastructure, and which needed physical improvement before turnover. Both systems with no governmentbuilt infrastructure and schemes with government-built infrastructure that had been recently improved were supposed to be directly turned over once the necessary organizational structure of the relevant WUA was put in place. However, officials from the irrigation agency argued that schemes which had never received assistance were often in a worse condition than those which already had government-built infrastructure. As stated by Bruns: "Aiding schemes that already had more elaborate infrastructure. while ignoring those with fewer permanent structures of stone and concrete, was portraved as unfair" (Bruns, 2003: 150). On the basis of these arguments, both the irrigation agency and the donors agreed that scheme improvement would be undertaken only where this was considered necessary. Following this agreement, the irrigation agency conducted several assessments to define the degree of physical improvement for each scheme category. Unsurprisingly, the assessments revealed that construction was required for all schemes. In turn, most of project funds were spent on 'special maintenance' activities (World Bank document, 2003). World Bank officials supervising the project acquiesced in this decision, seeming to feel it was beyond their influence (Bruns, 2003).

This rerouting towards construction programs was conditioned by the existing centralized funding mechanisms. The irrigation agency was fully in charge of focusing on construction and rehabilitation activities, as development funds continued to be disbursed in a top-down way. As stated by Bruns: "The participatory reforms initiated in 1987 offered Indonesian farmers greater voice in irrigation management, but little choice to exit from the dominant patterns of agency-controlled development in irrigation" (Bruns, 2003: 146). Put another way, though IMT gave WUAs greater access to decision-making process, the decision-making authority was still in the hands of the irrigation agency. In turn, WUAs' organizational development was limited to the government-defined

development framework focused on participatory design and construction of the irrigation infrastructure. In addition, even within this limited development choice, WUAs did not have any power to influence the actual works. For example, though farmer consultations were carried out during design, construction often proceeded without taking into account farmers' needs and preferences (Sindorf and Suhardiman, 1998).

At the implementation level, the IOMP was enacted through projects. Projects were the organizational unit in which the donor-funded policy program was materialized into different sets of activities (see also Chapter 2 for further discussion on the project approach). The IOMP implementation was divided into two different periods (from 1987 to 1991 and from 1991 to 1995), under two different projects. The first Irrigation Subsector Project (ISSP I) covered pilot activities for turnover and ISF collection. In practice, it was only in 1990, three years after IMT policy formulation, that the first systems in West Java and West Sumatra were turned over to WUAs. Later, the turnover program spread to other provinces in Indonesia during the second Irrigation Subsector Project (ISSP II), with most of the attention on Java, where most of the small-scale irrigation systems were located. In addition to the irrigation agency, the Ministry of Agriculture (MoA) and the Ministry of Home Affairs (MoHA) were both involved in respective project activities of coordinating WUAs training and ISF collection.

It was during ISSP II that IMT was redirected more and more towards construction and rehabilitation activities. It became more apparent that progress was achieved mainly in construction works. This was in contrast to the slow pace of turnover and the limited coverage of ISF (JIWMP-IDTO Inception Report, 1995; ISSP II report, 1994). Based on these dissatisfying outcomes, in 1989 the World Bank requested the International Irrigation Management Institute (IIMI) to reframe the policy. The mission resulted in the IIMI's suspension from Indonesia. Though no formal reason was ever stated with regard to the suspension, there was a strong impression from policy actors that it was related to the IIMI's proposal to use the sectoral development fund to finance other activities, in addition to infrastructure-oriented development activities. Although the suspension did not address the Bank's concerns about IOMP outcomes, this neither postponed the continuation of policy implementation under ISSP I nor prevented its extension into ISSP II.

When ISSP II was completed in 1995, the program was continued under the World Bank financed Java Irrigation and Water Resources Management Project (JIWMP) from 1995 to 2000, under the Irrigation Development Turnover (IDTO) component. IMT implementation was continued in pilot projects in the four provinces in Java (West, Central, East Java, and Yogyakarta special province). Though IMT under the JIWMP-IDTO still referred to the IOMP 1987 statement, it is unclear how these pilot projects were linked to the previous implementation of IMT under ISSP I and ISSP II. Further, during the JIWMP-IDTO it was made clear from the beginning that construction works were included in the turnover program, and that the project would have sufficient funds for rehabilitation and upgrading, targeted at irrigation systems larger than 500 hectares. However, turnover itself became a development target in the JIWMP, as the problem of a growing backlog⁵ of small rehabilitated but not yet transferred irrigation systems became

apparent. In 1997, after ten years of implementation, only 420,000 hectares of small-scale irrigation systems had been officially turned over to WUAs (Soeparmono and Sutardi, 1998). This was only forty-seven percent of the 900,000 hectares target that was supposed to be reached in 2003 (JIWMP-IDTO progress report, 2002) not to mention the fact that most irrigation systems smaller than 150 hectares were already farmer managed, even prior to IMT. In practice, just like in ISSP I and ISSP II, project activities were focused on physical improvements (Sindorf and Suhardiman, 1998).

5.3.3 Analysis of IMT under the IOMP 1987 statement

The way IMT policy is perceived from opposite angles by both donors and the irrigation agency reveals the conflict between IMT policy and the bureaucratic identity of the agency. For instance, the IMT policy objective to improve the poor performance of government irrigation systems conflicts with the agency's interest in preserving the vicious cycle of bad construction/deferred maintenance/premature rehabilitation (see Chapter 4). As far as the institutionalized rent-seeking practices in irrigation sector development are concerned, the preservation of this vicious cycle is crucial for the reproduction of the agency's identity (see Chapter 3 for an explanation and discussion on institutionalized rent-seeking practices and the way these practices shaped the irrigation agency's bureaucratic identity). Similarly, the IMT policy of promoting farmers' decision-making authority in systems management conflicts with the agency's interest in sustaining its bureaucratic power in relation to the sector's development. In addition, policy makers' attempts to increase WUAs' self reliance are at variance with the irrigation agency's interest in preserving farmers' dependency.

The way IMT conflicts with the agency's interest is evident in the 'cyclical relationship of codependency', in which farmers rely on government subsidies, and the agency 'relies' on infrastructure deterioration to justify rehabilitation projects (Vermillion, Samad, Pusposutardjo, Arif and Rochdyanto, 2000). Here, IMT may have served more to reinforce the dependency of farmers on the government rather than to engender self-reliance. For instance, findings from the study conducted by the IWMI and Gadjah Mada University indicate that the conventional pattern of farmers deferring some maintenance costs until the government might return with external assistance for rehabilitation has apparently not been overcome by turnover. WUA leaders interviewed in all four systems reported to researchers that they expected the government would return within five years to finance another rehabilitation of their system.

Further, in the IOMP 1987 statement, WUA formation and organizational strengthening became part of the mainstream financial strategy to reduce government expenditure in the irrigation sector (IOMP 1987 statement: Policy statement 4). Nevertheless, despite the strong tendency towards irrigation systems cost recovery, in practice, the turnover program did not have any significant effect on government's expenditure on the irrigation sector, or on the disbursement of development funds for the sector.

Finally, looking at the outcomes and impacts of IMT policy implementation at the field

level, studies conducted by researchers from the IWMI and Gadjah Mada University show that there was no significant change in systems management (O&M practices) after the systems turnover either. One important finding that emerged from the inventories and profiles was that, prior to turnover, farmers were already performing a majority of the management tasks in the systems. Hence, for many and probably most systems, turnover did not constitute a major change in actual management practices (Vermillion, Sarnad, Pusposutardjo, Arif, and Rochdyanto, 2000). In addition, mixed results with regard to WUAs' role in water distribution in particular, and in irrigation management in general, show that there was no direct link between WUAs formation and actual system performance.

5.4 IMT under WATSAL

This section discusses the reintroduction of IMT policy in 1999, followed by the promulgation of Presidential Instruction Number 3 of 1999 as the legal back-up for the WATSAL IMT program, and ends with an analysis of the policy agreement between the Government of Indonesia (GOI) and the World Bank, as stated in the Letter of Sector Policy.

5.4.1 IMT policy reintroduced

Late in 1997, a fiscal crisis hit Indonesia (Nanto, 1998). The political upheaval caused by the country's economic crisis subsequently triggered political and economic reform, which led to the downfall of Suharto's thirty-two years old regime in May 1998 (Priyono, Prasetyo and Tornquist, 2003). This political reform gave the momentum for the reformulation of IMT policy, under the overall concept of regional autonomy (see Chapter 2). The promulgation of the Regional Autonomy Act in 1999 accelerated the process of reform in the irrigation sector.

As the crisis left government ministries with insufficient development budgets and hardly enough funds to support staff salaries, the pro-reform government officials in the NDPA approached ⁶ World Bank officials in Indonesia to use this opportunity to introduce its reform agenda for the water sector in general, and for the irrigation sector in particular. Dazzled by but not in thrall to the strong tendency towards construction works in IMT under the IOMP, these pro-reform government officials⁷ saw the chance to use the recent political reform as the political counterforce against the construction-based bureaucratic interest of the irrigation agency. At first, an Agricultural Sector Adjustment Loan (ASAL) was proposed, with the water sector incorporated. However, due to lack of bureaucratic support from the MoA, ASAL was changed into a Water Sector Adjustment Loan (WATSAL) in October 1998. With this, policy reform was focused on the water sector, with no direct links to the agricultural sector. WATSAL formulation by both the GOI and the Bank marked the re-introduction of IMT policy as part of the country's political reform in 1999. In addition, the World Bank organized a water sector group of donors to ensure that donors have a common acceptance of and support for WATSAL. These donors included the Asian Development Bank (ADB), the European Union (EU), Japan International Cooperation Agency (JICA), and the Food and Agriculture Organization (FAO).

The incorporation of IMT policy reformulation into the wider context of Indonesia's political reform in 1999 silenced any possible counterforce from the irrigation agency. In the context of the 1998 political reform, IMT policy was recognized as part of larger political reform in the country. With reference to the Regional Autonomy Act, the decision to implement IMT policy was devolved to district governments. Theoretically, the irrigation agency's bureaucratic power would be effectively impaired by the transfer of authority from central to district government, as this transfer would totally cut the sectoral command line in the irrigation sector. Obviously, the irrigation agency had more than enough reasons to resist the proposed sectoral reform. However, bureaucratic resistance was not apparent at this early stage. Weakened by the current economic crisis and political turmoil, the core policy actors from the irrigation agency (see Chapter 3 for the definition of the core policy actors) did not openly show their resistance towards the renewal of IMT policy. At this stage, the core policy actors did not have much opportunity to immediately resist the reformulation of IMT policy, due to the people's demand for political reform and the strong pressure towards decentralization in all sectors of development. Furthermore, as the MPW was disintegrating⁸ at the very moment the move to regional autonomy occurred (as discussed in Chapter 3), this did not leave the core policy actors with much choice but to accept and wait for a better opportunity to react.

5.4.2 The renewal

Based on the decree of People General Assembly, prominent irrigation scientists⁹ from different universities in Indonesia (Gadjah Mada, Andalas, and Padjajaran universities) conceptualized the official mandate of the WATSAL IMT program in the Presidential Instruction Number 3 of 1999 (Inpres 3/99). At the early stage of reform, in the absence of any other supportive legal regulations, the Presidential Instruction acted as the main legal force behind the WATSAL IMT program, and thus as political back-up for the proposed sectoral reform. The Presidential Instruction was issued shortly after the President reintroduced the concept of IMT in a national workshop of vice governors for the entire country on April 13, 1999.

According to the Presidential Instruction Number 3 of 1999, the WATSAL IMT program in Indonesia focuses on the following elements:

- Redefinition of tasks and responsibilities in irrigation towards greater involvement of farmers in the decision-making process
- Farmer empowerment through the formation of WUAs
- Gradual, selective, and democratic transfer of irrigation systems management to WUAs
- ISF collection by WUAs to finance systems O&M and rehabilitation of irrigation infrastructure
- Sustainable irrigation development to consolidate land use for agriculture

The most prominent conceptual progress in the IMT policy renewal is the degree of management transfer. In 1999, WUAs' involvement in systems management was extended up to the system level through the introduction of the one irrigation system-one management principle. Furthermore, the principle opens the possibility for all irrigation systems to undergo management transfer. In the WATSAL IMT program, the requirement for management transfer was to be independent of system size, location, or the system's infrastructure condition.

Box 5.1: Presidential Instruction Number 3 of 1999: Third policy element

Arranging the transfer of irrigation management in a phased, selective and democratic manner, to WUAs according to the principle of one irrigation system-one management...

However, the way the one system-one management principle is linked to the method of management transfer, which was to be conducted in a phased, selective, and democratic manner, is unclear. For instance, use of the word democratic implies that farmers could decide whether or not to adopt and implement IMT but it is unclear how this decision relates to the other two words (phased and selective) in the third policy element of the Presidential Instruction.

Further, the WATSAL IMT program places greater emphasis on farmers' decision-making authority. Unlike in the IOMP where WUAs were perceived as irrigation beneficiaries (IOMP 1987 statement: Policy statement 3 on ISF), in the Presidential Instruction WUAs are projected as decision makers (Presidential Instruction Number 3 of 1999: Policy statement 1 on tasks redefinition). Furthermore, the word 'empowerment' used in the Presidential Instruction implies a more political understanding of WUA organizational development. It refers to the concept of governance which emerged in the global policy circle in the late 1990s (Grindle, 1997). This is in contrast to the way the farmer participation concept was applied within the neo-liberal development perspective under the IOMP (see Chapter 4 for the discussion of IMT as financial reform and its later link to the concept of governance).

Box 5.2: Presidential Instruction Number 3 of 1999: Second policy element

Empowering the farmer community...through development of WUAs which are autonomous, self-reliant, and rooted in the community,...and facilitating and providing opportunities for the farming community to democratically form economic and business units with legal status at the level of farming enterprises.

However, the WUAs' new role in systems management is not linked to the redefinition of roles, duties, and responsibilities of the irrigation agency. On the contrary, the redefinition of tasks and responsibilities of the irrigation agency mainly refers to the respective administrative levels (national, provincial, and district).

Box 5.3: Presidential Instruction Number 3 of 1999: First policy element

Rearrange duties and responsibilities of irrigation management institutions by giving a larger role to the farming community as decision makers in management of irrigation systems which are their responsibility.

Box 5.4: Presidential Instruction Number 3 of 1999: Explanation of the first policy element

Explanation: in order to implement irrigation activities more effectively and efficiently, the GOI will rearrange and redefine tasks and responsibilities of irrigation management institutions at national, provincial and district level, down to farmers' level, with WUAs as the decision maker in management of irrigation systems which are their responsibility.

In addition, the reformulation of IMT policy in 1999 still involved both the transfer of management and funding. (Presidential Instruction Number 3 of 1999: Third policy element). The cost recovery aspect is very apparent in the fourth policy element, where WUA's role in revenue collection is highlighted.

Box 5.5: Presidential Instruction Number 3 of 1999: Third policy element

...management and funding will be carried out jointly between the government and WUAs by means of joint management until management and funding can be fully transferred to WUAs. In the explanation section, it was further stated that GOI will hand over the management (O&M) and the financial cost of systems management to WUAs...

5.4.3 Policy reform by foreign loans

A Letter of Sector Policy (LoSP) was formulated only two weeks after the Presidential Instruction was issued in April 1999. The letter served as the formal loan agreement between the GOI and the World Bank with regard to the proposed water sector reform under WATSAL. While the LoSP refers to the broader water sector reform in Indonesia, I focus my analysis only on the letter's importance for the policy reform in the irrigation sector.

An overview of the loan agreement between the GOI and the World Bank is presented in Table 5.3.

According to the loan agreement, WATSAL was divided into three financial tranches, spread over a period of five years. After its completion, the GOI is given a five year grace period, followed by ten years to pay back the loan. Further, the WATSAL IMT program is concentrated on the formulation of IMT legal framework. For each tranche, funds allocation is connected to the completion of particular legal regulations as WATSAL's 'policy products'.

Table 5.3: WATSAL agreement

Tranche (in US \$)	Conditions	Policy product	Proposed completion	Actual completion
I	- Preparation and issuance of		April	April
50 million	Presidential Instruction on	on IMT	1999	1999
	IMT			
	- Public announcement by			
11	the President	Ministerial Deserves on	Dagamban	Dogganha
]] 100:11:	- Preparation and issuance of	-Ministerial Decrees on	December	December
100 million	MoHA and Kimpraswil	WUA empowerment	1999	2001
	Ministerial Decrees on IMT	and IMT guideline		
	-Preparation and issuance of	-Government Regulation		
	Government Regulation on	on irrigation		
	irrigation			
III	- Preparation and issuance of	- Water Act	March	Februa r y
150 million	new Water Act	 Ministerial Decree on 	2000	2004
	- Preparation of Joint	KIIF issued by the		
	Ministerial Decree on	Ministry of Finance		
	Kabupaten Irrigation	(MoF), MoHA and		
	Improvement Fund (KIIF)	Kimpraswil		

Source: Letter of Sector Policy of 1999; source for actual completion: date of issuance of the legal policy products

Furthermore, in the LoSP, the relation between WUAs and the irrigation agency was directed towards a client-service provider relationship. This is done by giving WUAs decision-making authority in systems management as well as the responsibility to manage the O&M funds.

However, this relationship could only be established within the framework of infrastructure-oriented irrigation development, bearing in mind that more emphasis continued to be placed on the need to preserve the irrigation infrastructure. The same problematic issues, such as a deferred maintenance culture and O&M budgeting (as defined in the IOMP 1987 statement), continued to be referred to in the WATSAL IMT program, with the importance of the issues for the irrigation systems management never being fundamentally questioned. In addition, there was more discussion on the way the budgeting system should be developed for infrastructure maintenance, rather than on the actual function of the infrastructure.

Box 5.6: LoSP 1999: Section on the need for sector reform and structural adjustment

Despite the preservation of O&M funding levels at about US\$70-80 millions equivalent per year since 1987, efficient and sustainable irrigation O&M is not being achieved by the provincial governments responsible for implementation. Funds are used primarily for staff support and administrative activities. The planned increase in regional fiscal and management autonomy raises further concerns. The current system of ISF has failed because of lack of accountability without a direct link between revenue and provision of O&M. A 'deferred maintenance culture' together with periodic externally aided rehabilitation has resulted in a costly short-lived irrigation system.

Box 5.7: LoSP 1999: Financing of government irrigation O&M

The estimation of government O&M budgets will no longer be based on a per-hectare of command area formula. The O&M budget to be made available by a district government of each irrigation scheme will be matched or linked to the total ISF payments collected by scheme WUAs. Thus, a direct linkage will be created between district irrigation agency funding and WUA satisfaction with irrigation supply and support services and their consequent willingness to pay the ISF. This linkage will foster irrigation agency accountability for services toward WUAs.

Nevertheless, the above policy criticism does not mean that the reformulation of IMT in 1999 lacks reform elements. In contrast, as mentioned earlier in this chapter, the scope of management transfer in Indonesia has been broadened to all irrigation systems, and its degree has been extended up to the system level. Furthermore, the introduction of the KIIF concept highlights WATSAL policy makers' serious and determined attempt to retract the existing funds disbursement in the irrigation sector (see section 5.5. for further discussion on the KIIF concept).

Box 5.8: LoSP 1999: Financing of WUA activities section

The government will fundamentally change the institutional framework and financing mechanisms for irrigation infrastructure maintenance and rehabilitation. System level WUA federations will have the right to request, prioritize, and control the quality of all infrastructure repair and development activities as part of the empowerment policy. In addition to the technical services and training to be made available by regional irrigation agencies, a government-financed Irrigation Improvement Fund will be established for demand-based rehabilitation and/or improvement of irrigation infrastructure under WUA/FWUA management at the district and/or provincial level as needed.

5.5 WATSAL organizational structure: from sectoral to inter-sectoral decision making

In 2000, in order to carry out the proposed reform program, the NDPA defined the WATSAL organizational structure (see Figure 5.1). Within this structure, the irrigation agency's decision-making authority in the sector was effectively replaced by an interministerial decision-making platform. This shift also rendered the NDPA's authority in decision making outside the power realm of the irrigation agency. For instance, the WATSAL office was even located on the premises of the NDPA.

The Coordination Team acted as the highest decision-making body in the WATSAL organizational structure. The team was led by the Coordinating Minister of Economy-Finance-Industry (MenKo Ekuin), the Kimpraswil minister, and the head of the NDPA. The Coordination Team comprised eleven different ministries (Kimpraswil or the former MPW, MoHA, the MoA, Ministry of Finance, Ministry of Forestry, Ministry of Environment, Ministry of Health, Ministry of Mining and Energy, Ministry of Transportation, Ministry of Trade and Industry, and Ministry of Fisheries).

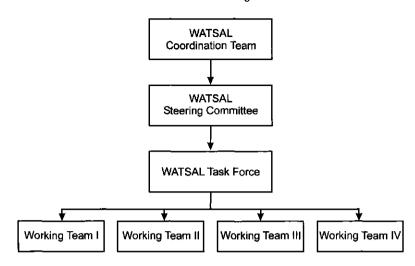


Figure 5.2: WATSAL organizational structure

WATSAL's organizational structure reflected the bureaucratic hierarchy in the Indonesian government ministries. Members of the Coordination Team consisted of ministers from these eleven ministries. Similarly, members of the Steering Committee consisted of director generals (or other government officials from echelon 2) from the respective ministries. Unlike the Coordination Team which was responsible for defining the direction of policy reform, the Steering Committee was in charge of reviewing legal drafts produced by the WATSAL Task Force (WTF) and its Working Teams. The WATSAL Task Force and its Working Teams consisted of government officials from echelon 3 and 4 from each respective ministry. In addition, the membership of the WTF also included two representatives from prominent NGOs.

The WATSAL Task Force and its Working Teams served as the engine in promoting policy reform in the water sector. From their position on the WTF, mid-level, pro-reform officials from the NDPA built their alliance to counteract the irrigation agency's sectoral decision-making authority. From here on, I refer to the alliance of the pro-reform government officials as the WATSAL policy makers. In addition, the WTF was responsible for facilitating and monitoring progress in the overall formulation of legal frameworks by the four Working Teams. However, in this thesis I focus primarily on the Working Team IV with regard to its role in drafting the WATSAL IMT legal framework. The first Working Team was responsible for drafting the legal framework for the national water policy. As for Working Teams II and III, they were in charge of drafting the legal regulations for river management and water quality issues.

However, outside the WATSAL organizational structure, the WTF did not possess any power to influence the responsible ministries to accept the proposed legal framework. After the draft regulations were completed by the Working Teams, they were sent to the Steering Committee. After this, the Committee would submit those regulations to the

respective ministries, where they should be approved and issued. Although this bureaucratic handicap had been apparent since the early stage of policy reform in the irrigation sector, it became a major problem when Kimpraswil issued its moratorium on the WATSAL IMT program in September 2003 (see Chapter 6 for a discussion on the moratorium and the way it affected actual IMT policy formulation and implementation under WATSAL). The completion of WATSAL policy products up to its second tranche is summarized in Table 5.4.

Table 5.4: WATSAL policy products

Tran ch e	Policy product	Focus on	Proposed completion	Actual completion
ľ	Presidential Instruction number 3 of 1999	The renewal of IMT policy	April 1999	13 April 1999
II	Government Regulation number 77 of 2001	Irrigation	December 2001	5 December 2001
	Kimpraswil Ministerial Decree number 529 of 2001	Guidelines for IMT from the irrigation agency to WUAs	December 2001	10 December 2001
	MoHA Ministerial Decree number 50 of 2001	Guidelines for WUAs' empowerment	December 2001	14 December 2001

Finally, Figure 5.3 presents the legal hierarchy of the IMT legal framework under WATSAL

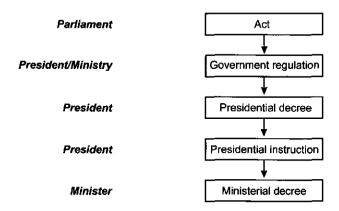


Figure 5.3: Legal hierarchy of the IMT legal framework under WATSAL

5.6 The strategic positioning of WUA empowerment

Following the general principles of the WATSAL IMT program summarized in Presidential Instruction Number 3 of 1999 (Inpres 3/99), IMT policy elements under

WATSAL were to be elaborated in Government Regulation and the Ministerial Decrees. In Government Regulation Number 77 of 2001 on IMT, WUA empowerment is designed as the government's grass-roots weapon to counteract institutionalized corruption within the irrigation agency¹¹. With reference to this policy design, or the hidden policy agenda¹² in the 1999 WATSAL IMT program, WUA empowerment is pursued under the cloak of irrigation systems cost recovery. Hence, following the cost recovery path in the IOMP, in the WATSAL IMT program, IMT is defined as the handing over of rights, authority, and responsibility from regional governments to WUAs to arrange irrigation management and the financial costs within their operational boundary (Government Regulation Number 77 of 2001, first clause). Similarly, the requirements for handing over the authority for irrigation management include that WUAs are successful in collecting ISFs, at least fifty percent from its total members, and fifty percent of the total targeted fee collection, or in the form of labor and construction material to the same value (Kimpraswil Ministerial Decree Number 529 of 2001; Clause 5 on the requirement for IMT).

Box 5.9: Government Regulation Number 77 of 2001

Clause 13, sub-clause 41 on financial issues

- Central and regional governments are financially responsible for the construction of new main and secondary canals, main headworks, and other infrastructure except those at the tertiary level.
- Irrigation management is autonomously and self-reliantly financed by WUAs according to their operational boundary.
- Central and regional governments support WUAs in funds allocation for irrigation management. The channeling of the funds is agreed between central, regional governments, and WUAs, with strong emphasis on the principle of self-reliance.

The strategy of WATSAL policy makers to use WUA empowerment to counteract bureaucratic rent-seeking within the irrigation agency lies in the way the cost recovery aspect of IMT in the WATSAL program is extrapolated into the creation of a new funds mechanism, the so-called Kabupaten Irrigation Improvement Fund or KIIF (Government Regulation Number 77 of 2001, clause 13, sub-clause 42). Linking the KIIF with WUA empowerment, the main idea in the WATSAL IMT program is to shift the access to sectoral development funds from the irrigation agency to WUAs¹³. With the KIIF, the development funds for the irrigation sector would be disbursed directly to district level, with the WUA as the authorized funds manager. The idea derives from the proposition that institutionalized rent-seeking practices within the agency can only be eliminated if the agency's access to development funds is withdrawn, given that the bureaucratic power of the irrigation agency is rooted in the agency's access to the sectoral development funds (see Chapter 3). Put another way, WATSAL policy makers perceived that a WUA's decision-making authority in respect of irrigation systems management could only be acquired when that WUA had direct access to the sectoral development funds¹⁴.

Box 5.10: Government Regulation Number 77 of 2001

Clause 13, sub-clause 42

- Irrigation systems management finance is disbursed through irrigation management funds at district level.
- WUAs could make proposals to use the funds to the Irrigation Committee.
- The Irrigation Committee defines the priority in funds allocation of the irrigation management funds.
- The head of the district defines the allocation of the funds as recommended by the Irrigation Committee.
- District government defines district policy to further arrange the regulation of the irrigation management funds.

Consequently, the KIIF would cut the sectoral development funds disbursement from the national irrigation agency to its representative at regional level. Furthermore, the application of the KIIF concept would harm the agency's construction-based bureaucratic interests in the long term. It could completely shut off the irrigation agency's access to the sectoral development funds, linking WUAs' direct access to sectoral development funds with the new principle of one irrigation system-one management, and thus the fact that WUAs' decision-making authority could be extended up to system level.

It is important to note here that, prior to the promulgation of Kimpraswil Ministerial Decree Number 529 of 2001 on IMT guidelines, the irrigation agency was unaware of the potential threat embodied in the KIIF concept. The core policy actors in the irrigation agency were not up-to-date with the actual progress of the WATSAL IMT program, as most of the drafting work in relation to IMT policy reformulation was conducted by the WTF. Nevertheless, the irrigation agency was determined to maintain its bureaucratic power in the irrigation sector, despite the agency's agreement to the reformulation of IMT under WATSAL. For instance, by using the word 'hand over' instead of 'transfer', the irrigation agency made it clear that the government's decision is all that matters in the WATSAL IMT program, that it is in the hands of the government whether or not to adopt and implement the IMT program (Kimpraswil Ministerial Decree Number 529 of 2001, clause 3). Furthermore, the agency's determination to preserve its construction-based interest is reflected in clause 11 of the Ministerial Decree, in which the quality of the physical condition of the irrigation system is defined as the first indicator of successful IMT (Kimpraswil Ministerial Decree Number 529 of 2001). With reference to the agency's determination to maintain its bureaucratic power, it is hard to imagine that Kimpraswil would have agreed to the introduction of the KIIF concept in the WATSAL IMT program had they been fully aware of the concept's real implications.

At this early stage of IMT policy renewal, WATSAL policy makers had successfully concealed the real implications of the KIIF concept from the irrigation agency. The majority of government officials in Working Team IV¹⁵ decided that the concept would only be briefly described in the 1999 LoSP, given the way the KIIF concept could disadvantage the irrigation agency's position. As stated by one of the NDPA officials: "Logically, we would not put the proposed reform in jeopardy by formally including

something in the policy that would evoke Kimpraswil's resistance" (interview with NDPA officials, 2003). The KIIF concept was hardly mentioned in either the Government Regulation or the Ministerial Decree. For instance, in the Ministerial Decree it is stated that the WUAs' authority to manage the irrigation systems includes collecting, managing, and using management funds for sustainable systems management (Kimpraswil Ministerial Decree Number 529 of 2001, clause 4 on authority, rights, duties, and responsibilities of WUAs). It is unclear, however, how this term 'management funds' should be understood here. In addition, under clause 8 on the financing of irrigation management, funding resources are identified (Kimpraswil Ministerial Decree Number 529 of 2001, clause 8). However, these resources refer to WUAs' financial capability and government funds support only. Although the KIIF could be considered as part of government funds support, the way the KIIF would be disbursed directly to district government is never mentioned in the decree.

In my opinion, the WATSAL policy makers' success is also partly due to the fact that the task redefinition of both the irrigation agency and the WUAs was not elaborated in Government Regulation Number 77 of 2001. The redefinition of authority and responsibility as well as the working mechanisms between different irrigation institutions is made in accordance with the legal regulation (Government Regulation Number 77 of 2001: Clause 3 on institutional aspect of irrigation management, sub-clause 8). This is the only sentence in the Government Regulation on tasks redefinition in IMT. From my interview with WATSAL policy makers, I learned that the issue of task redefinition had been intentionally left untouched. Again, this was done to prevent active bureaucratic resistance from the irrigation agency. As in the Ministerial Decree, it is only stated that the coverage of the handover of management authority in irrigation includes the redefinition of authority, rights, duties, and responsibilities of irrigation agencies in relation to the handing over (Kimpraswil Ministerial Decree Number 529 of 2001, clause 3). WATSAL policy makers thought that the task redefinition issue would be resolved automatically, once access to sectoral development funds shifted from the irrigation agency to WUAs¹⁶. The thinking was that once the agency's access to sectoral funds was withdrawn, this would automatically remove the agency's power over the sector's development.

The WATSAL policy makers intend to use WUAs for a different purpose, but equally instrumentally. The WUA remains a government policy instrument¹⁷, despite IMT policy renewal. WUA organizational development is centered on its role in IMT policy, rather than on the way farmers perceive the management problems in government irrigation systems. The WUAs' organizational development remains disconnected from farmers' actual needs. As stated in the MoHA Ministerial Decree: WUAs empowerment is conducted through a series of activities, which are indispensable from IMT (MoHA Ministerial Decree Number 50 of 2001). Although it is true that IMT policy cannot be implemented without the formation of WUAs, the danger lurks that the urge to accomplish widespread implementation of IMT would result mainly in the establishment of WUAs as mere targets (just as in the case of IMT under the IOMP 1987 statement).

Last but not least, WATSAL policy makers assumed that, unlike the irrigation agency, farmers in the WUAs would never get involved in rent-seeking practices. The validity of this assumption will be discussed later in this thesis. One could predict, however, that WUAs' functioning is also prone to rent-seeking practices, given that WUAs will have to follow the same bureaucratic procedures for funds allocation as the irrigation agency.

5.7 The implementation set-up: new elements, old structure

The implementation of IMT in the Java Irrigation and Water Resources Management Project, Irrigation Development Turn Over (JIWMP-IDTO) component between the years 2000 and 2001 marked the transition in IMT implementation from the IOMP to WATSAL. In 1999, when the agreement between the GOI and the World Bank was formalized in the formulation of the Letter of Sector Policy, IMT policy was still implemented under the JIWMP-IDTO. Officially, the JIWMP-IDTO loan lasted till the year 2000 but the loan was extended to the year 2001 due to the ongoing political reform in the country, and its accelerated effect in advancing policy reform in the water sector.

During that same year, Working Team IV produced the systematic framework for the implementation of the WATSAL IMT program (Adinugroho, 2003). With reference to Presidential Instruction Number 3 of 1999 on IMT, this framework divides the IMT implementation plan into five major steps: preparation of IMT implementation; task redefinition in systems management; WUAs' empowerment; irrigation management financing; and sustainable irrigation management. These major steps are further partitioned into different activities, also known as the 101 WATSAL IMT activities (Adinugroho, 2003). At the preparation stage, the framework focuses on activities such as raising public awareness, the formation of Irrigation Committees, the formulation of local regulations on irrigation management, and its promulgation by provincial and district heads. However, the framework only includes task redefinitions for irrigation institutions at the district level. The framework also incorporates fund allocation, fund use, and fund audit for the management of the irrigation system. Further, sustainable irrigation management is addressed by putting emphasis on conservation aspects to secure available water supply, to prevent the conversion of agriculture land, and improve farmers' household income. Although this framework for IMT implementation is not mentioned specifically in the Government Regulation and the Ministerial Decrees promulgated in 2001 (Government Regulation Number 77 of 2001 on irrigation, Kimpraswil Ministerial Decree Number 529 of 2001 on IMT, and MoHA Ministerial Decree Number 50 of 2001 on WUA empowerment), it has become the new guideline for the implementation of the WATSAL IMT program.

From 2001, the WATSAL IMT program was financially supported by the World Bank under the JIWMP-IWIRIP (Indonesia Water Resources and Irrigation Reform Program) loan. Unlike IMT under the IOMP, where the irrigation agency was solely in charge of policy implementation, the implementation of the WATSAL IMT program in the JIWMP-IWIRIP was divided between an IDTO component, often referred to as irrigation project (PI) under the Directorate General of Water Resources (the irrigation agency in particular)

and a NewISF component under the Directorate General of Regional Development in MoHA. In 1999, the ISF component under the JIWMP was transferred to the NewISF program under the supervision of MoHA, following the recommendation made by the World Bank's review mission (Herman, 2003). The introduction of NewISF as a separate policy program in the irrigation sector increased MoHA's bureaucratic power in the sector, as one of the government agencies in charge of the implementation of IMT policy. In addition, the appointment of MoHA as the direct implementer of the NewISF program also divided the cash flow between the two Directorate Generals under Kimpraswil (the former MPW) and MoHA.

The exact reasons behind MoHA's appointment were never formally stated or publicly presented 18. However, from my interview with some government officials and World Bank senior officials (2003), I learned that the appointment was made to limit the irrigation agency's ability to detour the actual implementation of IMT towards construction-based development, by reducing its access to sectoral development funds. Past implementation of IMT under the IOMP had shown that the agency's bureaucratic resistance was the major cause for severe delays in system turnovers. For instance, nothing could be done to increase the speed of turnover in IMT implementation under ISSP II and the JIWMP. Learning from past experiences and advised by the WATSAL policy makers, international donors positioned MoHA as the second implementing government agency, so that IMT under WATSAL could proceed without delay.

Thus, under WATSAL, both Kimpraswil and MoHA had their own IMT projects. Under Kimpraswil's project, the implementation of the WATSAL IMT program continued to be focused on construction and rehabilitation activities (Consortium of NGOs and Universities, 2003). The budget for IMT implementation was mainly spent on participatory construction (IWIRIP, progress report 2003). Furthermore, the agency used the distinction between 'field' and 'non-field laboratory' sites to limit the implementation of its own version of IMT to seven irrigation systems only. At the same time, construction and rehabilitation programs were continued in all other systems with claims that this was necessary as the preparation for management transfer. These field laboratories sites ¹⁹ consisted of the seven irrigation systems which had been rehabilitated under the JIWMP-IDTO in the third quarter of 1998. In addition, various studies on water use rights, task redefinition, asset management, and irrigation systems financing were conducted in the IDTO component of the Directorate General of Water Resources Development (DGWRD). However, it remained undefined how these studies were related to the WATSAL IMT program activities under Kimpraswil's project.

In the NewISF program under MoHA, on the other hand, the implementation of the WATSAL IMT program was based on the systematic framework defined by Working Team IV. In the preparation stage, an Irrigation Committee is formed at district level, with a WUA representative. Local regulations on IMT are formulated and promulgated. Further, with reference to the guidelines on IMT implementation, the NewISF program focuses on preparation for IMT, task redefinition at district level, and WUA empowerment. A special position is assigned to the community organizer (CO) to closely

guide and facilitate WUA development. While participatory design and construction activities are still taking place in the implementation phase, these activities form part of WUA empowerment and do not stand on their own, as in the IDTO component of the DGWRD.

Another major difference between the WATSAL IMT program implementation under the NewISF program and the IDTO component concerns the collaboration between central government's ministries and district governments in the districts where IMT is being implemented. In the NewISF program, implementation is jointly funded by central government (through the state's income or APBN) and regional government (through the regional government's income or APBD), and MoHA works closely with district and provincial government representatives. This is in contrast to the implementation of the WATSAL IMT program under the IDTO component, where regional governments were not involved in the decision-making process on IMT implementation. As the implementation of IMT under the IDTO was funded solely by the irrigation agency at the national level, the selection of activities, priorities, and financial mechanisms were all prepared and decided by the agency.

In addition, under the NewISF program, the WATSAL IMT program is spread over all Java provinces, covering 40 districts (with six irrigation systems to undergo IMT for each district) and eight off-Java provinces, including 16 districts (with IMT in two irrigation systems in each district). This is in contrast to the narrow coverage of the WATSAL IMT program under Kimpraswil's irrigation project, which focused on the four provinces in Java²⁰.

5.8 Conclusion

The national government's partial position on IMT policy formulation and implementation was evidenced by the way the Indonesian IMT was shaped by the different forces and alliances in the central government ministries. IMT policy evolution in Indonesia is shaped by power struggles between the core policy actors in the irrigation agency and the WATSAL policy makers. For instance, the way IMT policy under the IOMP 1987 statement was transformed into a construction program by the irrigation agency shows the core policy actors' capability to defend their bureaucratic interests in favor of infrastructure-oriented development vis-à-vis pressures from the international donors to adopt IMT policy. Under the IOMP, the core policy actors successfully neutralized the conflict between IMT policy and the bureaucratic identity of the irrigation agency by reducing the scope and importance of the proposed sectoral reform to a mere policy agreement (between the agency and the World Bank). As a policy agreement, the IOMP 1987 statement did not oblige the irrigation agency to define its (formal) position on the proposed sectoral reform. Similarly, the way farmer empowerment was designed as grassroots weaponry to eradicate the institutionalized rent-seeking practices in the irrigation agency under WATSAL in 1999 shows the WATSAL policy makers' capability to endorse the proposed sectoral reform using the momentum of the political reform of 1998.

IMT policy characteristics are shaped by negotiation processes conducted by the policy elite within these different alliances. These negotiation processes are focused on the policy elite's strategies to incorporate their perceptions on the problem situation and their policy interests into the IMT policy agenda. For instance, the way the core policy actors questioned the defined irrigation system classification under the IOMP 1987 statement highlighted their strategy to redirect management transfer towards construction and rehabilitation activities, in accordance to their infrastructure-based bureaucratic interests. Similarly, the way the real implications of the KIIF concept were hidden from the core policy actors in the irrigation agency showed the WATSAL policy makers' strategy to proceed with the WATSAL IMT program by blocking the channeling of policy information to the core policy actors. The WATSAL policy makers addressed the antagonistic relationship between IMT policy and the bureaucratic identity of the irrigation agency through vague formulation of the KIIF concept in both the Government Regulation and Kimpraswil Ministerial Decree (Government Regulation Number 77 of 2001; Kimpraswil Ministerial Decree Number 529 of 2001) to avoid 'unnecessary' policy discussion with the core policy actors. Consequently, the formulation process of the IMT legal framework in 1999 was dominated by a hidden policy agenda. In the context of this hidden policy agenda, policy discussions were conducted through deciphering hidden conceptual meanings. Policy negotiations were shaped through a political game of hide and seek.

The unresolved policy controversy in Indonesian IMT overwhelmed the directives and aspirations of donor policies. This controversy deprived the policy of a substantial foundation for its implementation. For instance, the strategy of the WATSAL policy makers to appoint MoHA as the second implementing agency as a substitute for bureaucratic reform in the irrigation agency proved to be efficient only in relation to MoHA's ability to accelerate IMT implementation under the NewISF program. As under the JIWMP-IWIRIP, IMT implementation continued to be routed towards a construction program by the irrigation agency. Apart from their formal acceptance of loan conditions defined by the donors, the agency continued to shift IMT policy into the realm of infrastructure development.

Late in 2002, the policy controversy in Indonesian IMT reemerged with Kimpraswil's withdrawal from the process of formulating a joint ministerial decree (from MoHA, Kimpraswil, and the Ministry of Finance) on the KIIF under the WATSAL program. The withdrawal marked Kimpraswil's awakening and the start of the IMT policy struggles, which are the topic of the following chapter.

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¹ A policy controversy occurs in a situation in which agreed-upon criteria to reach an agreement are not the essential elements upon which communication among contending actors is based (Rorty, 1979). A policy controversy cannot be settled by recourse to facts alone, or indeed by recourse to evidence of any kind because

they derive from conflicting frames. In this context, the same body of evidence can be used to support quite different policy positions (Rein and Schön, in Fischer and Forester, 1993).

² The emerging importance of these pro-reform government officials from the National Planning Agency in the inter-sectoral decision-making process was related to the reorganization of the agency in 1999. The reorganization put an end to the irrigation agency's authority to define development budget distribution. This was due to the agency's notorious reputation as one of the most corrupt government agencies in Indonesia. In turn, this reorganization created more room for maneuver for these officials to steer the agency's involvement under WATSAL.

³ In fact, these systems were already farmer managed.

⁴ The redefinition of systems rehabilitation under a term 'special maintenance' shows the irrigation agency's strategy to camouflage its bureaucratic interests. As the term fitted the new policy perspective of the foreign donors, the redefinition ensured the allocation of funds in the irrigation sector.

⁵ The slow pace of turnover during ISSP I and ISSP II indicates the irrigation agency's resistance to implementing IMT, and thus the antagonistic relationship between IMT policy and the agency's bureaucratic identity. In addition, the delay in IMT implementation also reflects the overall political dislike on the part of government agencies to decentralize governance power.

⁶ Interviews with mid-level officials from the NDPA and World Bank officials in Indonesia, 2003, 2004.

Apart from this attempt by the NDPA, the need for sectoral reform had already been addressed by mid-level officials from the irrigation agency back in 1992. These officials realized that, in order to cope with the present challenges, the agency needed to change its development approach from a sectoral to an integrated one, involving all sectors. However, it was very unlikely that the irrigation agency would accept the proposed measures, since the shift from sectoral to inter-sectoral decision making would considerably reduce the irrigation agency's decision-making authority in the sector. In practice, these mid-level officials failed to initiate the proposed reform, as they lacked the support from senior officials in the agency. It was in an attempt to release this policy dead-lock that the NDPA arranged an international seminar on integrated development and management of water resources for sustainable use in 1992 (Cisarua seminar proceedings, 1992). Two years later, the NDPA organized a national discussion forum to formulate government strategy for the sector's development, based on strategy developed at the Cisarua seminar. Later, decisions taken in the forum resulted in the formal recognition of water resources as a separate sector, the formation of a bureau of water resources and irrigation inside the NDPA, and the reorganization of the irrigation agency under the Directorate General of Water Resources and Development (DGWRD) of the MPW in 1995. In 1997, the NDPA arranged a series of national discussions on water policy, funded by the Ford Foundation and the World Bank, to address the lack of inter-sectoral coordination in the water sector. But, coinciding with the first discussion series, fiscal crisis hit Indonesia.

⁸ With the abolition of the MPW, bureaucratic leadership in the irrigation agency was challenged. As the new minister of Kimbangwil, Erna Witoelar did not come from the MPW, it became uncertain whether the irrigation agency's bureaucratic identity would survive this bureaucratic intrusion.

These prominent scientists remained involved in the implementation of the WATSAL IMT program afterwards. Later, a group of scientists from Gadjah Mada and Padjajaran universities merged with prominent NGO actors and formed the consortium of NGOs and Universities. Later, this consortium was actively involved in directing the implementation of the WATSAL IMT program under the NewISF program of the MoHA as it became the informal think-tank of the Directorate General of Regional Development in the MoHA.

¹⁰ The use of the word 'democratic' shows the WATSAL IMT program inclination towards popular political move**ments**.

¹¹ Interviews with mid-level officials from the NDPA and MoHA, 2003.

12 This policy perception is not stated explicitly in the policy papers, as bureaucratic rent-seeking is never formally presented as part of management problems in government irrigation systems. However, it is commonly understood within the circle of government bureaucracies that the main problem in the irrigation sector lies in institutionalized rent-seeking, facilitated by project mechanisms (see Chapter 2 for a discussion on the project approach in the Indonesian development context) in and around the allocation of sectoral development funds. This perception was strongly heeded by mid-level officials from the National Development Planning Agency (interview with mid-level officials from the NDPA, 2003). Yet, these officials were fully aware of the issue's sensitivity.

¹³ Interviews with officials from the NDPA and Vermillion in 2003. Vermillion's involvement in irrigation sector reform in Indonesia dated back from January 1986, when he was a researcher and policy specialist for

IMT with the International Irrigation Management Institute (IIMI). Between 1999 and 2003, Vermillion was the member of the World Bank WATSAL Team responsible for irrigation sector reform. During this time, he helped develop the policy and strategy, met with stakeholders, negotiated for the Bank's interest and helped developed Government Regulation Number 77 of 2001 and other ministerial decrees belonging to the WATSAL policy products.

¹⁴ The formulation of the KIIF as a new concept in irrigation systems management is made possible partly through the incorporation of sectoral policy reform into the widespread implementation of regional autonomy in

the country.

15 Interviews with officials from the NDPA and Kimpraswil in 2003.

¹⁶ Interviews with officials from the NDPA in 2003.

¹⁷ This presents another paradox in IMT. Despite the transfer, WUA organizational development was defined and directed according to the government's needs, rather than farmers' needs.

¹⁸ The incorporation of the WATSAL IMT program into the overall context of regional autonomy facilitated greater involvement of MoHA in the irrigation sector. Nevertheless, this does not explain why MoHA was given

a new role as implementing agent in 1999.

¹⁹ Almost at the same time that the IMT policy renewal was being prepared, the World Bank rejected the GOI proposal to rehabilitate ten or twelve irrigation systems between 500 and 1,000 hectares, in the third quarter of 1998. However, after intensive negotiation, the Bank finally accepted the rehabilitation proposal for seven irrigation systems only, requiring that such rehabilitation activities must be started with institutional empowerment activities for WUAs (World Bank document, 1998). The location of these seven irrigation systems was spread over the four provinces on Java (Consortium of NGOs and Universities, 2003). These seven irrigation systems were later referred to as the JIWMP's field laboratories. It is important to note that these field laboratories whose financial source was JIWMP-IDTO were basically not the field laboratories for the new IMT. These irrigation systems were labeled 'field laboratories' because they had been selected as the location for experimentation on the 'holistic approach' modeling of irrigation-based rural development. This experiment was promoted by the new Directorate General of Rural Development in early 1999. At that time, this directorate general had just replaced the role of Directorate General for Water Resources Development (DGWRD) in the irrigation sector (see Chapter 3 on MPW reorganization in the early stage of political reform).

Later, when Banten became an individual province, Kimpraswil's irrigation project covered IMT

implementation in these five Java provinces only.

6 The struggle on the principles of IMT under the WATSAL program

6.1 Introduction

This chapter gives further insights on how interdependencies and alliances at the central government ministries contested ideas and contradictions in IMT, as incorporated in the WATSAL IMT program.

The main findings of this chapter are:

- Resistance against the WATSAL IMT program from within the irrigation agency was possible because the reform of the irrigation agency itself was not included in the WATSAL program
- The outcome of the IMT policy struggles at the national level was shaped by the
 increasingly complex policy networks, represented by the dynamic alliances
 between policy actors and (non) government institutions clustered around the
 promulgation process of the new Water Act
- The overall process of alliance formation in the IMT policy struggles was linked to the distribution of sectoral development funds between the different government ministries
- The practice of money politics and pork barrel deals in both the Working Committee and Commission IV in parliament reveals the characteristic of the new Water Act as a political commodity
- Rules of the game in the IMT policy struggles were developed with reference to the formal procedure in the Water Act promulgation

The chapter is organized into ten sections that analyze the struggles in the chronological order of their unrolling. It maps the evolution of coalitions in the overall promulgation process of the new Water Act. The chapter first analyzes the presence of 'frames conflict' in Indonesian irrigation development (Rein and Schön, 1993). Section 2 gives the prelude to the struggles on the principles of IMT policy. Section 3 compares Kimpraswil's revised clauses of the new Water Act with their original version, as formulated by Working Team 1 in the WATSAL Task Force. Section 4 illustrates the Kimpraswil moratorium and the relationship between Kimpraswil and the Ministry of Home Affairs (MoHA). Section 5 shows how both Kimpraswil and MoHA designed the public consultations and the forum dialog on the draft Water Act to legitimize their positions on the WATSAL IMT program. Sections 6, 7, and 9 describe the parliamentary policy network at each stage of the Water

Act promulgation process. Within this, section 8 describes the National Development Planning Agency's attempt to counteract Kimpraswil's sectoral decision-making power. Section 10 illustrates the informal discussion between the conflicting policy actors, one day prior to the promulgation of the new Water Act by the parliament. As a side-view, the Kimpraswil-World Bank relationship is discussed.

6.2 The conflicting policy frames in Indonesian IMT

IMT policy renewal under WATSAL symbolized the attempt of the new Indonesian government (or some segment in it) to reform irrigation sector development as part of the country's political reform in 1998 (see Chapters 2 and 5). In the later stage of Indonesia's political reform, however, the national government's position towards the country's political reform was divided by the political struggles between those who wanted to continue with the reform and those who wanted to maintain the status-quo (Haris, 2005; Hadiz, 2003). In the irrigation sector, these political struggles were translated into the struggles on the principles of IMT policy as stated under WATSAL.

The IMT policy struggles illustrate the presence of 'frames conflict' in Indonesian irrigation policy development (Rein and Schön, 1993). Frames conflict occurs when policy actors' conflicting views cannot be settled by recourse to facts alone or by recourse to evidence of any kind. As stated by Rein and Schön: "Because they derive from conflicting frames, the same body of evidence can be used to support quite different policy positions" (Rein and Schön, 1993: 148). This frames conflict shows how the irrigation agency's perception of IMT was contested by other central government ministries. It illuminates the way IMT policy was perceived differently by the government staff at the central ministries in relation to their roles, function, and interest in IMT formulation and implementation under WATSAL. These central government ministries are the Ministry of Home Affairs (MoHA), the National Development Planning Agency (NDPA) and the Ministry of Settlement and Regional Infrastructure (Kimpraswil). The different positions of policy actors/institutions towards IMT are presented in Table 6.1.

This table shows how the policy struggles on the principles of IMT at the inter-ministerial level are rooted in the conflict of interest between the different central government ministries to sustain or gain access to the sectoral development funds. Nevertheless, these struggles were also shaped by other groups within and outside the government ministries who supported the WATSAL IMT program as a strategy to conduct bureaucratic reform. These groups included the WATSAL policy makers (represented by the mid-level government officials from the NDPA, MoHA and Kimpraswil who supported the idea of management transfer as part of Indonesia's sectoral and political reform), some (retired) high officials from the irrigation agency allied in the Irrigation Communication Network of Indonesia (JKII), and the consortium of NGOs and universities. This consortium of NGOs and universities consisted of mid-level, pro-reform government staff from the different central government ministries, policy actors from different universities, and prominent NGO leaders. During the IMT policy struggles, some WATSAL policy makers

	A MANAGANIA	THE COLON	rerection towards I'M I
The main bureaucratic actor	Formulate and implement	Sustain its access to	IMT is permitted as long as
and the executing agency in	irrigation policies	development funds, and thus	
the irrigation sector		ensure its bureaucratic	agency's access to
		power in the sector	development funds or shift
			the agency's focus on
			infrastructural development
Authorized agency for inter-	Coordinate inter-ministerial	Regain its decision-making	IMT is a strategy to regain
ministerial decision-making	activities in irrigation sector	authority, and thus its	NDPA's inter-ministerial
platform in irrigation under	in particular and water	bureaucratic power at inter-	decision-making power
WATSAL	sector in general	ministerial level	
Government agency	Formulate and implement	Gain additional access to	IMT is a strategy to grant
responsible for the regional	irrigation policies	development funds in the	MoHA access to sectoral
autonomy policy and thus,		irrigation sector	development funds
the sectoral policy reform in			
the irrigation sector			
Inter-sectoral organization	Formulate IMT reform legal	Promote bureaucratic	IMT is a strategy to cut the
responsible for directing	frameworks and monitor	reform through policy	cycle of corruption in the
sectoral development	IMT implementation	change	irrigation agency
according to the LoSP 1999		•	1
Civil society movement	Monitor the formulation and	Promote bureaucratic	IMT is a strategy to cut the
force	implementation of IMT	reform through policy	cycle of corruption in the
		change	irrigation agency
Funding agency	Define project funding	Release funding to promote	IMT is a strategy to cut the
		'good governance'	cycle of corruption in the
	the irrigation sector Authorized agency for interministerial decision-making platform in irrigation under WATSAL Government agency responsible for the regional autonomy policy and thus, the sectoral policy reform in the irrigation sector Inter-sectoral organization responsible for directing sectoral development according to the LoSP 1999 Civil society movement force Funding agency		Coordinate inter-ministerial activities in irrigation sector in particular and water sector in general Formulate and implement irrigation policies Formulate IMT reform legal frameworks and monitor IMT implementation Monitor the formulation and implementation of IMT Define project funding

investments in infrastructure cycle of corruption in the irrigation agency, and secure the earlier development¹ Unknown Sustain and increase their development funds and 'good governance' political power, both political networking through access to Promulgate legal act (on irrigation) Legislative body in the act promulgation Commission parliament IV in the

were incorporated into the consortium of NGOs and universities, as Kimpraswil's moratorium had made the WATSAL organizational structure dysfunctional.

The description and analysis of the IMT policy struggles in this chapter are based on the opportunity given by the different policy actors (some officials from the NDPA, MoHA, and Kimpraswil, but mostly from the members of the consortium of NGOs and universities) to 'join' the actual process of policy negotiations which took place at the ministerial, inter-ministerial, and parliamentary levels, from September 2003 to February 2004. I attended almost all parliamentary meetings, Kimpraswil's public consultations, MoHA's forum dialog and farmer demonstration arranged by the consortium of NGOs and universities. I also joined the members of the consortium of NGOs and universities' visits to different parliament members, as well as their meeting with Kimpraswil officials one day prior to the plenary meeting in parliament. I was aware that, by accepting this opportunity, I would have some biases in my analysis on the overall process of the struggles. In addition, I also accessed the formal meeting notes prepared by the Sub-Directorate of Water Resources in the MoHA. These meeting notes were particularly important in improving my understanding about how MoHA's position on IMT was shaped by the different interests of its staff. Similarly, I gained insights into the perceptions and strategies of the officials in the NDPA to counteract Kimpraswil's demand to recentralize the sector's development through direct interviews and by tracing NDPA formal meeting notes (especially those related to the NDPA seminar cancellation). Finally, I gained insights into the formulation of Kimpraswil's moratorium and its strategy to redirect the reform efforts under WATSAL through the revision of the draft Water Act from direct interviews with both pro-reform and anti-reform officials from the irrigation agency in Kimpraswil.

The following sections describe and analyze the decision-making mechanisms at both bureaucratic and parliamentary levels in chronological order. In this way, the structural development in the IMT policy discourse in Indonesia is discussed in relation to the different strategies used by the irrigation agency to protect its bureaucratic interests. For instance, under the IOMP 1987 statement, the irrigation agency resisted IMT policy by delaying the overall process of management transfer (see Chapter 5). Under WATSAL 1999, the irrigation agency resisted IMT policy by contesting and counteracting the earlier issued IMT legal frameworks with the promulgation of the draft Water Act in parliament. Both strategies were rooted in the irrigation agency's unchanged perception towards the proposed sectoral reform.

6.3 The prelude to the IMT policy struggles

The policy struggles on the principles of IMT began with Kimpraswil's withdrawal from the process of formulating a joint Ministerial Decree on the Kabupaten Irrigation Improvement Fund (KIIF). According to the Letter of Sector Policy (LoSP), the joint ministerial decree was to be issued by Kimpraswil, the MoHA and the Ministry of Finance (MoF), prior to the third tranche of WATSAL fund disbursement in December

2003 (LoSP, 1999) (see also Chapter 5). However, in June 2003, the irrigation agency (under Kimpraswil) refused to proceed with its issuance.

Kimpraswil's decision to withdraw from the formulation process of the joint ministerial decree originated from a letter addressed to its minister in mid 2003¹. The letter was written by a retired high official from the irrigation agency. At that time, the draft Water Act had entered parliament, and this official was appointed as one of Kimpraswil's representatives in parliament. While reading the draft act, he thought that the section on irrigation was not thoroughly formulated. In order to improve the section, he was about to refer to the Government Regulation Number 23 of 1984 on irrigation, only to find out that it had been replaced by a new government regulation (Government Regulation Number 77 of 2001). Reading the new regulation for the first time, he realized the potential dangers of IMT under WATSAL (see Chapter 5 for a more detailed explanation on these potential dangers). Later, he alerted the minister to restrict IMT implementation to irrigation systems under 500 hectares. This proposal meant a return to the IOMP 1987 statement (see Chapter 5). After reading the letter, the minister called a closed staff meeting. This meeting included only officials from echelons 1 and 2 belonging to the minister's inner circle of power, or the so-called core policy actors in the irrigation agency (see Chapters 2 and 3 on how these core policy actors are defined in this thesis). At the end of the meeting, it was generally agreed that the to-be-promulgated Water Act would be used as the agency's legal back-up to reduce the scope and degree of IMT implementation under WATSAL. Kimpraswil decided to revise the content of the draft Water Act.

The letter represented the role of the core policy actors in the irrigation agency in safeguarding the agency's bureaucratic interests. With reference to these bureaucratic interests, the renewal of IMT would be permissible as long as it was linked to the cost recovery objective incorporated in the IOMP 1987 statement. For instance, in his letter to the minister, the retired high official argued that the management of government irrigation systems should not be transferred to WUAs, if WUAs remain financially dependent on the agency's development budget. The core policy actors thought that IMT policy renewal had diminished the irrigation agency's power². Under WATSAL, sectoral decision making was transferred to an inter-sectoral platform under the coordination of the National Development Planning Agency. Furthermore, the WATSAL budget was divided between Kimpraswil and MoHA because the Sub-Division of Water Resources (SDWR) under the Directorate General of Regional Development (DGRD) in MoHA was appointed as the second government agency responsible for IMT implementation (see also in Table 6.1 how the irrigation agency perceived IMT) not to mention the fact that WATSAL did not result in the immediate funds allocation from the World Bank to the irrigation agency. During the transition period (between 2000 and 2001), the agency had to use its existing development budget (under the JIWMP-IDTO) to finance IMT implementation.

The reemerging importance of the core policy actors in the irrigation agency was made possible by the unification of the State Ministry of Public Works (Meneg PU) and the Ministry of Housing and Regional Development (Kimbangwil) into the Ministry of Settlement and Regional Infrastructure (Kimpraswil) in 2001 (see Chapter 3). During the

reorganization of the Ministry of Public Works in 1999, the core policy actors were excluded from key bureaucratic positions in the agency (see Chapter 3 for a detailed account of the reorganization). However, with the unification, the core policy actors returned to the overall bureaucratic structure of the agency. Nonetheless, during this early stage of Kimpraswil's existence, even when the bureaucratic leadership was returned to a high official from the former MPW, key bureaucratic positions were still held by midlevel officials who were part of the WATSAL policy makers (see Chapter 5). Hence, the real implications of IMT renewal under WATSAL for the agency's bureaucratic identity remained concealed from the core policy actors.

The first expression of the core policy actors' renewed importance in the irrigation agency was apparent in the changed membership composition of the WATSAL Task Force (WTF) and its Working Teams. In September 2002 (one year prior to Kimpraswil's withdrawal), a key WATSAL policy maker⁴ from the NDPA was removed from the WTF. The exact reason behind this removal was never clarified. However, there was some speculation⁵ that the removal was related to his determination to extend the scope and degree of IMT under WATSAL beyond what the Kimpraswil minister was willing to accept. Following this removal, the leadership of the WTF was transferred to the irrigation agency under Kimpraswil (Coordinating Minister for Economic Affairs Ministerial Decree Number 13 of 2002). With the exception of Working Team 3, officials from the irrigation agency held the leadership position in the other three working teams. Furthermore, the number of agency representatives on the WTF was tripled (Coordinating Minister for Economic Affairs Ministerial Decrees, Number 15 of 2001 and Number 39 of 2002). In addition, the status of the two NGO⁶ representatives on the WTF was changed from that of members to external advisors.

6.4 Controversial clauses of the draft Water Act

Once the danger to its interest was realized, Kimpraswil's strategy to redirect the path of IMT under WATSAL focused on the revision of three clauses on irrigation in the draft Water Act: clause 43 on task redefinition, clause 68 on operation and maintenance (O&M), and clause 81 on financing. Before I discuss the revised edition of these three clauses in relation to their original version, I first describe the act promulgation procedure. Following this procedure, Kimpraswil as the responsible government ministry in the irrigation sector was fully authorized to revise the draft Water Act formulated by WATSAL Working Team 1.

6.4.1 Water Act promulgation procedure

The original version of the draft Water Act was completed by Working Team 1 of the WTF in August 2001. After that, the draft act was sent to the inter-ministerial committee for approval. This inter-ministerial committee consisted of Kimpraswil and other government ministries represented on the WTF (see Chapter 5 for a more detailed explanation on the WATSAL organizational structure). Following the committee's approval, the draft act was sent to the president. In October 2001, the president proposed

its promulgation to parliament. In November 2002, the draft act was presented at the plenary meeting. The step-wise legal procedure of the Water Act promulgation is presented in Figure 6.1.

In parliament, the draft Water Act was sent to Commission IV, specialized in infrastructure development⁷. Like other parliamentary commissions, Commission IV consisted of representatives from different political parties. The representation of these political parties in the commission was determined by the number of each party's parliamentary seats. From large to small, these political parties⁸ are: PDI-P, Golkar, P3, PKB, Reformasi faction, PBB, and PDU.

Later, a Working Committee was formed within Commission IV. This committee worked closely with Kimpraswil (as the appointed government representative) in the reformulation of the new Water Act. Members of the Working Committee and Kimpraswil representatives discussed both the content and phrasing of the draft Water Act during their closed consultation meetings. The involvement of other government ministries in the act promulgation started only during the final discussion between Kimpraswil and the Working Committee (at the first open meeting of the Working Committee). The Working Committee of Commission IV consisted of seven PDI-P⁹, seven Golkar, three P3, two PKB, two Reformasi faction (PAN-PKS), one PBB and one PDU member(s). In addition, two members from the military faction were included in the Working Committee. The formal policy network involved in the Water Act promulgation in parliament is presented in Figure 6.2.

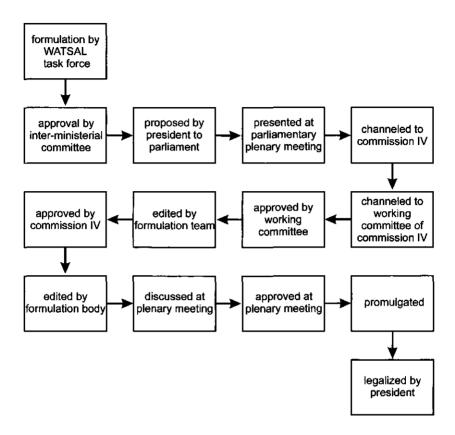


Figure 6.1: The legal procedure of act promulgation

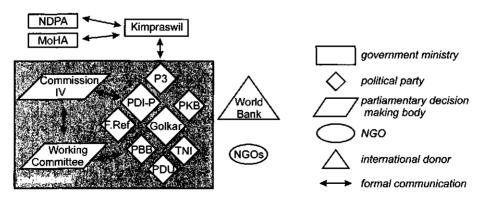


Figure 6.2: Formal policy network for the promulgation of the Water Act in parliament

After approval by the Working Committee, the draft Water Act would be channeled to the formulation team at the parliament, for possible editorial changes. After that, the draft act would be discussed by Commission IV in the formal Commission IV meeting. If approved, the draft act would be sent to the formulation body, for final editing. Later, the final version of the act would be presented in the plenary meeting. During these formal meetings, representatives from different government ministries were invited to join the discussion. In addition, the interested public (NGOs, donor agencies, academics) were welcome to attend the meetings. Finally, after the majority of the parliament members agreed on the content of the new Water Act, the act would be sent to the president to be signed and legalized at least seven days after its date of approval at the plenary meeting of the parliament.

6.4.2 Kimpraswil's revision of the draft Water Act

I summarize Kimpraswil's revised edition of the three clauses on irrigation in the draft Water Act in comparison with the original clauses¹¹ (as formulated by Working Team 1 of WTF) in Table 6.2.

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Table 6.2:	(lance_v	MICE	revicion	At the	dratt	Water	Δct
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Original version	Kimpraswil's revision	Implications of revisions	
Clause 43 on task redefinition	Clause 41 on task redefinition		
The scope and degree of IMT depends on WUAs' capability and willingness to take over the management of the irrigation system	Management responsibility is taken over by central and regional governments	The implication of the revision is no IMT will be implemented	
Clause 68 on O&M	Clause 63 on O&M		
WUAs' involvement is encouraged as much as possible	WUAs' role is limited to the tertiary level	The principle of one irrigation system-one management is discarded	
Clause 81 on financing	Clause 76 on financing		
Focus on the co-financing possibilities between central, regional governments and WUAs	Distinct boundary of financial responsibility between central and regional governments	The KIIF application is canceled	

These revisions are now discussed in more detail. The first revision concerned the reinstallment of government's decision-making authority in irrigation systems management. In the Kimpraswil revision, the word 'responsibility' is used to emphasize government's decision-making authority in systems management (Kimpraswil revised draft Water Act, 20 September 2003 version). This was in contrast to the word 'carried out' used in the original version of the draft Water Act (article 43 of the original version of the draft Water Act, 27 August 2001 version).

Box 6.1: Clause 41, Kimpraswil revised draft Water Act, 20 September 2003 version

- Development of irrigation networks is conducted to meet water demand for agriculture, as stated in clause 34.
- 2) Development of irrigation networks is the **responsibility** of central and regional governments, with the following conditions:
 - a. Development of province-crossing irrigation networks is the responsibility of central government;
 - b. Development of district-crossing irrigation networks is the responsibility of provincial government;
 - Development of irrigation networks in one district area is the responsibility of district government.
- 3) Development of irrigation networks as stated in (2) is conducted by involving the local population.
- 4) Development of irrigation networks as it is stated in (1) can be conducted by WUAs or other parties, according to their need and capability.
- 5) Guidelines about irrigation are decreed through Government Regulation.

Box 6.2: Article 43, original version of the draft Water Act, 27August 2001 version

- Development of irrigation networks systems as mentioned in Article 37 paragraph (2) point
 b is the responsibility of government and regional government and should involve the
 community and private sector.
- 2) Development of irrigation networks system as mentioned in paragraph (1) is carried out with the following provisions:
 - a. Development of province-crossing irrigation networks is carried out by each related provincial governments through cooperation;
 - b. Development of district-crossing irrigation networks is carried out by each related provincial governments through cooperation;
 - Development of irrigation networks in one district area is carried out by the related district governments;
 - d. Development of irrigation networks can be carried out by Water User Associations (WUAs) in accordance with their needs and capability.
- 3) Based on the WUAs' capability as mentioned in paragraph (2) point d, central and regional government can assist the development of irrigation networks.
- 4) Any legal body, business body, and individuals that can carry out systems development for business purposes are obliged to get licensed for the use of water resources from the authorized regional government.
- Guidelines and technical guidelines about development of irrigation system networks are decreed through Government Regulation.

The second revision concerned the rejection of the one irrigation system-one management principle in the WATSAL IMT program. In the new clause, farmers' decision-making authority was limited to the tertiary level¹². As stated in Kimpraswil's revised version: "O&M for main system networks is the responsibility of central government and regional government. O&M for tertiary networks is the responsibility of WUAs" (Kimpraswil revised draft Water Act, 20 September 2003 version). This was in contrast to how farmers' involvement was promoted under WATSAL. As stated in the original version: "As far as it is possible, the community can be involved in the implementation of O&M" (original version of the draft Water Act, 27 August 2001 version).

Box 6.3: Clause 63, Kimpraswil revised draft Water Act, 20 September 2003 version

-) Water resources management consists of the conservation of water sources and infrastructure O&M.
- 2) The implementation of O&M as it is stated in (1) includes planning, implementation, M&E to guarantee the sustainability of the water sources.
- 3) The implementation of O&M is conducted by central government and regional government, or the manager of the water source according to its jurisdictional boundary in the watershed system.
- 4) Private companies, groups or individuals who have constructed the infrastructure are responsible for the the infrastructure O&M.
- 5) The local population is involved in the O&M, as stated in (1).
- 6) Systems O&M is defined as follows:
 - a. O&M for main system networks is the responsibility of central government and regional government, according to their respective jurisdictional boundary.
 - b. O&M for tertiary networks is the responsibility of WUAs.

Box 6.4: Article 68, original version of the draft Water Act, 27 August 2001 version

- 1) Water resources management covers O&M and evaluation of the existing infrastructure.
- 2) As far as it is possible, the community can be involved in the systems O&M as mentioned in paragraph (1).
- 3) Systems O&M is carried out by any legal body, business body or individual.

The third revision concerned the elimination of the KIIF concept (in the original version of the draft Water Act, the KIIF concept was called 'financial cooperation'). According to the new clause, all financial responsibility for systems management was to be assumed by the government (see also in Table 6.1 the irrigation agency's perception of IMT in relation to its access to sectoral development funds).

Box 6.5: Clause 76, Kimpraswil revised draft Water Act, 20 September 2003 version

- 1) Central and regional governments are financially responsible for water resources management, according to their defined jurisdictional boundaries.
- 2) The financial arrangement for construction, O&M is defined as follows
- 3) Central and regional governments are financially responsible for the construction, O&M of main and secondary level of the irrigation system. Farmers can be involved here.

Box 6.6: Article 81, original version of the draft Water Act, 27 August 2001 version

- Financial management of the irrigation systems is borne by the community, private sector, and the government, in accordance with the obligations and responsibility, either as individuals or as a partnership cooperation.
- Financial management of a watershed area is decided together by the related regional government through cooperation.
- 3) Regulation of **financial cooperation** as mentioned in paragraph (1) and paragraph (2) is decreed by Government Regulation.

The next section illustrates how the revision of these three clauses resulted in open bureaucratic conflict between Kimpraswil and MoHA.

6.5 The start of the policy struggles

The policy struggles about the principles of IMT started with the bureaucratic clash between Kimpraswil and MoHA. This bureaucratic clash was triggered by the issuance by both MoHA and the MoF of Ministerial Decrees on the KIIF. Following Kimpraswil's withdrawal from the formulation process of a joint Ministerial Decree on the KIIF, the NDPA wrote a formal letter to the three respective ministries, suggesting that they continue with the issuance of the joint ministerial decree on the KIIF. However, when Kimpraswil refused to rejoin the formulation process, the NDPA urged both MoHA and the MoF to promulgate the guidelines for the KIIF application in their respective ministerial decrees. In June 2003, Ministerial Decrees on the KIIF were issued by both MoHA and the MoF (MoHA Ministerial Decree Number 22 of 2003 and MoF Ministerial Decree Number 298 of 2003). Two months later, Kimpraswil launched a moratorium on the WATSAL IMT program.

Firstly, I discuss Kimpraswil's moratorium. Secondly, I illustrate the Kimpraswil-MoHA relationship in the IMT policy struggles.

The chronological order of the IMT policy struggles is presented in Figure 6.3.

6.5.1 The Kimpraswil moratorium

The moratorium was announced through Kimpraswil's formal letter addressed to the Coordinating Minister for Economic Affairs as the highest decision-making authority in WATSAL. A copy of the letter was also sent to the heads of the NDPA, MoHA, the MoF, the MoA and Commission IV in parliament (Kimpraswil moratorium letter, 3 September 2003). According to the moratorium, IMT policy under WATSAL would be substantially changed (points 2 and 4 of the moratorium letter). Farmer involvement would be limited

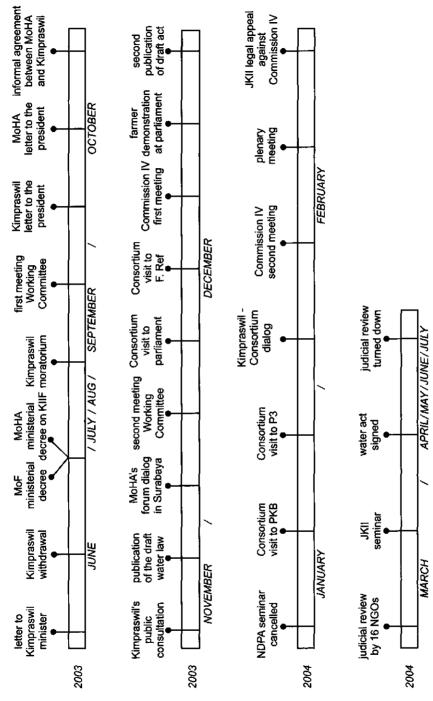


Figure 6.3: The timeline of the IMT policy struggles

to the tertiary level. In addition, the new Water Act would be invoked as the legal basis to amend the Government Regulation number 77 of 2001 on irrigation.

With the moratorium, Kimpraswil used parliamentary decision-making authority on the promulgation of the draft Water Act as its 'legal shield' to justify the irrigation agency's position on the WATSAL IMT program. As stated in its moratorium letter, the decision to halt IMT implementation under WATSAL was rooted in Commission IV's objection to the degree and scope of management transfer (letter from Kimpraswil to the Coordinating Minister for Economic Affairs, 3 September 2003). Later, during the informal meetings between Commission IV and members of the consortium of NGOs and universities, some Commission IV members acknowledged Kimpraswil's domination in the parliamentary decision-making process. In a Commission IV member's words: "Most members of Commission IV are politicians. We are not water management or irrigation specialists. We would accept Kimpraswil's explanation on almost everything. Hence, when Kimpraswil presented farmer financial incapability as the reason to limit farmer's involvement in systems management, Commission IV members agreed to limit the scope and degree of IMT" (statement of a Commission IV member during the informal meeting between Commission IV and members of the consortium of NGOs and universities, 16 January 2004).

The idea to proclaim a moratorium originated from a high official¹³ in the irrigation agency. This official belonged to the core policy actors in the agency, like the retired high official who wrote the letter to the Kimpraswil minister. He presented the idea of a moratorium to the Kimpraswil minister as a means to restore Kimpraswil's honor, after the issuance of both the MoF and MoHA ministerial decrees on the KIIF. From my interviews with different government officials in Kimpraswil, MoHA, the MoA and the NDPA, I learned that his motive in proposing a moratorium was to improve his own bureaucratic position¹⁴. Following the moratorium in September 2003, the minister reshuffled bureaucratic positions in the irrigation agency. This high official was promoted to a higher and more important position.

The moratorium was designed to give the message to other government ministries, but especially to the NDPA, that the irrigation agency had regained its sectoral decision making authority (see also in Table 6.1 the NDPA's interest in regaining its inter-sectoral decision-making authority through its role as the WATSAL program coordinator). Moreover, with its moratorium, the agency disclosed its attempt to recentralize the sector's development. The Kimpraswil minister's attempt to show his bureaucratic power and redirect the policy path in the WATSAL IMT program was evident in his speech during the WATSAL coordination team meeting on the 3 September 2003. On the same day that the formal moratorium letter was issued, the Minister announced the moratorium on the WATSAL IMT program in front of the Coordinating Minister for Economic Affairs, officials from the NDPA and government representatives from the eleven ministries involved in WATSAL. Later, when the NDPA representative questioned Kimpraswil's decision, the Kimpraswil minister hardly reacted to him. Instead, the Kimpraswil minister accused Working Team 4 of the WTF of forgery. According to the Minister, the current

satisfactory progress on the WATSAL IMT program was merely a reflection of data manipulation on the part of Working Team 4 of the WTF. In the Minister's own words, members of the Working Teams were called 'deceitful' (MoHA's meeting note, 3 September, 2003).

In practice, the moratorium had two important functions. Firstly, it manifested the Kimpraswil minister's demand for bureaucratic loyalty from all his staff (from national down to field level). It conveyed the minister's order to his staff to take a united stand against the WATSAL IMT program. After the moratorium, different types of safety measures were taken by moderate policy actors in the irrigation agency; namely those who held key positions during IMT policy renewal in 1999. High and mid-level officials camouflaged their past involvement in the WATSAL IMT program formulation. For instance, the Kimpraswil representatives on Working Team IV of the WTF justified their past compliance with IMT policy renewal under WATSAL as the result of pressure from other members of the Working Team and the World Bank¹⁷. In contrast to this, a mid-level official who insisted on supporting the WATSAL IMT program was isolated from the formal and social network¹⁸ of the irrigation agency.

Secondly, the moratorium canceled the ongoing application of the KIIF. Prior to the moratorium, the KIIF had already been applied in several irrigation systems on Java in the form of a stimulant fund. After the moratorium, stimulant fund disbursement was canceled. The issuance of both the MoHA and MoF ministerial decrees on the KIIF did not ensure the continuation of sectoral development fund disbursement to the district level, as this disbursement was controlled by Kimpraswil.

In addition, before the moratorium, discussion on the draft Water Act was limited to Kimpraswil's representative and the members of Commission IV in parliament. However, after the moratorium, larger segments of society (government bureaucracies, NGOs, political party forces, environmental groups) became involved in the promulgation process of the new act. Though this wider public involvement also derived from the existing parliamentary procedure, I wonder whether the draft Water Act would have received that much public attention (especially from policy actors and experts in the irrigation sector) had the moratorium not been announced in the first place.

In October 2003, the irrigation agency spread the moratorium letter to the regional governments. Hence, policy confusion occurred not only at national level, but also at regional level (the effects of the moratorium on the WATSAL IMT program at regional and field level are discussed in Chapter 7).

6.5.2 The Kimpraswil-MoHA relationship in IMT: bureaucratic clash and agreement

On 8 September 2003, only five days after the announcement of Kimpraswil's moratorium on the WATSAL IMT program, the MoHA minister sent a letter of concern to Commission IV in parliament. In the letter, the minister requested the incorporation of

IMT principles under WATSAL (as described in Government Regulation Number 77 of 2001 on irrigation) into the to-be-promulgated Water Act (Letter from MoHA to Commission IV, 8 September 2003). Through this request, MoHA would be able to sustain its existing involvement in the WATSAL program (see also in Table 6.1 MoHA's interest in gaining access to sectoral development funds). This letter was written by the Sub-Directorate of Water Resources¹⁹ (SDWR) under the Directorate General of Regional Development (DGRD) in MoHA together with mid-level officials from the NDPA and some members of the consortium of NGOs and universities.

With reference to MoHA's letter, the Working Committee in Commission IV decided to postpone the promulgation process of the new Water Act until the bureaucratic disagreement between Kimpraswil and MoHA was resolved (Working Committee meeting, 8 September 2003). On 2 October 2003, the Kimpraswil minister wrote a letter to the president, seeking her support to proceed with the promulgation process of the new Water Act (letter from Kimpraswil minister to the president, 2 October 2003). In the letter, the minister insisted on the need to proceed with the promulgation process of the new act as one of WATSAL's policy products. Similarly, on 13 October 2003, the MoHA minister informed the president about the need to continue with the WATSAL IMT program. Again, in its letter, the MoHA minister proposed the incorporation of IMT principles as described in Government Regulation Number 77 of 2001 into the to-be-promulgated Water Act (see the letter from the MoHA minister to the president, 13 October 2003). Theoretically, a formal letter from the president to either Kimpraswil or MoHA would end the bureaucratic struggles between the two ministries. In practice, presidential support was given to neither Kimpraswil nor MoHA.

In its attempt to resolve the bureaucratic dispute, Kimpraswil arranged an informal meeting with MoHA. This meeting took place on 16 October 2003. Present in this meeting were the Kimpraswil minister, high officials from the irrigation agency, and the Secretary General of MoHA, who was acting in place of the MoHA minister.

At the end of this meeting, Kimpraswil and MoHA agreed that WUA involvement should be limited to the tertiary level, while government remained responsible for the overall systems management. The Kimpraswil-MoHA agreement was rooted in the division of the sectoral development funds between the two ministries (the agreement note between Kimpraswil and MoHA, 16 October 2003). Kimpraswil's access to the sectoral development funds was ensured through its role in managing large-scale irrigation systems (larger than 4,000 hectares). At the same time, MoHA was granted access to sectoral development funds through its role in the management of small (between 600 and 1,000 hectares) and medium-scale (between 1,000 and 4,000 hectares) irrigation systems. MoHA was entitled to allocate part of Kimpraswil's sectoral development funds to, respectively, district and provincial governments. It is interesting to note here that the Kimpraswil-MoHA agreement was made without involving the Directorate General of Regional Development in MoHA. Later, the DGRD would continue to oppose Kimpraswil's attempt to recentralize the sector's development.

Referring to the agreement, the Kimpraswil minister wrote a letter to Commission IV in parliament, informing them that the bureaucratic dispute between Kimpraswil and MoHA had been settled.

6.6 Public consultation about the draft Water Act

Though the bureaucratic dispute between Kimpraswil and MoHA had been resolved, the next parliamentary meeting was scheduled only at the beginning of December 2003. In the month of November, Kimpraswil continued to introduce the to-be-promulgated Water Act to the wider public. The Sub-Directorate of Water Resources under the Directorate General of Regional Development in MoHA, on the other hand, arranged a forum dialog to convince members of the Working Committee to postpone the promulgation of the Water Act.

Firstly, I discuss how Kimpraswil legitimized its position on IMT through its public consultations. After that, I illustrate how members of the Working Committee responded to WUA representatives' demands during the MoHA forum dialog.

6.6.1 Kimpraswil's public consultation

In November 2003, Kimpraswil arranged public consultation meetings in several districts on Java. Formally, these public consultation meetings were designed as discussion forums to consult with farmers on the latest version of the draft Water Act. Present during the meeting were officials from the irrigation agency, members of the Working Committee from Commission IV, irrigation experts from different universities, NGO members and a number of farmers.

In practice, these meetings were conducted only to legitimize the irrigation agency's perception on IMT. For instance, during the public consultation meeting in Solo, Central Java, the discussion between farmers and members of the Working Committee was focused on Kimpraswil's pre-defined alternative clauses. For example, during the discussion on clause 76 on the financial arrangement, farmers could choose how they would finance system maintenance at the tertiary level. However, the defined alternatives limited farmers' involvement to the tertiary level. In other words, IMT would be permitted as long as farmers' involvement was limited to the tertiary level (see Table 6.1. on how this limited degree of IMT was rooted in the irrigation agency's interest in maintaining its access to sectoral development funds). Similarly, the participants at the meeting were limited to the irrigation agency's alliance and those whose action and opinion could be directed beforehand. For instance, I was puzzled by the fact that only three farmers were invited to attend the public consultation meeting in Solo. Needless to say, these farmers were not members of WUAs.

Further, Kimpraswil published the to-be-promulgated Water Act (with its 96 clauses) in the national newspaper²⁰ (KOMPAS, 28 November 2003). With this media publication, Kimpraswil tried to convince members of the Working Committee that farmers' opinion in

particular and public opinion in general would be taken into account and incorporated into the draft Water Act. As stated in the newspaper, these opinions were to be sent to Kimpraswil by email, or by letter to the legal section in the Directorate General of Water Resources Development.

Nevertheless, the actual significance of this media publication remained unclear. This is because a communication line was established only from the public to Kimpraswil, and not vice versa. For instance, though it was possible for everybody to provide suggestions, no further information was given on how these suggestions would be handled. Nevertheless, different organizations (mostly NGOs) and prominent irrigation experts (from, respectively, Gadjah Mada and Andalas universities) sent their suggestions about how to revise the draft Water Act. These organizations included the consortium of NGOs and universities, the Irrigation Communication Network of Indonesia or JKII (a prominent network of which many of the irrigation agency's officials were members), the Indonesian forum on globalization or INFOG²¹, and the Nahdatul Ulama (one of the most prominent religious, grass-roots mass organizations). In general, these suggestions raised the issue of farmers' decision-making authority in respect of irrigation management (raised by the consortium, the JKII, and the prominent irrigation experts), and the privatization of the water sector (raised by INFOG and the Nahdatul Ulama). With the exception of suggestions from INFOG, no suggestions were ever mentioned in the press.

6.6.2 MoHA's forum dialog

Apart from the Kimpraswil-MoHA agreement on the division of sectoral development funds, the Directorate General of Regional Development (DGRD) in MoHA continued its struggles to halt the promulgation of the new Water Act by arranging a forum dialog between WUA representatives and members of the Working Committee. The main objective of this dialog was to channel farmers' opinions on the draft Water Act to the second Working Committee meeting, which would be held on the day after the dialog. The dialog was initiated by the Sub-Directorate of Water Resources (SDWR) in the DGRD. In preparing this dialog, the SDWR was supported by the consortium of NGOs and universities. The DGRD's attempt to counteract the Kimpraswil-MoHA agreement shows that the struggles on the principles of IMT were also shaped by policy actors within and outside the central government ministries, willing to use IMT as a tool for bureaucratic reform (see also in Table 6.1 the consortium of NGOs and universities' interest in promoting IMT implementation under WATSAL in Table 6.1.).

The dialog was held in Surabaya on 3 and 4 December 2003. Present at the dialog were the regional government representatives (including the irrigation agency at regional level), as well as WUA members from 62 districts and 13 provinces, where the WATSAL IMT program had been implemented, officials²² from the NDPA, some NGOs members, and three members of the Working Committee. The first member, A²³, represented the PDI-P political party. The second member, B, represented the P3 political party. The third member, C, represented the PAN political party (or the Reformasi faction²⁴).

The DGRD head's determination to continue with IMT under WATSAL was apparent in his opening speech. In his words: "Rules and regulations can be changed. But, the spirit of reform should be sustained, and policy reform should be continued" (DGRD director general's speech, 4 December 2003). Further, in his speech he highlighted the need to include farmers' rights and authority in systems management in the present formulation of the draft Water Act. In addition, quite unconventionally, he mentioned that policy agreement between MoHA and Kimpraswil should not be based on their common bureaucratic interests²⁵.

At the start of the dialog, one of the WUA representatives presented the proposed changes to the draft Water Act to the members of the Working Committee. These proposed changes are summarized in Table 6.3.

Table 6.3: Proposed changes to the draft Water Act, as presented during the forum dialog in Surabaya, 4 December 2003

Kimpraswil's version	Proposed changes		
Clause 41: -Irrigation system management is conducted by central and regional governments, by involving the local population -Irrigation system management can be conducted by WUAs according to their need and capability	-Irrigation system management is conducted by central and regional governments, together with the local population -Irrigation system management is the responsibility of central and regional governments, as well as the local population		
Clause 63: -Governments are responsible for O&M at main system level -Water users and the local population are responsible for O&M at tertiary level	The authority to implement O&M is transferred from the regional government to farmers according to their capability		
Clause 76: -Governments are responsible for financing construction, O&M activities at main and secondary level -Governments or WUAs are responsible for financing construction and O&M activities at tertiary level	Construction and O&M activities are financed together by governments and the local population, according to their capability		

During the dialog, a WUA representative declared farmers' rejection of the present formulation of the draft Water Act. WUAs demanded the transfer of decision-making authority for irrigation management to the WUAs (declaration of WUA representatives in Surabaya, 4 December 2003). In the WUA declaration it was stated that WUAs perceived the draft Water Act as an impediment to the process of reform in general, the principle of decentralization, the implementation of regional autonomy, and the implementation of IMT under WATSAL. In addition, it was stated in the declaration that WUAs opposed any attempt to abolish Government Regulation Number 77 of 2001 as the legal back-up to IMT under WATSAL.

Both the declaration and the proposed changes brought forward the issue of farmers' decision-making authority in respect of irrigation systems management. In my opinion, this was a good starting point to discuss IMT policy differences, as perceived by Kimpraswil, members on the Working Committee, WUAs and regional government representatives.

However, reactions from the Working Committee members did not encourage further discussion on the substantial differences in IMT policy, as defined under WATSAL and stated in the draft Water Act. On the contrary, both A and B transformed the dialog into some sort of information channeling on the legal procedure and current proceedings around the promulgation of the new Water Act. For instance, in their opening statement, both A and B informed²⁶ the dialog participants that the draft Water Act was about to be promulgated. Using A's words: "Conceptually, eighty percent of its contents had been agreed by the Working Committee, Soon, the draft Water Act would be sent to the formulation team. After this, it would be presented and promulgated in the plenary meeting". However, after hearing the WUA declaration, A's opinion on the promulgation status of the draft Water Act changed 180 degrees. Contradicting his previous statement, he agreed that IMT policy elements under WATSAL should be incorporated into the draft Water Act. However, he did not mention anything about channeling the WUA demands to the parliamentary meetings. B, on the other hand, insisted that the Water Act should be promulgated soon. In his opinion, the present policy disagreements could only be solved by the promulgation of the Water Act. In addition, B proposed to focus the discussion on farmers' responsibility only at the tertiary level.

Nevertheless, the dialog illustrated the actual function of public consultations for the three members of the Working Committee. Firstly, the presence of the Working Committee members in this dialog could legitimize the committee's decision to approve the draft Water Act. Ironically, their presence could be presented as evidence that they had based their decision on farmers' opinion - this despite the fact that they hardly took any account of the farmers' demand to continue with the WATSAL IMT program. Secondly, the dialog could function as a forum to increase these members' bargaining position vis-à-vis the conflicting parties in general, and vis-à-vis Kimpraswil in particular. The evolution of B's role from the consortium NGOs and universities' contact person to Kimpraswil's alliance showed how B's bargaining position had been increased through his active involvement in such forums. At the beginning of the policy struggles, B was the consortium of NGOs and universities' contact person in Commission IV in parliament. Consortium members tried to raise their concerns on the continuation of the WATSAL IMT program through B, by supplying him with the necessary knowledge and information. At first, B used this information to counteract Kimpraswil's argument on the revision of the irrigation clauses in the draft Water Act. Later, B's active participation in different public forums as well as his (transferred) knowledge on substantial issues in irrigation obliged Kimpraswil to include him as part of its alliance (see section 6.6. on the Kimpraswil-PDI-P alliance). C, in contrast, used the forum dialog to counteract the Kimpraswil alliance. For instance, C suggested²⁷ the use of 'outside forces' (read demonstration) to force Commission IV to postpone the Water Act promulgation process.

Finally, back in Jakarta, these members discovered that the second Working Committee meeting had already closed. Originally, the meeting was scheduled for 3 December 2003. Later, the meeting was rescheduled for 5 December. At the last moment, however, the meeting was again rescheduled for 4 December 2003. Though the exact reason for these repeated changes remained unclear, C thought²⁸ that there must have been some connection between the schedule change and the dialog in Surabaya.

6.7 The second Working Committee meeting: the emergence of the Kimpraswil-PDI-P coalition

Following the Kimpraswil-MoHA agreement, the Working Committee approved the draft Water Act on 4 December 2003. After that, the draft act was sent to the formulation team in parliament for editorial changes. Generally, the team would channel the draft act to Commission IV but, in this case, the formulation team decided to return it to the Working Committee. Possibly, the formulation team hinted²⁹ that the Working Committee could still revise the draft Water Act. However, insisting on its earlier approval, the Working Committee directly channeled the draft Water Act to Commission IV.

It is important to see the way Kimpraswil had changed the agreement to its advantage. In the final version of the draft Water Act (as approved by the Working Committee), Kimpraswil added another parameter, that is the administrative location of the irrigation systems (in addition to their size) to define government's responsibility in systems management. As stated in the explanation section of clause 41:

- 1) The district government is responsible for the management of small-scale irrigation systems (smaller than 1,000 hectares), which are located within one district
- 2) The provincial government is responsible for the management of medium-scale irrigation systems (between 1,000 and 3,000 hectares), or small-scale irrigation systems which are located within two or more district boundaries within one province
- 3) The central government is responsible for the management of large-scale irrigation systems (larger than 3,000 hectares), or irrigation systems which are located at inter-provincial level, or have a strategic function for the state (15 December 2003 version of the draft Water Act, explanation section on clause 41)

As a result of the above change, the development budget for medium-scale irrigation systems did not necessarily have to be disbursed to MoHA. For instance, where an irrigation system of 2,000 hectares was located within two or more provincial boundaries, the budget for the system development would be disbursed to Kimpraswil, instead of to MoHA. In addition, by reducing the number of hectares under medium-scale irrigation systems (up to 3,000 compared to 4,000 hectares in the agreement), Kimpraswil's development budget for the irrigation sector was increased to the disadvantage of MoHA's budget. Realizing that Kimpraswil had partly violated the principle in the agreement, the Secretary General of MoHA recalled MoHA's earlier request to the Working Committee to revise the draft Water Act. However, this did not stop the committee from approving the draft Water Act.

Apart from the Kimpraswil-MoHA agreement, Kimpraswil's ability to ensure the Working Committee's approval was related to its coalition³⁰ with the PDI-P political party. At the Working Committee level, the Kimpraswil-PDI-P coalition was represented by the relationship between the Kimpraswil minister (or his close aides) and K, a representative of PDI-P who was also a former official from the Ministry of Public Works³¹. Through K's position³² on the Working Committee and Commission IV, Kimpraswil could steer the decision-making process in the Working Committee.

Later, through its relationship with PDI-P, Kimpraswil extended its alliance with other political party representatives (with the exception of PKB and Reformasi faction) in the Working Committee (see Figure 6.4.).

In the next section, I discuss the consortium NGOs and universities' strategy to halt the promulgation process of the new Water Act at Commission IV level.

6.8 The emergence of a Kimpraswil-PDI-P counter alliance

In this section, I describe how the members of the consortium of NGOs and universities shaped the decision-making process in a Commission IV meeting. After the approval of the draft Water Act by the Working Committee, consortium members attempted to build a Kimpraswil-PDI-P counter alliance in Commission IV. For this reason, consortium members approached political party representatives both directly and indirectly (through farmer demonstrations). Later, I discuss how the consortium members' political approach manifested itself in the first Commission IV meeting.

6.8.1 The consortium's political approach

In early December 2003, members of the consortium NGOs and universities started to build a Kimpraswil counter alliance in Commission IV. Consortium members used their political connections to contact Commission IV members and other political party representatives.

D³³ from the PAN political party was the first parliament member contacted by the consortium members. D was a member of Commission III (agriculture development) and Commission VIII (environmental development). Upon the consortium members' arrival in his office, D contacted some people from his party, who were on Commission IV. One of them was C. After hearing the consortium members' explanation about Kimpraswil's attempt to recentralize irrigation sector development, D decided to use his position in both Commission III and Commission VIII to halt the promulgation of the new Water Act. Later, he sent a formal letter to Commission IV, on behalf of both Commission III and Commission VIII, urging the inclusion of both Commission III and Commission VIII in the promulgation process of the new Water Act.

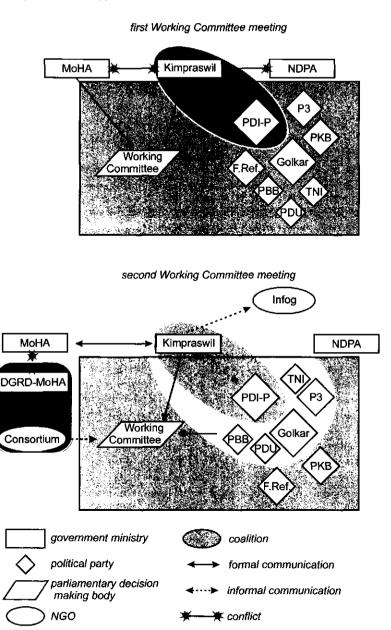


Figure 6.4: Parliamentary policy network at the Working Committee level

In addition, C agreed to put the proposal to postpone promulgation of the act during a Commission IV meeting. However, being a small political party C was aware that, being a small political party, the PAN/Reformasi faction alone could not counteract the Kimpraswil-PDI-P coalition. Hence, C advised³⁴ the consortium members to approach the representatives of other political parties to gather the needed political support.

Next, consortium members contacted F, a representative from the PKB political party. F was a member of Commission IV and the head of the Working Committee. After hearing the consortium members' plan to build a counter alliance, F agreed to support the PAN/Reformasi faction's proposal in the Commission IV meeting. F's immediate support arose from his interest in building a political relationship with two members of the consortium. As national elections were approaching, F needed these members' support to boost his political image. Theoretically, these members' position in the Nahdatul Ulama would give F access to votes from the organization's followers.

Later, consortium members included Golkar³⁵ in the PAN/Faction Reformasi-PKB coalition. The alliance with Golkar was established through a political maneuver conducted by a mid-level official in the Directorate General of Regional Development of MoHA. First, this official contacted G (a Golkar representative in Commission IV) to explain the situation around the promulgation process of the new Water Act. However, G refused to join the alliance. On the contrary, G said that the new Water Act would be promulgated soon. Later, this official contacted another Golkar representative, H. Upon his request to postpone the promulgation of the new act, H told him that he should contact G, as he was the leading formal representative of Golkar in Commission IV. The official told H about his failure to convince G. Further, to get H on his side, he told him about G's relation with the PDI-P political party. In his words: "Possibly, G had been bought by Kimpraswil or PDI-P". In this way, he tried to intensify the political tension between PDI-P and Golkar as the two major competitors in the next national election. H still remained unconvinced about the idea of coalition building, but finally this official managed to convince H to join the PAN/Faction Reformasi-PKB coalition by highlighting the WUAs' importance for Golkar, in terms of the number of votes they could deliver for the next national election. For instance, given that each WUA consists of an average 50 farmers, with more than 5,000 WUAs, this would mean at least 250,000 votes (not including the WUAs' family members) for any political party which could strategically use the struggles on the principles of IMT to gain farmers' votes. In addition, he said to H that he could as easily present this idea to other political parties. He even bluffed that he had already been offered a position in the political campaign by another political party. Out of fear that the idea of using WUAs might be leaked to other political parties, H immediately contacted I, the head of the Golkar political party at that time. Interested in the idea, I instructed J (the vice secretary of Golkar) to meet H and this mid-level official from MoHA. In this meeting, J was supplied with all the data on WUAs. Later that day, H confirmed that Golkar would join the alliance to postpone the promulgation of the new Water Act. With this confirmation, the coalition between Golkar-PAN/Reformasi faction-PKB was established, just a few days before the Commission IV meeting took place.

Apart from approaching different political party representatives, consortium members arranged a farmer demonstration to exercise political pressure on Commission IV to postpone the promulgation process of the new Water Act (even when the draft Water Act had already been approved in the Commission IV meeting). Hence, the date of the demonstration was planned for 19 December, just two days after the Commission IV meeting. But, against the consortium members' prediction, Commission IV did not approve the draft Water Act. Nevertheless, consortium members did not see any reason to cancel the demonstration. In their opinion, the demonstration would still highlight the importance of the WATSAL IMT program for farmers. Thus, consortium members contacted WUA representatives in Java to organize the demonstration. However, due to the limited budget for the demonstration (financed by members' contributions), the consortium decided that the demonstration would only involve WUA representatives from West Java.

In my opinion, the fact that the demonstration was arranged by the consortium does not necessarily mean that these members were imposing their opinion about IMT on WUA representatives. However, consortium members had narrowed the category of farmer for inclusion in this demonstration. For the demonstration, the members selected WUA representatives who were supportive of the WATSAL IMT program. Hence, the opinion of these representatives was not always true for other WUA representatives elsewhere. For instance, during the dialog, when WUA representatives from West Java said that farmers were capable of taking over the systems management, this does not say anything about farmers' managerial capability in general. Nevertheless, the opinion remains as a counterargument for Kimpraswil's perception about farmers' financial incapability.

In the early morning of 19 December 2003, around sixty WUA representatives gathered in front of the parliament grounds in Jakarta. While waiting for permission to meet Commission IV members, some of the representatives orated on the importance of the WATSAL IMT program for farmers. Others lifted up their leaflets and posters, pressing their demand for the revision of the present formulation of the draft Water Act. It was noon before they were allowed to enter the parliament grounds and meet Commission IV members. The procedure involved in obtaining a permission to meet Commission IV members showed the importance of political connections for channeling one's opinion to the parliament members. Q (the leader of the demonstration and also a member of consortium NGOs and universities) had to arrange a formal permission to meet Commission IV at the parliamentary public relations office. Later, I heard that a formal letter from Commission IV was required to arrange this permission. At first, the official in the public relations office only allowed three WUA representatives to enter the parliament grounds. It was only after fierce discussion between Q and the official that the latter agreed to let thirty WUA representatives meet Commission IV. Finally, after entering the parliament grounds, WUA representatives first had to stand in a row to be counted by a security officer. Later, they walked³⁶ to the meeting room where they would meet members of Commission IV, escorted by a policeman. Meanwhile, the remaining WUA representatives were waiting in front of the main gate.

Arriving at the meeting room, the thirty WUA representatives were awaited by some members of Commission IV. Present in the room were E from PAN/Faction Reformasi, B from P3, a representative from PBB (to whom I refer as N), two representatives from PDI-P (H and another referred to as O), and a former military general.

At the start of the dialog, WUA representatives urged members of Commission IV to revise the three controversial clauses on irrigation (clauses 41, 63, and 76) in the draft Water Act. Further, one of the WUA representatives presented the way the WATSAL IMT program had empowered farmers. In his words: "With the WATSAL IMT program, WUAs are able to conduct systems rehabilitation by themselves". In addition, he also mentioned that his WUA was able to collect irrigation service fees (ISFs) up to Rp.50 million (equal to US\$5,000) to finance the needed rehabilitation.

Nevertheless, farmers' opinion of their own capability did not change Commission IV members' perception on farmers' financial incapability. For instance, E³⁷ (a representative from PAN/Faction Reformasi) insisted that farmers' decision-making authority should be limited to the tertiary level. Next, N (a representative from PBB) replied that the government would remain responsible for systems management at secondary and main level. In N's words: "Perhaps in West Java farmers were able to take over systems management. But this did not automatically apply to farmers outside Java" (statement uttered by N during the Commission IV meeting with WUA representatives from West Java, 19 December 2003). In addition, the representative from the military faction insisted that the government should remain financially responsible for systems management, down to the tertiary level. In his opinion,³⁸ farmers should not be burdened with the high costs of O&M in irrigation. Interestingly, B agreed³⁹ to the WUA's demand. In B's words: "I understand the spirit that has developed among farmers. Therefore, I do not have any objection to the proposal to postpone the promulgation of the new Water Act" (as observed during the dialog between WUA representatives and Commission IV, 19 December 2004). Representing Commission IV, he said that they would fight to ensure the inclusion of farmers' aspirations in the formulation of the new Water Act.

6.8.2 The first Commission IV meeting: the emergence of counter political forces in parliamentary decision making

The Commission IV meeting was held on 17 December 2003. Present in the meeting were the representatives from the seven political parties, high level officials from Kimpraswil (including the minister), government representatives from MoHA, the MoA, and other sectoral ministries⁴⁰, as well as representatives from prominent NGOs and some of the consortium members. In the Commission IV meeting, the seven political parties and the military faction would decide on the promulgation status of the draft Water Act. Theoretically, if Commission IV approved the draft act, the act would be channeled to the plenary meeting. However, if they decided to postpone its promulgation, the act would be discussed for a second time in a Commission IV meeting.

The meeting was scheduled for 9 o'clock in the morning. However, the meeting was postponed until 10 o'clock, and later till 11 o'clock because there were insufficient political party representatives in the meeting room (the so-called quorum regulation). In between the first and second announcement about the postponement of the meeting, the head of the Working Committee asked each head of the political party representatives to meet in a separate room. Shortly after this, the meeting on the promulgation of the new Water Act was reopened by the head of Commission IV (representative from PDI-P).

Against Kimpraswil's expectations, Commission IV decided to postpone the promulgation of the Water Act until the second Commission IV meeting. The Commission required that the wider public should first be consulted about the act. K, a representative from PDI-P, who was also Kimpraswil's key actor in the promulgation process inquired about the timeframe for the proposed public consultation. Surprisingly, the head of Commission IV closed the meeting without answering K's question. The officials from MoHA, the consortium of NGOs and universities, as well as other NGOs, welcomed the decision. Kimpraswil officials, on the other hand, immediately left the meeting room. The second Commission IV meeting would take place after the second parliamentary recess period (or after mid January 2004).

The reason behind the delayed promulgation was stated in the national newspaper on the following day (KOMPAS newspaper, 18 December 2003). According to the head of the Working Committee (a representative from PKB) and the vice of Commission IV (a representative from Golkar), the decision to postpone the promulgation of the new Water Act was based on objection letters from both Commission III and Commission VIII. The head of Commission III (to whom I refer as L) confirmed that he had sent a letter to Commission IV, proposing that Commission IV included Commission III in the promulgation process. Similarly, the head of Commission VIII, a representative from Golkar (to whom I refer as M) said that the promulgation process should be tackled at the inter-commission level.

With the establishment of a political coalition of Golkar-Reformasi faction-PKB political parties, Kimpraswil's coalition with PDI-P was insufficient to steer the decision-making process in Commission IV. Nevertheless, the capability of the Golkar-Reformasi faction-PKB coalition to counteract Kimpraswil-PDI-P was also linked to D's idea to channel the proposal to postpone the promulgation of the draft act to both Commission III and Commission VIII. The development of the different coalitions at the Commission IV level is presented in Figure 6.5.

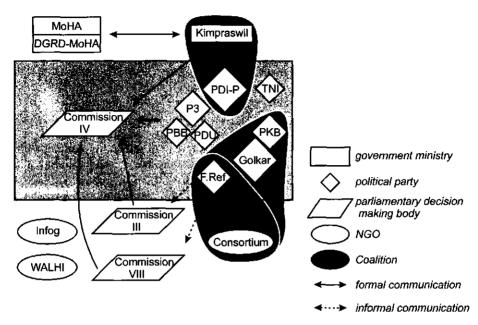


Figure 6.5: Parliamentary policy network at the first Commission IV meeting

Following the instruction from Commission IV (to conduct public consultation), Kimpraswil sent a formal letter to the twelve government ministries asking for possible suggestions on the existing formulation of the draft Water Act (see Kimpraswil's letter to the twelve government ministries, 22 December 2003). In the letter, it was stated that any suggestion should be sent to Kimpraswil before the end of the month. Practically, this left only a week to react. In addition, in contradiction of the formal objective of such public consultation, it was stated in the letter that discussions on the contents of the draft Water Act had been completed.

Two days later, the MoHA minister sent a formal letter with the proposed suggestions⁴¹ to Kimpraswil. In this letter, it was stated that sector development should be focused on farmer empowerment, and that the content of the draft Water Act should reflect the principle of decentralization and democratization (letter from MoHA to Kimpraswil, 24 December 2003). Proposed changes to several clauses (41, 64, and 78) were also included in the letter's annex.

On 31 December, right at the start of the New Year's Eve celebration, the latest version of the draft Water Act, including an explanatory section, was published for the second time in KOMPAS, the national newspaper (KOMPAS, 31 December 2003). None of MoHA's suggestions was included in this version of the draft act.

6.9 The re-occurrence of bureaucratic conflicts

In early January 2004, the Directorate of Irrigation and Water Resources (DIWR) of the NDPA announced a national seminar on irrigation development. The seminar's title was: National strategy to increase the level of wealth in farming households (as stated in the invitation letter, 5 January 2004). Included in the long list of seminar participants were representatives from different government ministries as well as from the regional governments, NGOs, university academics, WUA representatives, and foreign donor organizations.

With this seminar, the DIWR attempted to launch a national movement on IMT. As planned, an inter-ministerial coalition would be formed to counteract Kimpraswil's recentralization efforts (see also in Table 6.1 how this attempt to form an inter-ministerial coalition is rooted in the NDPA's interests in regaining its inter-sectoral decision-making authority in Table 6.1.). In addition, the DIWR engineered formal presidential support for the IMT movement by asking the president to open the seminar.

However, less than a week before the date of the planned seminar, a formal letter was sent, announcing the cancellation of the seminar (letter from the National Development Planning Agency concerning the national seminar, 7 January 2004). Prior to this official cancellation, the head of the DIWR was forced to resign⁴². The Kimpraswil minister instructed his new Directorate General of Water Resources Development to approach the head of the DIWR to negotiate and convince him to cancel the seminar, just shortly after the seminar invitations were distributed. However, later, the minister himself approached the head of the NDPA because the DIWR head insisted on continuing with the seminar. In the end, the NDPA head instructed the Director General of the DIWR to cancel the seminar.

The exact reason behind the seminar cancellation was never formally acknowledged. However, according to my informants in the NDPA and MoHA, the seminar was canceled due to several circumstances. Firstly, the head of the NDPA canceled the seminar because his staff could not identify a main funder for the seminar. Initially, he assumed that the seminar would be funded by Kimpraswil. However, after hearing about the Kimpraswil minister's objection to the seminar, he ascertained that Kimpraswil was not the main funder of the seminar. Secondly, the way the seminar had been poorly prepared also contributed to the NDPA head's decision to cancel the planned event. For instance, one week before the seminar, none of the international speakers had confirmed their availability or willingness to present at the seminar. In addition, when the head of NDPA checked the president's monthly work schedule, he discovered that she would not even be in the country to open the seminar.

Prior to the NDPA's seminar cancellation, MoHA had also arranged a national seminar to counteract Kimpraswil's position on IMT. However, during the last minutes of its preparation, the seminar was also canceled. The reason behind this cancellation lies in the unresolved disagreement between the Director General of the DGRD and the Secretary General in MoHA. Although both wanted to take credit for the seminar's success, neither

of them was willing to take the risk of losing their position if the seminar turned into a catastrophe (as was the case with NDPA's seminar). The idea to conduct this national seminar came from the Secretary General. However, she intended to make the DGRD host this seminar. In this way, she would get the credit if the seminar was conducted successfully (as it was her idea to hold it). Similarly, it was the Director General of DGRD who would have to deal with the bureaucratic consequences if the seminar turned into a bureaucratic catastrophe. Hence, the head of DGRD refused to include the seminar within his formal bureaucratic realm. The cancellation of both seminars marked the end of the bureaucratic disputes within the struggles on principles of IMT policy.

6.10 Back to the parliamentary setting

With the cancellation of the NDPA seminar, the context of the policy struggles once again shifted to the parliamentary decision-making domain. In this section, I discuss both PAN/Faction Reformasi's and Kimpraswil's strategies to steer the decision making process in, respectively, Commission IV and the plenary meeting. Prior to discussing these meetings, I describe the consortium members' efforts to strengthen their political alliance in parliament.

6.10.1 The continuation of coalition building

Shortly after the decision to postpone the promulgation of the draft Water Act was made by Commission IV, members of the consortium of NGOs and universities continued to strengthen their coalition in parliament. Prior to the second Commission IV meeting, consortium members approached F (a representative from PKB), B (a representative from P3), and O (a representative from PAN).

Consortium members met F to discuss how he could use his position as head of the Working Committee to postpone the promulgation of the Water Act (see meeting note, 16 January 2004). In this meeting, F proposed to use the defined parliamentary procedures to postpone the act promulgation, at least until April 2004, that is when the national election would be underway. After April 2004, the composition of the parliament (including Commission IV and the Working Committee) would be changed. Hence, if the draft Water Act was not promulgated till then, automatically the whole promulgation process would be started all over again. According to F, the most effective strategy to halt the promulgation of the draft Water Act was to continuously postpone the schedule of the plenary meeting. According to the defined procedure, after the approval by Commission IV, the draft Water Act would be sent to the formulation body. This formulation body would set a date for the plenary meeting. However, the plenary meeting could only be conducted when the parliament head received enough confirmations from the political party representatives that they would attend the plenary meeting. F's strategy was to use PKB's and Reformasi faction's position in parliament to postpone the plenary meeting. Consortium members, on the other hand, thought that F should focus on the issue of public consultations (as this had been stated as the cause of the delayed promulgation by Commission IV). But, F thought that the issue of public consultation could not be used to

keep postponing the promulgation of the new Water Act. In F's words: "It was very unlikely that Commission IV would postpone the promulgation of the draft Water Act for the third time. This was because the draft act had already been approved by the Working Committee and the formulation team" (statement by F during his informal meeting with consortium members, 16 January 2004). In the end, no concrete decisions⁴⁵ were taken on how to postpone the promulgation of the new Water Act.

On 30 January 2004, the consortium members visited B (a representative of P3). B explained that substantial changes could no longer be made in the existing formulation of the draft Water Act. Commission IV would not repeat the whole legal procedure required for act promulgation. In his opinion, both the Working Committee and Commission IV could not solve the present polemics on the draft Water Act. This was because the problem was rooted in the sectoral egoisms between the different government ministries. For instance, B mentioned that discussions and negotiations between government ministries were centered on access to the development budget.

It is interesting the way B hid his interest behind Commission IV members' lack of knowledge on development issues in irrigation. In B's words: "The way the negotiation was conducted between members of parliament and officials from the government agency is comparable to a football match between the village team and the national team of Brazil. Hence, Kimpraswil could steer the parliamentary discussion, such that its end product would represent only the agency's interest" (as said by B during the meeting between consortium members and the P3 representative, 30 January 2004).

Failing to convince B of the need to postpone the promulgation of the new Water Act, consortium members approached⁴⁶ the representatives of Reformasi faction to confirm the faction's support. Unlike the previous visit (see section 6.8.1), this time, consortium members were received formally by O, the party secretary⁴⁷. He informed the consortium that the draft Water Act would be approved in the next Commission IV meeting, and sent directly to the plenary meeting to be promulgated. Nevertheless, he would try his best to stop the act promulgation. In addition, he said that the promulgation process of the new Water Act had been directed by powerful forces outside parliament. Members of Commission IV in general, and C and E in particular, had repeatedly informed him about the difficulty of changing anything in the act formulation.

6.10.2 The second Commission IV meeting: Reformasi faction's strategy

On 11 February 2004, the second Commission IV meeting was reopened. The meeting was attended by members of Commission IV, the representatives from the seven political parties and the military faction, some NGO leaders, and a couple of journalists from the national media. Also present in the meeting was the Kimpraswil minister (accompanied by the high officials from the irrigation agency, including the new Director General of Water Resources Development, its Secretary General, Inspector General, and some retired high officials), some key actors from MoHA and the National Development Planning Agency.

After a ceremonial introduction, the head of the Working Committee informed the participants that this meeting would be focused on the Reformasi faction's proposal to revise the draft Water Act. The existing formulation of the draft Water Act had been agreed by all the representatives of the political parties, except the Reformasi faction. In addition, he presented the main discussion points in the promulgation process of the draft Water Act. These points were: the management of drinking water, privatization which involves water export to other countries, and the financial issue of maintenance and construction of irrigation infrastructure at the tertiary level. Surprisingly, the issue of farmers' decision-making authority in irrigation systems management was not mentioned at all

C stepped forward and presented Reformasi faction's proposal to the other political party representatives. The proposed change concerned the reformulation of clause 29 (section 3) and 40 (section 3). With regard to clause 29, the proposal was to add the word 'irrigation' to the sentence. As for clause 40, the proposed change concerned the role of the cooperatives, vis-à-vis a government financial body and a private company. The opinions of each political party and the military faction representatives on the proposed changes are presented in Tables 6.4 and Table 6.5.

After the presentation, the Kimpraswil minister announced his agreement to the proposed changes. In addition, the minister proposed to empower cooperatives.

Suddenly, during the discussion on the issue of cooperatives, E from the Reformasi faction proposed the postponement of the promulgation of the draft Water Act. In panic, some members of Commission IV said that its promulgation could no longer be postponed. According to these members, Commission IV had already decided to approve the draft Water Act and channel it to the plenary meeting. However, E insisted that he would make the same proposition in the plenary meeting. At this point, G from Golkar expressed his support for E's proposal. At the end of G's proposition, chaos erupted in the meeting room. Amidst this chaos, B from P3 insisted that the new Water Act should be promulgated in this meeting. At this point, F attempted to close the meeting. However, other representatives from PDI-P proposed to temporarily halt the meeting and reopen it after lunch time. Commission IV members gathered in a separate room.

After lunch, the meeting reopened with E's statement, confirming that he had decided to withdraw his proposal to postpone the promulgation process of the new Water Act. After he said this, representatives from PDI-P, P3, and the military faction in the parliament congratulated him on the decision. Following E's withdrawal, Commission IV approved⁴⁸ the draft Water Act and channeled it directly to the head of the parliament to be scheduled for a plenary meeting.

Table 6.4: The opinion of the political parties and the military faction with regard to the proposed change to clause 29

Opinion on clause 29 section 3 (as proposed by Reformasi faction): The main priority in water supply is given for basic needs and irrigation.		
Priority should be given to water use for irrigation above the supply for drinking water.		
A distinction should be made with regard to the definition of basic needs in relation to water.		
The priority should be defined between water use for drinking, and irrigation.		
Priority should be given to water use for irrigation.		
The priority should be defined between water use for drinking and for irrigation. But given that the distinction could have difficult implications in the field, perhaps clause 29 should be left as it is.		
Clause 29 should be left as it is.		
Clause 29 should be left as it is.		

Table 6.5: The opinion of the political parties and the military faction with regard to the proposed change to clause 40

Political party	Opinion of clause 40:		
	Cooperatives, government financial institutions, private companies, and the		
.	local population can be involved in the drinking water systems development.		
PDI-P	It agrees with the minister's opinion that cooperatives should be empowered.		
Golkar	It agrees with the minister's opinion.		
P3	Clause 40 should be left as it is.		
PKB	Clause 40 should be left as it is.		
PBB	Clause 40 should be left as it is.		
PDU	It agrees with the minister's opinion.		
Military faction	Clause 40 should be left as it is.		

The combination of both C's and E's proposals (respectively, to revise the draft Water Act and to postpone the act promulgation) almost enabled Reformasi faction to break through the Kimpraswil-PDI-P defense line in the second Commission IV meeting⁴⁹. C's proposal was essential in promoting discussion during the meeting, and thus creating the room for E's interference. Later, E's interference allowed Reformasi faction's allies (PKB and Golkar) to further disorient the forum and direct the decision-making process to halt the promulgation process of the draft Water Act. If only F's attempt to close the meeting had not been impeded by a representative from PDI-P, then the promulgation process would have been halted for a second time. In addition, Golkar's support for E's proposal forced the forum to take E's opinion into account, instead of immediately dismissing it (as proposed by some members of P3 and PDI-P).

Furthermore, C's strategy to propose uncontroversial changes was important in reducing Kimpraswil's alertness with regard to the formation of the Kimpraswil-PDI-P counter alliance at Commission IV. Had the attempt to revise the controversial clauses in the draft Water Act been included in C's proposal, I doubt whether the proposal would have been channeled to the Commission IV meeting. According to the parliamentary procedures,

changes proposed by political party representatives on the existing formulation of the draft Water Act were to be delivered to Commission IV. Prior to the Commission IV meeting, the Commission discussed this proposal with Kimpraswil in their final consultation meeting (on 9 February 2004). In this meeting 50, both Kimpraswil and Commission IV members would decide whether or not to channel the proposed changes to the Commission IV meeting.

The coalition map during the second Commission IV meeting is presented in Figure 6.6.

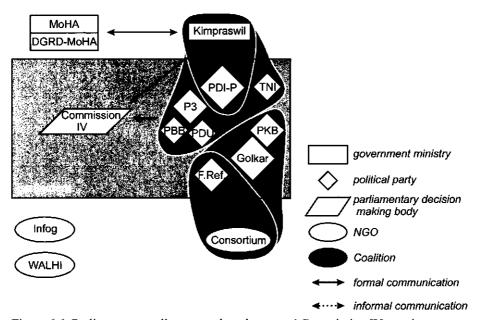


Figure 6.6: Parliamentary policy network at the second Commission IV meeting

6.10.3 The plenary meeting: the outcome of the policy struggles

The plenary meeting on the draft Water Act was held on 19 February 2004. Present during the meeting were members of Commission IV, political party representatives, as well as other parliament members, representatives from government ministries, NGOs, and some people from the national media. The meeting was opened by R, the head of the parliament from the Reformasi faction.

At the beginning of the meeting, R announced that the new Water Act would be promulgated during this plenary meeting. At this point, a member from Commission III said that the status of the draft act should not be announced before the opinions from each political party were presented publicly. Further, he inquired about a letter from Commission III, which requested the inclusion of Commission III in the promulgation

process of the draft Water Act. Reacting to this, R openly announced his successful lobbying of the heads of both Commission III and Commission VIII. According to R, both Commissions were affirmative towards the decision made by Commission IV.

Similarly, before the opinion of the political party representatives were presented, the head of Commission IV also informed the participants that the new Water Act would be promulgated in this plenary meeting. In addition, he said that a new Government Regulation should be issued directly, following the promulgation of the new Water Act.

Later, the head of the parliament asked Golkar to declare its formal position on the draft Water Act, followed by P3, PKB, Reformasi faction, representatives from the military faction, PBB, KKI, PDU and PDI-P. Apart from the Reformasi faction's objection and PKB's abstention in relation to the act promulgation status, the majority of the political parties agreed on the existing formulation of the draft Water Act.

After each party's formal presentation, the plenary meeting was temporarily halted. Again, representatives from each political party and the military faction entered another room.

Twenty minutes later, the head of the parliament announced that the new Water Act would be promulgated on that day. This decision was interrupted by a member from Reformasi faction. He said that that was not what he had understood from the internal discussion. According to him, they had agreed to vote⁵¹ for the final decision on the status of the draft Water Act. Right after this statement, chaos ensued in the plenary meeting. Later, I discovered that somebody had turned off the microphones in the room. These microphones were attached to the seat of each parliament member and used if these members wanted to make a statement or raise some issues of concern during the formal meeting. Without using the microphone, a member from PDI-P proposed that the head of the parliament should read out the decision that had been made during the internal meeting. Surprisingly, the proposal was dismissed by the head of the parliament. Following this dismissal, more than five parliament members raised their hands. However, ignoring this too, the head of the parliament immediately promulgated the new Water Act. After that, he gave the floor to the Kimpraswil minister. Nine members from Reformasi faction left the meeting room in protest against the decision before Kimpraswil minister started his speech.

The promulgation of the new Water Act did not stop the widespread criticism of its controversial contents. On the same date that the draft Water Act had been approved in the plenary meeting, the Irrigation Communication Network of Indonesia delivered a legal appeal to charge members of Commission IV. This appeal was addressed to the public court in Jakarta, under the name of a WUA in West Java (see the formal letter for the legal appeal, 19 February 2004). However, for no particular reason, this appeal was rejected. Further, on 7 March 2004, sixteen NGOs proposed a judicial review of the new Water Act (see KOMPAS newspaper, 8 March 2004). The legal procedure for judicial review was started on 8 March 2004. Later, after constant coverage of the issue in the media, the Judicial Court decided to turn down the proposal to review the new Water Act (see

KOMPAS newspaper, 20 July 2004). Nevertheless, the decision did not halt the incoming criticisms (mainly on privatization) on the new Water Act (see KOMPAS newspapers, 23 July 2005, 1 August, 2 August, 23 August 2005, and 15 December 2005). Next, on 22 March 2004, the Irrigation Communication Network of Indonesia arranged a one-day seminar. This seminar was meant to convince the core policy actors from the irrigation agency in Kimpraswil about the need to change their sectoral approach. However, the seminar did not result in a resolution of the controversial issue in the draft Water Act (with regard to the scope and degree of IMT policy). Present at the seminar were policy actors from different government ministries, NGOs leaders, and retired high officials from the former MPW.

At the plenary meeting of the parliament, the decision to promulgate the draft Water Act was shaped through the different layers of political interrelationship. This political interrelationship was established between political parties, within a political party, as well as through individual positions. Kimpraswil's strategy at the plenary meeting was focused on its relation with the head of the parliament. Kimpraswil recruited him as part of its alliance because the head of the parliament could intervene and direct the decision-making process in the plenary meeting to serve Kimpraswil's purpose. This was regardless of the political status of the parliament head as a member of Reformasi faction.

Similarly, the shift in Golkar's coalition from Reformasi faction-PKB to Kimpraswil-PDI-P-P3 could be explained by reference to the higher level political activities happening outside Commission IV. This shift was related to the formation of the Golkar-PDI-P coalition around January 2004. On 22 February 2004, just three days after the promulgation of the new Water Act, Golkar's leader announced the coalition between Golkar and PDI-P for the next national election (KOMPAS newspaper, 24 February 2004). This announcement came out less than a week after the Golkar's leader judicial trial, in which he was cleared of all corruption charges. Prior to the alliance formation, Golkar's top leader was facing legal charges as a result of his past involvement in corruption practices during the New Order government. The provincial court having found him guilty, the issue was taken up to the Judicial Court (KOMPAS newspaper, 27 January 2004). With reference to this legal problem faced by the Golkar's leader, I am inclined to think that the coalition between Golkar and PDI-P was the most logical step for the Golkar top leader to embark on, as his alliance with PDI-P would automatically solve his legal problem. As the ruling political party at that time, PDI-P could lobby the Judicial Court decision on the proposed legal charges against the Golkar leader. In turn, Golkar's decision to join the PDI-P-Kimpraswil coalition had significantly reduced Reformasi faction's capability to counteract Kimpraswil's strategy in the plenary meeting. The Reformasi faction's position in parliament (as only the fourth or fifth largest political party) was not sufficient to act as a counterforce to the Kimpraswil-PDI-P coalition.

The establishment of the different coalitions in the promulgation process of the Water Act at the plenary meeting is presented in Figure 6.7.

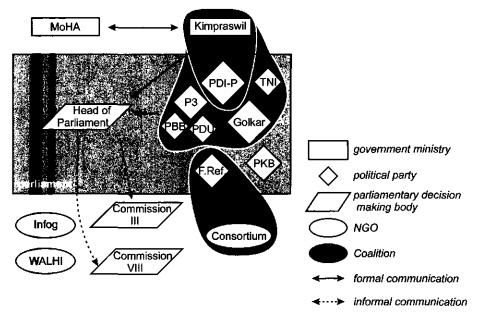


Figure 6.7: Parliamentary policy network at the plenary meeting

6.11 One day before the meeting

One day before the second Commission IV meeting, an informal dialog between the officials from the irrigation agency in Kimpraswil and members of the consortium was arranged by F (a representative from the PKB political party, who was also the head of the Working Committee). The dialog was conducted in a private meeting room at a five star hotel. Present at the dialog were members of the consortium, mid-level officials from Kimpraswil and F.

Kimpraswil officials' and the consortium members' conflicting perceptions on IMT and farmers' decision-making authority in systems management were evident during the whole course of the dialog (which lasted almost continuously from 2 to 7 pm). During this dialog, Kimpraswil's strong opposition⁵² to the concept of farmer empowerment as proposed in the WATSAL IMT program was pretty much apparent.

Firstly, Kimpraswil officials insisted that decision-making authority for irrigation systems management should remain in the hands of the government. Consortium members, on the other hand, thought that farmers should also be involved in the decision-making process in relation to the sector's development. See also in Table 6.1 how these conflicting perceptions were presented in the frames conflict. Reacting to this proposal, Kimpraswil officials said that if farmers were to be given the decision-making authority to manage irrigation systems, this should stem from their financial responsibility. In reply, consortium members said that government should be committed to empower farmers,

instead of demanding their financial contribution towards systems management. At this point, the discussion was completely disrupted.

Still on the first discussion point, Kimpraswil officials insisted that the principle of one irrigation system - one management in the WATSAL IMT program should no longer be applied. As far as large-scale irrigation systems were concerned, these officials argued that WUAs could not be held responsible for systems management. Members of the consortium replied that this illustration alone could not justify the limitation of farmers' involvement to the tertiary level. This was because large-scale irrigation systems form less than thirty percent of the total irrigation systems in Indonesia. Despite the arguments from the consortium, Kimpraswil officials insisted that they could not incorporate the proposal into the final formulation of the draft Water Act.

Later, when consortium members asked Kimpraswil officials to note their suggestions, these officials refused to do so. In the words of one official: "The next day, the draft Water Act would be discussed in the Commission IV meeting. Hence, we did not see the point of having to note the suggestions from the consortium members" (statement by an official from the irrigation agency during the informal dialog between Kimpraswil and the consortium of NGOs and universities, 18 February 2004). At that time, F was not in the room. Reacting to this, consortium members proposed stopping the dialog for a while, until F came back.

Upon F's return, Kimpraswil officials informed him about the fact that the discussion had been halted for some time, due to disagreement on the formulation issue. In addition, consortium members informed F about the Kimpraswil officials' unwillingness to note their suggestions on farmer participation. Reacting to this, F said that if they refused to do that, perhaps all the differences would be solved only during the plenary meeting. In addition, he instructed Kimpraswil officials to note every suggestion, so that these could be used in addition to the suggestions of the Reformasi faction for the formal meeting in Commission IV the next day. After saying this, F left the room for another meeting. At the end of the dialog, not a single agreement was reached between Kimpraswil and the consortium members. Perhaps this explains why not a single point raised during this dialog was discussed during the third Commission IV meeting on the following day.

Finally, consortium members asked F about the possibility of incorporating their proposed changes in the existing formulation of the draft Water Act. According to F, this depended on the decision made by the Working Committee. However, he thought that it was not too late to include some of the issues. Further, F explained that even though Commission IV approved the formulation of the draft Water Act, suggestions to improve the draft act could still be channeled to the plenary meeting. Nobody could predict the decision beforehand, because (in F's words): "Parliament is a political arena, where differences in opinion and perceptions could always be converged into a decision" (as stated by F during the informal dialog between Kimpraswil and consortium NGOs and universities, 18 February 2004).

6.12 A side-view: Kimpraswil-World Bank relationship

The World Bank was fully informed about Kimpraswil's attempt to redirect the policy path in the WATSAL IMT program. In its draft aide memoire in June 2003, the World Bank had already advised the Government of Indonesia (GOI) to avoid any revision of the two key outputs in WATSAL (the Ministerial Decrees on the KIIF and the Government Regulation on irrigation) (the letter from the World Bank to the NDPA, 3 June 2003) (see also in Table 6.1 the Bank's interest in promoting 'good governance' in its development projects in Table 6.1.). This advice was a response to Kimpraswil's withdrawal from the process of formulating the joint ministerial decree on the KIIF. Later, with reference to the Kimpraswil moratorium, the World Bank wrote a letter to the NDPA, demanding the GOI's confirmation of its position with regard to the continuation of the WATSAL IMT program (letter from the World Bank to the NDPA, 19 November 2003). As stated in the letter: "The Bank would greatly appreciate to receive confirmation of the government's commitment to its irrigation policy reform, and to the regulations it already has issued". Further, the Bank recommended the GOI to "ensure that it has a unified and consistent position on its sector policy, particularly where it concerns irrigation management".

In May 2004, the NDPA wrote a letter to the World Bank, stating that Kimpraswil, the NDPA, and MoHA had reached an agreement on the key principles of irrigation management transfer (letter from the NDPA to the World Bank, 28 May 2004). Indirectly, in this letter, both MoHA and the NDPA declared their agreement with Kimpraswil's position on IMT. The position of the government with regard to IMT policy principles (as defined in the LoSP 1999) vis-à-vis the new Water Act is summarized in the Table 6.6.

With reference to the GOI's position on IMT, in mid 2004, the Bank decided to stop the third tranche of fund disbursement. However, in late 2005 the World Bank started a new program. This program was called the Water Resources and Irrigation Sector Management Program or WISMP. Originally, the WISMP was designed as the follow-up to WATSAL. Hence, it will be interesting to see how the WATSAL IMT program will fare under WISMP.

Table 6.6: GOI's position on IMT one year after Kimpraswil's withdrawal from WATSAL

Key issues	Stated in the aide memoire	GOI's decision
Roles of WUAs in O&M and water allocation	WUAs play an important role as the partner of local and national government in O&M	WUAs is responsible for O&M only at the tertiary level. They may be involved in O&M for primary and secondary level of irrigation systems
WUAs organizational structure	Water users will set up WUAs at the tertiary level, which in turn will confederate to secondary level, up to higher system level	In principle WUA should be established within the tertiary level. WUA could also be formed at primary and secondary level according to needs and capacity
Delegation of irrigation management responsibility	The government establishes an MoU with the WUAs in the irrigation system, prior to the actual IMT, up to the system level	Secondary and primary level systems management remain the responsibility of central and regional governments. WUAs may participate in the management of primary and secondary irrigation systems based on their willingness and capability
KIIF	Government will create a financial mechanism to allow direct funds transfer to WUAs with sound technical proposal	The abolition of the MoF ministerial decree on the KIIF. The new KIIF is not a fund transferred directly to the WUAs

6.13 Conclusion

Resistance against the WATSAL IMT program from within the irrigation agency was possible because the reform of the irrigation agency itself was not included in the WATSAL program. The WATSAL policy makers' strategy was to exclude the core policy actors in the irrigation agency from the overall process of IMT renewal. Under WATSAL, the role of pro-reform government officials in the irrigation agency was limited to accelerating the formulation process of IMT legal frameworks, and at the same time blocking the channeling of IMT policy information to the Kimpraswil minister. In the early stage of IMT policy renewal, this strategy proved to be effective. The Kimpraswil minister did not resist the promulgation of either the Government Regulation on irrigation or the Ministerial Decree on IMT guidelines as part of IMT legal framework not to mention the fact that the Kabupaten Irrigation Improvement Fund (KIIF) concept was already applied in several irrigation systems on Java, prior to the promulgation of both the MoHA and the MoF ministerial decrees on the KIIF. However, with the reemergence of the core policy actors, the information barrier to the minister was removed.

The outcome of the IMT policy struggles at the national level was shaped by the increasingly complex policy networks, represented by the dynamic alliances between policy actors and (non) government institutions clustered around the promulgation process of the new Water Act. The formation of coalition and counter coalition in both the Working Committee and Commission IV in parliament was linked to the strategies used by the different alliances in the central government ministries to influence the decision-

making process in parliament. For instance, the formation of a Kimpraswil-PDI-P counter coalition at Commission IV was related to the strategy used by both the Sub-Directorate of Water Resources of the Directorate General of Regional Development (DGRD) in MoHA and the members of the consortium of NGOs and universities to approach the parliament members. Similarly, the process of coalition formation in Commission IV in parliament was influenced by the higher level politics around the national election. For example, F's (a representative from the PKB political party) decision to act as the consortium of NGOs and universities' second contact person (after B was 'recruited' into the Kimpraswil-PDI-P alliance) was related to his strategy to use some of the consortium members' political connections and advices to strengthen his political program in the next national election. In addition, the decisions made by the Golkar political party to join the PAN/Reformasi faction-PKB coalition during the first Commission IV meeting and later withdraw its political support from the coalition during the second Commission IV meeting were primarily linked to the higher level politics around Indonesia's national election in April 2004.

The overall process of alliance formation in the IMT policy struggles was linked to the distribution of sectoral development funds between the different government ministries. Access to sectoral development funds was the foundation of the policy actors' belief system (Sabatier, 1988). Consequently, policy actors' perceptions on IMT policy as formulated under WATSAL and later reformulated in the Kimpraswil-revised draft Water Act are based on their interest in gaining access to the sectoral development funds. For instance, MoHA's position as Kimpraswil's counter force in these struggles was based primarily on MoHA's position as the second government agency responsible for the implementation of the WATSAL IMT program, MoHA's motivation to counteract Kimpraswil's position on IMT was linked to its objective to protect its access to the sectoral development funds through its NewISF program, which would be eliminated if the WATSAL IMT program was to be reformulated to fit Kimpraswil's intention to recentralize the sector's development. Nevertheless, in the aftermath of the struggles on the principles of IMT policy, MoHA agreed to support Kimpraswil's IMT in the WISMP, as long as they could gain access to project funds. For similar reason, the NDPA joined the Kimpraswil-MoHA alliance.

The practice of money politics and pork barrel deals in both the Working Committee and Commission IV in parliament reveals the characteristic of the new Water Act as a political commodity. According to some members of Commission IV, a considerable amount of money was involved in the promulgation process of the new Water Act. It is worth noting here that the amount of money mentioned (US\$ 150 million) coincided with the exact amount of WATSAL third tranche funds disbursement. The practice of money politics and pork barrel deals was reflected in Kimpraswil's domination in the parliamentary decision-making process. For instance, neither Commission IV nor the Working Committee could force Kimpraswil to bring up the controversial clauses in the draft Water Act in the formal policy discussion in parliament. Similarly, they were unable or unwilling to discuss the way the public consultation on the draft Water Act had been approached by Kimpraswil.

The promulgation process of the new Water Act was governed by both bureaucratic and political interests. Financial interests and resources became the main force that shaped the negotiation process at each stage of parliamentary decision making, as access to parliamentary decision making was traded for access to financial resources, and vice versa. Members of the Working Committee and Commission IV never had any intention of resolving the existing contradiction in the scope and degree of IMT (as stated in the draft Water Act and as defined under WATSAL) as their position in the promulgation process was related primarily to their interest in increasing their funding resources to finance their political campaigns. These members treated substantial policy issues such as farmers' willingness and capability to take over systems management primarily as their political tool and resources to increase their bargaining position around the Water Act promulgation process. This was evident in how B strategically transformed his role from the consortium of NGOs and universities' contact person in the Working committee to Kimpraswil's alliance.

Rules of the game in the struggles on principles of IMT policy were developed with reference to the formal procedure for Water Act promulgation in parliament. Both the Working Committee and Commission IV members used this procedure as their formal prescription to justify and legitimize their decisions, amidst the practice of money politics and pork barrel deals. For instance, according to F, the issue of public consultation on the draft Water Act could no longer be used as a reason to postpone the promulgation process, since it had already been used once by Commission IV to postpone the act promulgation process in December 2003 - this regardless of how the consultation had been conducted by Kimpraswil. Similarly, the way F proposed to use the quorum regulation to halt the channeling of the draft Water Act to the plenary meeting shows Commission IV members' strategy to use the formal procedure for act promulgation as their reference to strengthen their position.

Finally, in the aftermath of the IMT policy struggles, Kimpraswil seems to have been successfully neutralized WATSAL reform efforts at the national level. The next chapter discusses how the outcome of the policy struggles on the principles of IMT was translated to both provincial and district levels.

¹ Interviews with officials from Kimpraswil, MoHA, the MoA and the NDPA, 2003.

² Interviews with officials from MoHA and Kimpraswil, 2003.

⁴ This key official belongs to the group of mid-level officials in the NDPA who proposed the incorporation of IMT into the regional autonomy policies (see Chapter 5).

⁵ Interview with officials from the NDPA and Kimpraswil, 2003.

⁶ These two NGO representatives were both members of the consortium NGOs and universities, a prominent force in the formulation and implementation of IMT policy under WATSAL.

⁷ This appointment reflects how the promulgation process of the Water Act was linked to the irrigation agency's bureaucratic identity and interests (see Chapter 3 for more elaborate discussion on the irrigation agency's bureaucratic identity and interests).

Apart from PDI-P, Golkar and P3 which existed during the New Order government, the remaining political parties were formed only shortly after the political reform in 1998. PKB is the political party of the former president Abdurrachman Wahid. This party has close ties with the Nahdatul Ulama, the largest grass-roots level Moslem organization. Reformasi faction consists of PAN and PKS political parties. Both parties have strong ties with the Muhammadiyah (one of the largest Moslem organization in Indonesia). In 2003, PAN, PKB, and PKS were considered by many as the opposition wings in the Indonesian parliament. In addition, PBB and PDU are religiously based political parties.

⁹ As the ruling political party at that time, PDI-P representatives formed a majority in both Commission IV and the Working Committee.

10 If the president would not sign and legalize the approved act within 15 days after its date of approval, the head of parliament would send her a formal letter asking for explanation. However, if the president would remain indecisive, or refuse to sign the act after one month of its date of approval, the act would be legalized automatically.

11 The difference in clause numbers occurred because extra clauses were added in the revised draft Water Act.

¹² The scope and degree of IMT was reduced tremendously. Even in the IOMP 1987 statement, WUAs were responsible for O&M, up to the secondary level of the irrigation system.

¹³ Interviews with officials from Kimpraswil, 2003.

¹⁴ Officials in the agency referred to the strategy used by this high official as "throwing a hot ball" to your bureaucratic competitor'. By preventing his colleague from holding onto the 'hot ball', he was in fact excluding any possibility of him winning the game, or even staying in the game.

¹⁵ Firstly, the NDPA official illustrated how the moratorium could be regarded as a legal violation of both acts on regional autonomy and fiscal decentralization. Incorporated into regional autonomy, IMT implementation under WATSAL could not be halted as long as the Regional Autonomy Act remained effective. Secondly, he argued that the moratorium could reduce people's trust in the government. Since 1999, around 4,000 WUAs had been formed and activated. Thirdly, he mentioned how the moratorium could complicate the third tranche fund disbursement under WATSAL because it would prove the GOI's deviation from the agreed plan (as stated in the Letter of Sector Policy, 1999).

16 The Kimpraswil minister's expression about Working Team IV of WATSAL proved his dislike of the NDPA, especially with regard to its leadership role in the WATSAL organizational structure.

Interview with mid-level officials from the irrigation agency, 2003.

¹⁸ Unlike the formal network, this social network continues even after retirement (see Chapter 3 for a more elaborate explanation of this network).

The sub-directorate was established in 1999 and immediately given the task of implementing IMT under the NewISF program. Since then, the sub-directorate has been viewed as the bureaucratic competitor of the irrigation agency under Kimpraswil.

The promulgation process of the new Water Act had attracted widespread public attention. So far, the press had covered the bureaucratic dispute between Kimpraswil and MoHA, as well as Kimpraswil's controversial revision on the draft Water Act (Jakarta Post, 27 November 2003). Later, the press focused on the privatization issue, leaving the debates on IMT policy in the background (see articles in KOMPAS, 6, 18, 22, and 24 December 2003). In addition, the bureaucratic struggles between Kimpraswil, MoHA and the NDPA as well as the actual process of political lobbying at the parliament were never publicly documented.

²¹ INFOG is one of the NGOs that was formed shortly after the political reform in 1998. In the later stage of the policy struggles, the head of INFOG also became the head of another newly formed NGO: the water rights

coalition for the Indonesian people.

22 Officials from Kimpraswil were absent. I do not exactly know whether their absence was because of their unwillingness to attend the dialog, or whether it was because they were never invited in the first place. Either way, this absence showed the intense bureaucratic conflict between Kimpraswil and other policy actors in favor of IMT.

In the past, he used to do consultancy work for Kimpraswil (the former MPW). At present, he is also the head

of the Indonesian businessmen's association.

A faction is formed by more than one political party, namely those who do not have enough parliamentary seats to be represented on their own. Reformasi faction consisted of the PAN and PKS political parties.

Although his opinion could be considered as a sign of bureaucratic integrity, it was also shaped by the

competitive bureaucratic relationship in MoHA. It was commonly known that both the Director General and the Secretary General were competing with each other for the same bureaucratic position.

According to the formal procedure in act promulgation, the draft Water Act could not be channeled directly from the Working Committee to the plenary meeting, without first being approved at a Commission IV meeting. I am uncertain whether the mistake made by A was based on his lack of knowledge, or on his intention to misinform the participants in the dialog.

²⁷ Shortly after C finished his suggestion, A questioned him about why he proposed the particular suggestion. C replied that this was just part of the strategy to promote democratization. ²⁸ Interview with C and B, 2003.

²⁹ With reference to this hint, E, a member of the Working Committee from PAN, thought that Commission IV would not approve the final version of the draft Water Act in its first Commission IV meeting.

The Kimpraswil-PDI-P coalition was rooted in the political party partisanship system. This partisanship system is applied to ensure the ruling party's position for the next national election (see Chapter 2). With reference to the political party partisanship system, the coalition between Kimpraswil and PDI-P at the Working Committee level formed only a small part of the wider Kimpraswil-PDI-P coalition. However, starting from 1998, the application of direct presidential elections did reshape some of the mechanisms in the system.

³¹ Interview with officials from MoHA, the NDPA, Kimpraswil, and some of the Working Committee members,

Because of his close relation with K, the Kimpraswil minister did not have to consult with the president or other high level PDI-P political functionaries with regard to its attempt to redirect the policy path of IMT under WATSAL.

³³ D was a popular leader in the 1970s' student movements. In Suharto's era, D's political career was limited to a certain NGO circle. However, during the 1998 political reform, he succeeded in becoming a parliament member for the PAN political party. Through his past connections, D became acquainted with the prominent leaders in the civil society movement, both from NGOs and universities.

³⁴ For political reasons, PAN representatives could not directly approach the other representatives.

35 Golkar was the ruling political party during the New Order government's thirty-two years reign. After the political reform in 1998, Golkar suffered a major setback. However, it remained the most organized political machine in Indonesia.

36 While walking some of the WUAs members expressed their opinion that politicians would only start to respect farmers once farmers stopped growing rice.

I do not understand why E did not want to include farmer's opinion in the present formulation of the draft Water Act. This was mainly because E was a member of PAN/Reformasi faction. When I asked consortium members about E's strange reaction, these members said that they themselves did not have a clue about it. In their words: "Parliamentary politics was not always clear and understandable for outsiders".

38 Reacting to this populist proposal, one WUA representative asked the former military general about how he thought the government would implement the proposal. This was because government expenditure on the irrigation sector had been reduced considerably. The former general ignored the question.

Again, I do not understand this sudden shift of opinion.

Though invited, none of the officials from the NDPA were present in the meeting.

⁴¹ On 23 December 2003, after MoHA received the letter from Kimpraswil, officials from the sub-directorate gathered with consortium members to discuss the revision of the draft Water Act.

This was the second time that a prominent government official in favor of IMT policy was removed during the struggles on principles of IMT policy. Unlike the first removal, Kimpraswil's interference was much more evident this time, though I believe that the removal was never formally or openly proposed by the Kimpraswil minister to the head of the planning agency. Nevertheless, it was the minister's objection with regard to the

planned national seminar that pointed all the bureaucratic misconduct in one direction: towards the head of the DIWR.

According to my informants, this seminar should have been financially backed by one of the prominent political parties (either PDI-P or Golkar). As the time for the national election in April 2004 was approaching, the seminar would give these political parties direct access to WUA representatives as one of their main target groups in the election not to mention the populist topic of the seminar. The first scenario is that Golkar was behind this national seminar. Golkar's interest in approaching WUAs was evident from the conversation of its party's representative with the mid-level official from the DGRD in MoHA (see section 6.6.1). The second scenario is that PDI-P was the main funder of the seminar. Probably one would never think that PDI-P was behind the seminar. This was because PDI-P was also in Kimpraswil's alliance in Commission IV. However, there remains a possibility that the seminar could be used by some political factions in the PDI-P to increase their political influence. Internal competition within the PDI-P was apparent in the period nearing the national election (see article in KOMPAS newspaper, 17 January 2004).

⁴⁴ Interviews with officials from the NDPA and MoHA, 2003.

⁴⁵ Instead, F explained about his development proposal for the city of Yogyakarta to some members of the consortium. In the next national election, Yogyakarta was one of F's campaign areas. Hence, in order to succeed in his campaign, F needed the support of prominent actors at the regional level (in form of advice and personal support).

Entering the room, they were greeted by D, who said that their efforts in the last meeting had successfully

torpedoed Kimpraswil's alliance in Commission IV.

⁴⁷ As in the previous meeting with F, the issue of farmers' decision-making authority vis-à-vis Kimpraswil's attempt to redirect the path of irrigation development towards recentralization was raised. Kimpraswil's violation of the objectives and role of the consultation was also mentioned.

Following the approval, criticism on the present formulation of the draft Water Act flooded the columns of the national newspapers. The criticism came from different NGOs (INFOG and WALHI), the Nahdatul Ulama, as well as from individuals (KOMPAS newspaper, 5, 13, 14, 16, and 18 February 2004). Most of the concerns related to access to water for the urban poor. Reacting to these concerns, the Kimpraswil minister announced that the government would control and regulate the water sector to prevent privatization and ensure the local population's access to water. In his words: "We will take sides with the people, and not with the businessmen. Private sector's involvement in water management was meant only to give them a chance to participate (as stated in KOMPAS newspaper, 18 February 2004). It is interesting to note here that although the participation of the private sector was encouraged, no reference was made to the issue of farmer participation in irrigation systems management.

⁴⁹ Without the Reformasi faction's proposal, Commission IV would immediately approve the draft Water Act.

⁵⁰ I think it was during this consultation meeting that each party's position and opinion on the draft Water Act was rehearsed beforehand. For instance, while panicking, some members of P3 and PDI-P emphasized the need to approve the draft Water Act right away, as this was already agreed by Commission IV. I could not think otherwise, that the opinion emanated from the agreement made during the consultation meeting because the Commission IV meeting was still ongoing at that time.

Though Reformasi faction's members were outnumbered in Commission IV, the voting at the plenary meeting would not rule out its chance of defeating the dominant coalition of PDI-P-Golkar-P3-PBB-PDU-military faction in Commission IV. This is because the voting at the plenary would involve all members of parliament present in the meeting. Furthermore, given that the number of parliamentary members in the meeting was less than is required for voting, Reformasi faction's representatives thought that non-fulfillment of the quorum would result in the suspension of the meeting.

This opposition was never formally presented, or even mentioned during any of the parliamentary meetings.

7 Regional governments and IMT policies

7.1 Introduction

This chapter focuses on how the irrigation agency at different administrative levels coped with the internal contradictions in implementing IMT policy in the aftermath of the IMT policy struggles. It elucidates the strategies of provincial and district governments to cope with the IMT policy change that took place after the promulgation of the new Water Act in February 2004. In addition, the chapter illustrates how IMT implementation under WATSAL was shaped by the project development approach both before and after the IMT policy struggles.

The main findings of this chapter are:

- The incorporation of the WATSAL IMT program into the regional autonomy program resulted in the internal fragmentation of the irrigation bureaucracy; this in turn enabled the continuation of the IMT program implementation
- The WATSAL IMT program implementation through the project development approach resulted in the transfer of bureaucratic rent-seeking from the irrigation agency to the Federation of Water User Associations (FWUA)
- IMT implementation under WATSAL did not eliminate farmer dependency on government funding support
- The way FWUAs' access to stimulant funds was designed to eradicate rent-seeking
 practices has backfired shows how the WATSAL IMT program implementation
 was shaped primarily by the policy actors' strategy to satisfy their own policy
 interests
- The project approach limited the scope of IMT under WATSAL to that of a policy blueprint

This chapter is divided into six sections. Section 1 highlights Kimpraswil's strategy to halt the implementation of the WATSAL IMT program after the promulgation of the new Water Act. After that, the provincial governments' positions on IMT are discussed. In section 3, the way the district irrigation agency in Kulon Progo district dealt with the WATSAL IMT program implementation in the aftermath of the policy struggles is discussed and analyzed. Section 4 illustrates the way WATSAL policy makers' attempt to use the stimulant fund as a tool to eradicate rent-seeking practices in the irrigation sector backfired. In section 5, target-oriented IMT implementation under WATSAL is elucidated. Section 6 discusses the employment of community organizers (COs) to

illuminate how the implementation of the WATSAL IMT program was overwhelmed by project procedures and mechanisms.

7.2 Kimpraswil and its new Participatory Irrigation Program

In the aftermath of the IMT policy struggles at the national level, Kimpraswil promoted its new IMT policy under its Participatory Irrigation Program. Under this program, farmers' involvement was limited to the tertiary level. At the national level, two workshops were held at the National Development Planning Agency (NDPA) to inform the representatives of the regional governments about the recent promulgation of the Water Act, and thus the need to halt the WATSAL IMT implementation in the field. Present during these workshops were officials from Kimpraswil, the NDPA, Ministry of Home Affairs (MoHA), and regional government representatives from the 29 provinces in Indonesia. At the regional level, Kimpraswil introduced its new Participatory Irrigation Program through its seminars and workshops on irrigation. For example, in Yogyakarta province, the dissemination was conducted during a workshop on the cultural aspects of irrigation management. In Solo² the dissemination was effected during the agency's internal workshop.

Formally, Kimpraswil did not have the mandate to direct the regional governments' policy attitude towards IMT. Regional governments were authorized to define their own development programs within the overall application of regional autonomy in 2001. Kimpraswil's dissemination efforts lacked any legal power to enforce direct policy translation from the national to the regional level not to mention the fact that, formally, Kimpraswil was no longer represented at the regional level. The sectoral command line in irrigation which ran from Kimpraswil down to its representative at the field level was cut as a direct consequence of regional autonomy (see Chapter 3 for an explanation of this). Both Kimpraswil's regional offices and the Division of Provincial Irrigation Services (or DPIS) as Kimpraswil's direct representatives at, respectively, provincial and district level were abolished.

After regional autonomy was introduced, both the provincial and district irrigation agencies were incorporated into the organizational structure of the regional government. Similarly, the project management unit of Kimpraswil (the former MPW) was incorporated into the provincial government structure. The Provincial Irrigation Project (PIP) was placed in the Provincial Water Resources Service (PWRS). Likewise this was done for housing and road infrastructure projects.

The overview of provincial government structure, before and after regional autonomy, are presented in, respectively, Figure 7.1 and Figure 7.2.

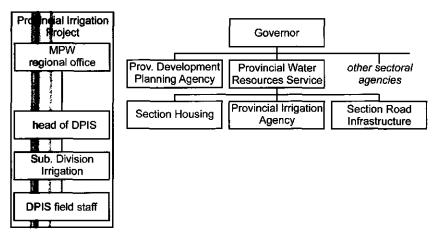


Figure 7.1: Overview of provincial government structure (before regional autonomy)

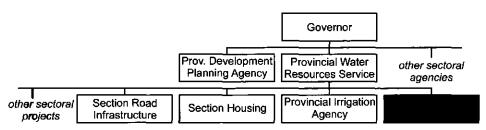


Figure 7.2: Overview of provincial government structure (after regional autonomy)

In practice, the implementation of the WATSAL IMT program through the project structure preserved Kimpraswil's power to direct the sector's development. The head of the PIP became Kimpraswil's 'new' representative at the provincial level, replacing the role of Kimpraswil's regional office in the past because project funds for IMT implementation were disbursed directly from Kimpraswil to the PIP. The head of the PWRS, on the other hand, was not always informed about funds disbursement for IMT implementation (see also Chapter 2 for a discussion on the regional autonomy handicap³, which in turn results in regional governments' lack of financial capability to put into practice their decision-making authority).

In the aftermath of the national policy struggles, Kimpraswil used both its access to project funds and the handicaps within the regional autonomy to force regional governments' compliance in relation to halting the WATSAL IMT implementation. Kimpraswil halted IMT implementation in several districts by temporarily 'freezing' fund disbursement to the regional governments shortly after the promulgation of the new Water Act. Development activities related to the WATSAL IMT program in the PIP were given 'non-budgetary' status, meaning that no budget would be given to these activities until

further notice. IMT implementation under Kimpraswil's Java Irrigation and Water Resources Management Project (JIWMP) was completely halted. Although the promulgation of the new Water Act provided Kimpraswil with the legal back-up to recentralize the sector's development, it was Kimpraswil's access to project funds which in practice halted the implementation of the WATSAL IMT program in the field.

In the next section, I discuss the different strategies used by the provincial governments to cope with the policy transition from early 2004 to late 2005 (from WATSAL to the WISMP), before WISMP was activated in early 2006.

7.3 Provincial governments' positions on IMT

This section firstly illustrates the way the Provincial Irrigation Agency's (PIA) position in the struggles on the principles of IMT under WATSAL was directed by the agency's interest in maintaining its access to the sectoral development funds (see Chapter 3 for further discussion on the relation between access to development funds and access to bureaucratic decision making authority). Secondly, I discuss the relationship between PIP project heads and PIA officials in shaping the PIA's position on IMT. Thirdly, I illuminate how the PIA's position on IMT was linked to its ability to ensure fund disbursement outside the project structure.

The discussion is based on my interviews with PIP project heads and PIA officials in, respectively, the East Java, Yogyakarta, and West Java provinces⁴. The reason why I limit my provincial selection to these three provinces on Java relates to the history of IMT implementation in Indonesia. Unlike in other provinces outside Java, IMT had been implemented on Java since the formulation of the IOMP 1987 statement in 1989. In this way, the possible relation between IMT implementation under WATSAL and IMT implementation in the pre-WATSAL period can be discovered (see also Chapter 4 with regard to the IMT policy evolution from the IOMP 1987 statement to WATSAL).

7.3.1 The PIA's position and its interests

In West Java province, PIA officials did not have any objection to the adoption of the WATSAL IMT program adoption, or any reason to insist on the continuation of the program afterwards as long as Kimpraswil ensured project fund disbursement. Prior to the IMT policy struggles, the motivation of the PIA in West Java to adopt IMT under WATSAL was primarily to gain access to the project funds for IMT implementation. This interest was evident in both the PIA's and the PIP's competing interest in managing the IMT project funds. PIA officials objected to the way the project head dominated the IMT project funds. As expressed by one PIA official: "We tried to gain access to the IMT project funds to include irrigation systems which crossed more than one district boundary in the IMT program under WATSAL. However, the PIP project head insisted on limiting the PIA's involvement in the management of IMT project funds by focusing IMT implementation on irrigation systems at district level. In this way, IMT project funds were disbursed directly from the PIP to the district government" (as stated by one of the

officials from the PIA, West Java, 2004). In the aftermath of the national policy struggle, Kimpraswil ensured these officials' interests through the allocation of construction and rehabilitation funds (outside the context of IMT). In practice, I did not observe any significant differences in the PIA's activities prior and after the IMT policy struggles. Prior to the policy struggles, activities in the WATSAL IMT program in West Java were also focused on construction and rehabilitation works.

Similarly, in the aftermath of the IMT policy struggles, the majority of PIA officials in Yogyakarta province agreed with Kimpraswil that farmers' decision-making authority should be limited to the tertiary level. As stated by one of the officials: "It is impossible for the government to give farmers full authority for irrigation systems management, if farmers are unable to finance the systems management. The low ISF collection rate proves farmers' financial inability to be held responsible for systems O&M above the tertiary level" (as expressed by one of the PIA officials in Yogyakarta, 2004). Later, these officials justified Kimpraswil's decision to halt the implementation of the WATSAL IMT program by presenting problems that occurred during the program implementation as direct evidence of farmers' lack of capability (not only financial, but also technical and managerial) to manage the irrigation systems. For instance, according to PIA officials in Yogyakarta FWUAs' interest in IMT was primarily to gain access to project funds through rehabilitation works. Irrigation systems O&M, on the other hand, was simply neglected.

Officials from the bureaucratic minority (in the PTGA⁶) in the PIA Yogyakarta and West Java, on the other hand, thought that IMT policy implementation was driven primarily by the reduced number and zero regeneration of irrigation agency field staff at the regional level, rather than by farmers' financial capability to take over management of the system from the government. As one official stated: "Even when Kimpraswil consider that farmers are unable to take over the systems management, efforts to increase farmers' capability should be made continuously" (as expressed by one of the officials in the PIA Yogyakarta and West Java, 2004).

Nevertheless, the PTGA officials' opinion is also rooted in their interest in gaining access to sectoral development funds. With reference to their main organizational task of empowering farmers in irrigation systems management, the implementation of the WATSAL IMT program would improve their access to development funds. Put another way, their main concern in the IMT policy struggles lay in the frozen fund disbursement, rather than the halted effort to empower farmers. In the aftermath of the policy struggles, these officials attempted to capture certain portions of regional revenue from district government by extending their organizational unit to the district level. In practice, when unsuccessful in gaining access to regional revenue, the unit instead followed Kimpraswil's demand to limit farmers' involvement to the tertiary level. It launched its new program on managerial training for farmers, designed especially to strengthen their involvement at the tertiary level.

7.3.2 The PIA-PIP relationship

In East Java, good working relationships between Kimpraswil's project head in the PIP and the PIA officials enabled the PIA to continue with the implementation of the WATSAL IMT program, even after Kimpraswil froze fund disbursement. Prior to the IMT policy struggles, both the PIP project head and PIA officials agreed to transform project funds to routine funds. Both project and routine funds were allocated by central to regional governments. However, project mechanisms restricted the expenditure of project funds within certain periods, and for certain pre-defined activities. Routine funds, on the other hand, were always available for disposal by the regional government for a quite unlimited period (see Chapter 2 for further explanation of the distinction between these two types of funds). Initially, the PIA proposed this informal funds transfer because PIA officials wanted to use some of the project funds to continue empowering farmers (even after the project was completed). In the aftermath of the IMT policy struggles, the 'remaining project funds' became the PIA's essential financial resource to continue with the WATSAL IMT program.

In Yogyakarta special province, on the other hand, the PIA head failed⁷ to counteract Kimpraswil's attempt to halt the WATSAL IMT program because it lacked support from the PIP. The PIA's decision-making authority was undermined by Kimpraswil's relationship with its 'project head'. Even prior to the policy struggles, the PIA was excluded from the decision-making process around project funds and activities. Decisions on development fund disbursement and proposed project activities were discussed exclusively between Kimpraswil and the project head. The head of the PIA was informed about project fund allocation only after the funds were spent. In the aftermath of the national policy struggles, the PIA head was forced to follow the project head's decision⁸ to halt the WATSAL IMT program. In practice, the PIA was not equipped with a project management unit or project staff whereby it could coordinate and implement project activities.

The motivation for the PIA leader⁹ to continue with the WATSAL IMT program was evidenced from his statement: "Even when farmers are proven financially incapable of managing the irrigation system, this inability should not be presented as a barrier to promote farmer empowerment in IMT" (interview with the PIA head Yogyakarta, 2004). Furthermore, he countered Kimpraswil's argument that farmers were financially unable to take over irrigation systems management. In his words: "The ISF collection rate did not at all reflect farmers' financial capability. Regardless of their financial condition, farmers did not always feel motivated to pay their ISF contribution. This was because farmers' actual needs were not always represented in the way the collected ISFs were spent (as in most cases ISFs went to pay FWUA/WUA staff salaries)" (interview with the head of the PIA in Yogyakarta, 2004).

7.3.3 The PIA's position and its ability to ensure funds allocation outside the project structure

The Provincial Irrigation Agency's position in the IMT policy struggles was linked to its ability to ensure the allocation of development funds for the WATSAL IMT program implementation from other sources outside the project structure. In East Java, the strong opposition from both the PIP project head and PIA officials to Kimpraswil's demand to halt the WATSAL IMT program was rooted in their ability to secure the actual fund disbursement for IMT implementation from regional revenue. PIA officials managed to disburse some portion from regional revenue to continue with some activities in the WATSAL IMT program through their close relationship with the officials in the Provincial Development Planning Agency (PDPA) (PDPA was responsible for preparing the budget allocation approval for the proposed development program).

The PIA's ability to ensure fund disbursement from regional revenue gave it an independent position in the IMT policy struggles. In East Java, the PIA's position on IMT did not originate from the competing bureaucratic interests that shaped IMT policy struggles at the national level. As expressed by several senior officials in the PIA: "The PIA's decision to continue with the WATSAL IMT program was related neither to the promulgation of the new Water Act nor MoHA's attempt to continue with IMT under WATSAL. The decision was simply derived from farmers' de-facto role in systems management and the high absence of irrigation agency field staff (due to zero recruitment)" (interviews with PIA staff in East Java, 2003). However, when Kimpraswil officials confronted their decision with the promulgation of the new Water Act, both project heads in PIP and officials from the PIA presented the vague formulation of the new act as their counterargument to justify their decision to continue with the WATSAL IMT program. These officials twisted Kimpraswil's recentralization effort, arguing that the new Water Act did not legally forbid the extension of farmers' decision-making authority beyond the tertiary level. Furthermore, when Kimpraswil officials confronted them with problems that had occurred during the implementation of the WATSAL IMT program, PIA officials referred to these problems as part of the learning process for both farmers and the irrigation agency in synchronizing their new roles in systems management¹⁰.

7.4 The district government's position on IMT

District government staff directly implemented IMT activities under WATSAL for the first time¹¹ as a result of the introduction of regional autonomy. This section first discusses the organizational restructuring of the district irrigation agency in Kulon Progo district. After that, the way the district government coped with Kimpraswil's attempt to halt the WATSAL IMT program is illustrated.

Kulon Progo district is located in the western region of Yogyakarta special province. There are three other districts in the province: Gunung Kidul, Sleman and Bantul, respectively in the southern, northern, and eastern part of Yogyakarta city. The location of Kulon Progo district in the province is shown in the Map 7.1.



Map 7.1: Districts in Yogyakarta special province

7.4.1 The district irrigation agency's organizational restructuring

Before regional autonomy, irrigation agency staff at district level were divided between those in the District Water Resources Services or DWRS and those in the Division of Provincial Irrigation Services or DPIS. DWRS staff were incorporated into the district government structure, whereas DPIS staff operated under the direct authority of the Provincial Water Resources Services or PWRS. In practice, DPIS staff acted primarily as the former MPW's bureaucratic extension at the district level. DPIS staff were incorporated into the PWRS because the MPW could not officially hire its staff at the district level, without involving the provincial government. Put differently, the DPIS's task primarily was to implement nationally funded project activities at district level. The set-up is similar to that of the provincial level, where former MPW staff incorporated into the MPW regional office had the implementation of nationally funded projects at provincial level as a primary task. The DPIS staff played an important role in directing district level irrigation development because most development activities were coming through the project structure and mechanisms.

Both the DPIS and the DWRS consisted of three development sections: irrigation, housing and road infrastructure, with reference to the former MPW's organizational structure at the national level. However, the development sections in the DWRS were not equipped with field staff. This was unlike in the DPIS, where each development section was equipped with a separate unit of field staff. The organizational structure of the district irrigation agency before regional autonomy is presented in the organogram in Figure 7.3.

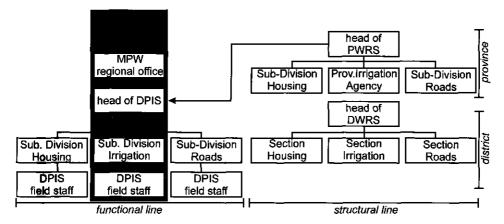


Figure 7.3: The organizational structure of the irrigation agency at district level (before regional autonomy)

At district level, the head of the DWRS could only direct its staff, and not those in the DPIS. Formally, the district government was not authorized to direct the DPIS's role in irrigation development because the DPIS got its development budget from the former MPW. Unsurprisingly, both units were preoccupied by their own development activities. DWRS staff were hardly aware of the activities conducted by the DPIS. Similarly, when DWRS staff received development funds from the district government, DPIS staff were never involved in these regionally funded development activities.

District government structure varied between districts after regional autonomy. The organizational restructuring of the irrigation agency in Kulon Progo district is presented in Figure 7.4.

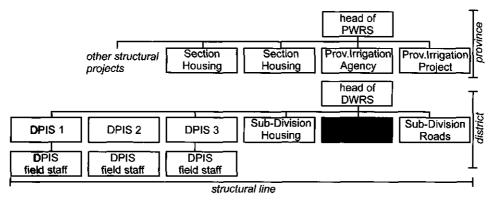


Figure 7.4: The organizational restructuring of the irrigation agency at district level

The DPIS¹² underwent a massive bureaucratic transformation with regional autonomy. The newly formed DPIS was incorporated into the district government structure, and put under the authority of the DWRS. In addition, former DPIS staff were replaced by new staff from the district government.

Nevertheless, officials from the former DPIS continued to play an important role in the irrigation sector's development, Former DPIS staff sustained their importance by replacing the existing irrigation section under the DWRS with a 'new' organizational unit shortly before the application of regional autonomy. This new organizational unit was called the Sub-Division of Irrigation, or SDI. This replacement seemed rather ceremonial at first as it mainly concerned changing the name of the development unit from a 'section' to a 'subdivision', but, later I discovered that the replacement allowed the transfer of prominent policy actors from the former DPIS to this 'new' unit. The replacement enabled the former DPIS staff to take over the role of the newly formed DPIS in irrigation sector development even before the new DPIS staff were officially appointed not to mention the fact that project funds from Kimpraswil and MoHA for the WATSAL IMT program implementation, as well as the regional revenue funds from both district and provincial government, were channeled directly to the SDI. As expressed by the head of DPIS 2: "The present bureaucratic transformation in the DPIS did not result in any significant bureaucratic transfer from the sectoral agency to the DPIS. The SDI remained in charge of channeling sectoral funds. All decisions with regard to the development program were made by the SDI. In short, the organizational structure was changed, but the old mechanisms were still applied. In turn, nothing really changed" (interview with the head of DPIS 2, 2004).

Formally, both the SDI and the new DPIS were assigned different tasks and roles in irrigation management. The SDI was assigned the coordinating role, whereas the new DPIS was responsible for directing irrigation management practices at the system level. In practice, the overall implementation of IMT under WATSAL was conducted by the SDI, without any involvement on the part of the newly formed DPIS. Quite to my surprise, the new DPIS staff were not at all aware of the WATSAL IMT program or its actual implementation by the SDI.

In addition, the sectoral command line between the former DPIS staff and their field staff was cut with the formation of the SDI. Officially, the SDI was not authorized to direct these field staff anymore (as DPIS field staff were now supervised by the newly formed DPIS). The SDI's request to the newly formed DPIS staff could only be made through the DWRS head. As stated by the head of DPIS 3: "Our unit would only follow the SDI's request when this was instructed by the DWRS head" (interview with the head of DPIS 3, 2004).

7.4.2 The district irrigation agency and Kimpraswil's attempt to halt the WATSAL IMT program

The district government of Kulon Progo decided to continue with the WATSAL IMT program, despite the promulgation of the new Water Act in February 2004. This position was unanimously adopted by district government representatives¹³ (from the DWRS and the District Development Planning Agency, or DDPA) during the Irrigation Committee¹⁴ meeting (Irrigation Committee meeting note, 4 March 2004). Later, this decision was formally presented to the district head. On 13 March, the district head formally announced Kulon Progo district's position to continue with the WATSAL IMT program, using the decision made by the Irrigation Committee as his reference (Irrigation Committee meeting note, 13 March 2004).

The position taken by the district government of Kulon Progo revealed the SDI's perception on IMT. SDI staff viewed IMT as a possible solution for the existing problems in irrigation systems management. Firstly, SDI staff realized that they would have to rely on their relationship with farmers for the delegation of their decision-making authority in irrigation systems management, bearing in mind the missing command line between SDI staff and DPIS field staff. Secondly, the SDI staff thought that IMT could be used as a strategic policy instrument to stimulate farmers' financial contribution for systems management, and thus to cope with reduced government expenditure in the sector (note that the aspect of cost recovery in IMT had reemerged under WATSAL). Within the four years of IMT implementation under WATSAL, some FWUAs had shown their ability to collect a considerable amount of money from the ISF (DWRS report on the FWUA evaluation, 2003). In addition, SDI staff were convinced that they would be able to sustain their bureaucratic importance in the sector's development as long as they could direct farmers' involvement according to the applied management procedures (a more detailed description of the way SDI staff managed to preserve their bureaucratic importance is presented in section 7.4.3.).

The SDI staff's determination to continue with the WATSAL IMT program was also related to Kimpraswil's different treatment of those districts where management transfer had actually taken place, as compared to districts in which IMT had been implemented but had not been followed by formal management transfer. For example, in the aftermath of the IMT policy struggles, Kimpraswil disbursed sectoral development funds primarily to the latter districts, while completely cutting its sectoral budget for the former districts. In turn, disappointed by being treated unfairly, SDI staff in Kulon Progo thought that they did not have any other choice but to continue with the WATSAL IMT program. As expressed by one of the SDI key staff: "In the past, the SDI never wanted to implement IMT under WATSAL. However, as this was instructed by the central government ministry, it could not do otherwise. SDI staff in Kulon Progo were determined to make IMT implementation successful, motivated by the strong policy support from the sectoral ministry, Later, Kulon Progo district was 'praised' for its IMT implementation. However, all this effort turned into nothing when, all of sudden, Kimpraswil changed its attitude towards the WATSAL IMT program, and turned its back on the very district irrigation agencies that had promoted its implementation" (interview with SDI staff, 2004). At the

time that the new Water Act was promulgated, IMT implementation in Kulon Progo district had reached such an advanced stage that it no longer fitted with Kimpraswil's policy attempt to return the decision-making authority for irrigation management to the SDI. As stated by an SDI staff member: "The SDI could not regain its power from the recent policy setback in the WATSAL IMT program because the management of all technical irrigation systems in the district had been transferred to FWUAs. According to the new Water Act, farmers' decision-making authority was limited to the tertiary level. However, in Kulon Progo FWUAs were already formed and functioning. Hence, the SDI would ensure that the FWUAs remained. It would be a pity if the considerable amount of development funding that had been spent to promote FWUA organizational development had to result in nothing" (interview with SDI staff, 2004).

SDI staff continued with the WATSAL IMT program, relying primarily on regional revenue (both from district and provincial governments). For instance, SDI staff managed to get development funds for systems repairs and maintenance from the district government¹⁵. Furthermore, SDI staff continuously encouraged FWUA staff to increase their ISF collection so that FWUAs could be financially independent from government support. One of the proposed strategies to increase ISF collection was to involve farmers in the overall collection process. For example, in the aftermath of the IMT policy struggles, SDI staff suggested that FWUA staff should collect ISFs based on their agreement with farmers. In this way, it was thought that ISF collection would also allow the expression of farmers' priorities and improve the organizational link between farmers, WUA, and FWUA staff. Furthermore, some FWUAs were unified in the so-called system level WUAs or SWUAs (see Chapter 8 for further explanation of this unification). This unification was conducted only with the agreement of the FWUAs involved. According to SDI staff, this unification would motivate FWUA staff to be actively involved in FWUA organizational development because it would dramatically reduce the number of FWUA staff (at least by half), and thus indirectly increase FWUA staff salaries. In addition, to motivate FWUA staff involvement in irrigation systems management, SDI staff arranged an FWUA competition, 16 together with the provincial government, in which each FWUA would be judged for its organizational development (both formally and in the field). This competition was focused on the formal organizational requirements of an FWUA (such as its financial audit, the registration of its meeting notes, and ISF contribution). However, one aspect of the competition also inquired about FWUA staff's direct interaction with WUA staff and farmers in the field. Later, the winner of this competition would represent Kulon Progo district in the FWUA competition at the provincial level.

In the aftermath of the policy struggles, when project heads at provincial and district level were confused about their position towards IMT, SDI staff took over the leading role to continue with the WATSAL IMT program implementation. Both project heads, on the other hand, focused on implementing activities in which funding was still made available by the central ministries. This activity concerned the recruitment of the so-called community organizer or CO, an external cadre whosetask was to facilitate the process of farmer empowerment in IMT (I discuss CO employment in section 7.6.).

7.5 The stimulant fund: a weapon to eradicate rent-seeking or a tool to transfer rent-seeking?

Under WATSAL, IMT implementation was to be conducted through five stages according to the defined systematic framework (WATSAL report, 2003).

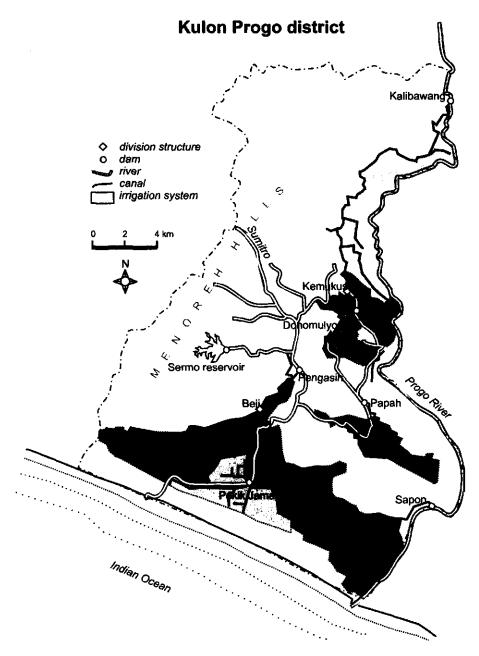
- Stage 1: the preparation for IMT implementation, which included activities to raise
 public awareness, the formation of an Irrigation Committee at district level, and the
 formulation of IMT legal regulations at regional level
- Stage 2: FWUA/WUA training in participatory construction and rehabilitation, administrative management, and farming enterprise
- Stage 3: the formulation of legal agreements for the actual management transfer by the DWRS office together with the FWUA. The agreement should contain task redefinition for irrigation institutions at district level
- Stage 4: the introduction of the new irrigation system finance through the Kabupaten Irrigation Improvement Fund (KIIF)
- Stage 5: the formulation of policy strategies to promote sustainable irrigation

In Kulon Progo district, the implementation of the WATSAL IMT program both from the JIWMP-IDTO project and the NewISF program were merged and coordinated by the SDI of the DWRS (see previous section).

An overview of the irrigation systems in Kulon Progo district is given in Map 7.2.

According to the systematic framework for IMT implementation, the concept of the KIIF would be introduced during the fourth stage, which was when irrigation systems were already transferred to FWUAs. In practice, the use of a stimulant fund as an embryo of the KIIF was introduced as early as 2000. Stimulant funds were allocated directly by the project head to the district government and later disbursed to the FWUA bank account.

The early introduction of the stimulant fund illustrated the effort of WATSAL policy makers to use the shift in decision-making authority for funds management as their main strategy to eradicate bureaucratic rent-seeking in the irrigation sector (see also Chapter 5 on how the KIIF concept was never mentioned explicitly in Government Regulation Number 77 of 2001 on irrigation and Kimpraswil Ministerial Decree Number 529 of 2001 on IMT guidelines). As one policy maker said: "We hope to eliminate corruption practices in the irrigation sector by shifting the decision-making authority for sectoral funds management from the irrigation agency to FWUAs. The sooner we could transfer this decision-making authority in funds management the better. Hence, we started the application of the stimulant fund prior to the promulgation of the Ministerial Decree on the KIIF" (as expressed by one WATSAL policy maker during several interviews, 2003, 2004).



Map 7.2: Irrigation systems in Kulon Progo district

Ir ri gation system	Size	Number of FWUAs	Number of WUAs	Location	
Kalibawang	1,488	1,488 2 (Kalibawang I and II)		upstream	
Donomulyo	534	1	18	upstream	
Penjal i n	652	1	12	upstream	
Papah	983	2 (Cangkring Mulyo and Kongklangan)	16	mid	
East Pengasih	671	1	15	mid/tail	
West Pengasih	1,329	1	20	tail-end	
Pekik Jamal	868	2 (West and East Pekik Jamal)	15	tail-end	
Sapon	1,800	3 (Kengkeng, Wonokasih and Banaran)	36	mid	

Table 7.1: Overview of FWUAs in Kulon Progo district

In the following sub-sections I discuss how WATSAL policy makers' attempt to use the stimulant fund as its weapon to eradicate rent-seeking in the irrigation sector backfired. IMT implementation through the project approach shaped FWUA organizational development along the bureaucratic lines of the irrigation agency. The application of the stimulant fund replicated the agency's organizational characteristics in FWUAs. Firstly, I discuss FWUA organizational characteristic as a contracting agency. Secondly, I illuminate how the FWUA was incorporated into the chain of undetectable funds management in the irrigation sector's development. Thirdly, I discuss how the stimulant fund preserved the irrigation agency's bureaucratic power at district level.

7.5.1 The stimulant fund and infrastructure-oriented irrigation development

Like the irrigation agency, the FWUA's organizational existence was rooted in infrastructure development 17 (see Chapter 3 for discussion on how infrastructure development shaped the agency's bureaucratic identity). FWUA organizational functioning was focused on rehabilitation and maintenance activities because project rules required that the stimulant fund be used only for these activities.

The FWUAs' access to stimulant fund management transformed FWUAs into a contracting agency. The motivation of FWUA staff to improve FWUA organizational functioning was rooted in their interest in increasing their financial profit by managing the disbursed funds. With reference to this interest, FWUA staff attempted to 'pull in' as much development funding as possible under the FWUA management. In addition, FWUA staff viewed knowledge about project mechanisms (both technical and managerial) as the key element in FWUA organizational development. As expressed by an FWUA staff member in Papah: "An FWUA's success was defined by its staff's ability to develop the right type of proposal and send it to the right institutions for funding" (interview with FWUA staff Papah, 2004). Apart from the stimulant fund, FWUA Papah, West Pekik Jamal, West Pengasih, and Kalibawang also prepared development proposals for other potential funders (such as the district government, sub-district government, and other government ministry representatives at district level).

FWUA transformation into a contracting agency was most apparent in Papah irrigation system. As expressed by one of the FWUA staff in Kongklangan: "Practically, an FWUA had to be profit oriented. An FWUA needed money to cover the whole cost of proposal development. The whole process of proposal development was a costly activity. In order to make an initial proposal, we had to go to the field, to check the field situation. Later, we had to go back to the same site in the field, to compare the initial proposal with the field condition at that time (in case changes occurred during the time the proposal was developed). Not to mention that sometimes FWUA staff needed to buy new technical material to make a more accurate proposal, such as surveying equipment" (interview with FWUA staff in Papah, 2004). FWUA staff in Cangkring Mulyo went as far as seeking technical support from a local contracting agency in order to improve their capability to develop technical analysis in their proposal.

7.5.2 The stimulant fund and transferred rent-seeking practices

The FWUAs' decision-making authority to manage the stimulant fund linked FWUAs to the chain of undetectable fund management symbolized in the relationship between project heads and their supervisor at provincial and national level (see Chapter 3 for discussion on how rent-seeking practices were concentrated in the relationship between project heads and their supervisors). The defined project requirements in stimulant fund management incorporated FWUA organizational functioning into the overall project mechanisms and procedures in the implementation of the WATSAL IMT program. FWUAs could acquire their decision-making authority only by adopting the existing project procedure and mechanisms.

FWUA inclusion into the chain of rent-seeking practices became evident from the way the stimulant fund was mismanaged by the majority of FWUAs in Kulon Progo district. Collaborating with the treasurer, the former head of the FWUA in West Pengasih directed¹⁸ almost all of the allocated funds for rehabilitation activities, and any other funds that were channeled to the FWUA, through his personal bank account. FWUA staff in Kongklangan (Papah irrigation system) manipulated their financial report by adding an extra number of laborers above that what was actually needed and increased the amount of per/day pay above what was actually received by these laborers. Similarly, FWUA staff in East Pengasih worked together with DPIS field staff to manipulate the standard mixture of construction materials. In order to gain some financial benefit, more sand was used in the mixture of sand and cement, exceeding the standard formula. In East Pekik Jamal, the FWUA head did not even bother to produce a financial report or inform other FWUA staff and WUA members about fund allocation. Consequently, nobody really knew how he spent the total amount of the stimulant fund.

Actual fund management was conducted through close and informal financial agreements between the FWUA staff. WUA staff and farmers were never informed about this fund management. If WUA staff were involved in this decision-making process, it was because they were also FWUA staff. For FWUA staff in Papah in particular, the decision-making process with regard to the actual use of the stimulant fund was conducted almost in secret,

with no outsiders allowed to be present during the meeting. When I inquired about the reasons behind this secretiveness, some of the staff said that the presence of an outsider would make FWUA staff feel uneasy about making their personal financial arrangements within the overall process of fund management. These financial arrangements included the way part of the stimulant fund was used as FWUA staff salaries. Moreover, FWUA staff took a certain percentage from the total amount of the fund and distributed this 'benefit' among themselves. In a more extreme case, the head of the FWUA in East Pekik Jamal transformed the whole organizational functioning of the FWUA into a one-man organization in order to optimize his financial benefits from managing the stimulant fund. He individually prepared the reports for proposed works and for the financial management of the fund. In turn, all the proposed development activities were conducted by his relatives.

An FWUA's access to stimulant fund linked FWUA functioning to a certain 'logic' in development fund disbursement (see Chapter 2 for explanation and discussion on the logic in development fund disbursement within overall project mechanisms). According to this logic, fund management emphasized spending the allocated development budget regardless of actual development needs. In the context of stimulant fund management, maintenance and rehabilitation activities were conducted because the allocated budget had to be spent within a certain period of time regardless of farmers' actual needs. In turn, FWUA functioning was rooted in the disbursement of stimulant funds rather than in the representation of farmers' needs. As expressed by FWUA staff of Cangkring Mulyo (in Papah irrigation system): "The key behind the good functioning of this FWUA is that its staff are always able to spend the total amount of the allocated development funds" (interview with FWUA staff in Papah, 2004).

With reference to this logic, the FWUA perceived the stimulant fund as a gift. Nobody was expected to feel responsible with regard to the management of the fund. Put differently, FWUA staff were convinced that their access to the stimulant fund would be secure regardless of how they actually used the fund. This confidence was rooted in the financial control mechanisms for projects. Within the project structure, fund management was controlled primarily administratively, through the formulation of a project financial report (see Chapter 2). Whether or not this report was based on the actual use of the funds was considered to be beyond the project head's control. In general, the project head would produce the 'right type' of project report to 'describe' all the activities conducted in the field so as to appear responsible and accountable to his/her supervisor at provincial and national level. The report¹⁹ formulated was not based on the actual data from the field. With reference to this formality in project financial control mechanisms, the SDI project head chose never to bring up the financial misconduct of FWUA West Pengasih and others because reporting these would also negatively affect his performance evaluation. Consequently, FWUA staff viewed his indifferent attitude²⁰ towards the control of the actual use of the stimulant fund as a 'green light' to continue with their rent-seeking practices.

The way the stimulant fund was perceived as a gift became self-evident in the way policy actors coped with the financial ordeal²¹ in FWUA West Pengasih. Neither the newly elected FWUA nor the WUA staff saw the need to follow up the former FWUA head's financial misconduct because they did not perceive the corrupted funds as theirs (except in terms of rights to use it). The newly formed FWUA staff did not consider themselves responsible for correcting the earlier mismanagement of the stimulant fund. With regard to the WUA staff, their demand to the former FWUA staff was directed primarily to initiate FWUA staff change. Thus, confronted only by SDI staff, the former FWUA head insisted that he had not done anything wrong with the actual management of the stimulant fund. In his words: "Materials have been bought and used. Labor has been paid. The amount that has been spent for this cannot be changed because everything has been conducted according to the defined project procedure" (as observed during the restructuring meeting of FWUA West Pengasih, June 2003).

Last but not least, some FWUA heads adopted the project head's strategy to use their access to stimulant fund management as their resource for patronage. This adoption was apparent in the majority of FWUAs in Kulon Progo, but was self-evident in FWUA West Pengasih and FWUA Papah. In West Pengasih, the former FWUA head²² allocated government support (sometimes in the form of construction materials) only to those WUAs who belonged to his alliance. In Papah, the FWUA head ensured equal distribution of the 'financial benefit' made by the FWUA from the management of the stimulant fund among other FWUA staff. He himself took the highest percentage of this benefit.

7.5.3 The stimulant fund and the SDI's preserved bureaucratic power

The SDI preserved its bureaucratic power by confusing²³ FWUAs about the procedures for proposal/report writing in respect of stimulant fund management. The SDI kept FWUA staff ignorant about the standard requirements (technical and managerial) in proposal writing. For instance, there was no formal guideline on how FWUAs should prepare their development proposals. When approached by FWUA staff in Sapon about the matter, SDI staff refused to tell them anything. Instead, SDI staff told FWUA staff that they should approach SDI staff with any question about the requirement during the process of proposal writing itself. In addition, the SDI changed the existing rules or invented new rules in proposal writing according to its interests.

To illustrate how this power was exercised I discuss the way the SDI could whimsically reject and approve FWUA development proposals. Firstly, the SDI decided to reject the proposal made by FWUA Kalibawang and FWUA Sapon because they thought the proposals lacked the required technical explanation. However, I did not see any significant difference between these two proposals and the proposal from FWUA West Pekik Jamal, which was directly approved²⁴ by the SDI. Like the other two rejected proposals, the successful proposal also lacked the required technical explanation. Later, for unknown reasons, stimulant fund was allocated for both FWUA Sapon and FWUA Kalibawang, even when the required technical explanation had not been added to the proposal. Secondly, the SDI decided to postpone the stimulant fund allocation to FWUA East

Pengasih because they thought that FWUA staff had manipulated the actual fund management. The SDI accused the FWUA of preparing the financial report beforehand. However, when the FWUA argued that the early report preparation was made based on the SDI's instruction in previous years, the SDI changed its reason for postponing the fund allocation. They now said that they were not convinced that the FWUA had written th proposal with the involvement of the WUAs. Reacting to the SDI's doubt, a meeting to discuss the proposed development activities was held, attended by all WUA representatives. However, the allocation of stimulant fund for FWUA East Pengasih remained blocked. In the end, the fund was allocated only after the head of FWUA East Pengasih contacted the district head about this ordeal. This was possible because the head of the FWUA was an indirect relative of the district head. Later I discovered that the SDI's decision to postpone the stimulant fund allocation to FWUA East Pengasih was rooted in the alliance between FWUA East Pengasih and DPIS field staff. SDI staff found out that FWUA East Pengasih had asked the DPIS field staff to prepare²⁵ the proposal in return for a considerable fee. In an SDI staff member's words: "Where did the FWUA staff get the money to pay this fee, if not through budget manipulation in its development proposal?" (interview with SDI staff, 2004).

In practice, the majority of FWUAs made informal financial contributions to the SDI as a reaction to the 'complicated' but mainly unclear procedures in proposal writing²⁶. This contribution was deducted from the amount of stimulant fund to be received by each of these FWUAs. Those FWUAs who made this contribution believed that it would smooth the process of their proposal approval by the SDI.

7.6 Target-oriented IMT implementation and FWUA organizational development

IMT implementation under WATSAL was focused on the achievement of certain predefined targets. Project heads should be able to transfer a certain number of irrigation systems, form a certain number of FWUAs and allocate the available stimulant fund within the pre-defined timeframe²⁷ (JIWMP-IDTO progress report, 2002) (see also Chapter 2 for explanation and discussion on the main criteria used to monitor project activities). Firstly, I discuss the way FWUAs were formed and developed rapidly according to the defined project indicators. After that, I discuss how management transfer was reduced to a project target.

7.6.1 Farmer empowerment and rapid FWUA formation

Under WATSAL, FWUA organizational development was focused on the formal fulfillment²⁸ of the pre-defined project targets. An FWUA had to be formally registered as a legal farmer organization. It had to possess formal organizational rules, and it had to have an extensive organizational structure. FWUA organizational development resulted in FWUA bureaucratization²⁹. All registered FWUAs had standardized organizational rules (prepared by SDI staff) and uniform organizational structures. All FWUAs had one

FWUA head, two secretaries, two treasurers as well as separate staff specialized in O&M, rehabilitation, irrigation and administrative tasks.

In practice, FWUAs were formed in isolation from the existing WUAs and farmers. As explained by some officials from the DDPA. FWUA formation was conducted rather hastily, without involving farmers. At the beginning of the WATSAL IMT program implementation, district government staff³⁰ arranged the formation of FWUAs through their connection with village governments. In these officials' words: "In the past, we had to form FWUAs quickly to accommodate rapid management transfer. Hence, FWUAs were formed through the district government's connection with village government. The way FWUAs were to be formed rapidly did not allow either project staff or district government to conduct public awareness properly" (interview with DDPA staff, 2004). Initially, village governments appointed the new WUA heads because most of the formed WUAs were inactive. In general, a village government would appoint its own members as the new WUA heads and include one or two farmers in the newly formed WUA organizational structure. Later, both the district government and SDI staff would select FWUA staff from these appointed WUA heads. Consequently, FWUA formation resulted primarily in the establishment of a new power niche for the rural elite. FWUA staff consisted mainly of both members of the village government and other actors belonging to the rural elite. In Papah, three of the seven FWUA staff were from the village government. The other three staff were retired civil servants (teachers), with a close family connection to the village government. A similar situation occurred in FWUA West and East Pekik Jamal. In the Kalibawang irrigation system, all FWUA staff belonged to the village government structure. In East Pengasih, the FWUA staff's connection with village government extended up to the district head. WUA staff and farmers, on the other hand, became aware of IMT policy (if they became aware at all), only after FWUAs were actually formed and the formal management transfer was conducted. During my field research, none of the thirty-one farmers I interviewed³¹ in the seven irrigation systems in Kulon Progo district was aware of FWUAs (see Chapter 8). It was only in 2005 that the farmer empowerment activities in the WATSAL IMT program were extended to the tertiary level. Nevertheless, the program focused primarily on the formal registration of WUA staff and the status of its organizational rules (see section 7.6.).

In turn, FWUA bureaucratization accommodated the preservation of rural elite domination in the FWUA organizational structure. These elites were better than farmers in conducting the FWUA's administrative tasks because of their bureaucratic and administrative background as village government members. As expressed by the head of FWUA Kongklangan in Papah: "The most important requirement to be FWUA staff was one's administrative capability. Given that the FWUA has to manage the stimulant fund, its staff should be able to write development proposals, financial reports, ISF registration forms, as well as the regular meeting notes" (as stated during the SWOT exercise in Papah, 10 August 2004).

7.6.2 Management transfer as project targets

In its implementation, IMT under WATSAL was reduced to a project target. Systems management was simply transferred from the District Water Resources Services (or DWRS) to FWUAs without taking into account the role of SDI and DPIS field staff in systems management. The project head compromised the formulation of the legal agreement for IMT because he had to spend the total amount of the allocated stimulant fund within the defined timeframe. According to the systematic framework for IMT implementation (see section 7.4.), stimulant fund could only be allocated to an FWUA after formal management transfer. In practice, the formulated legal agreement only stated the transfer of management authority. It failed to redefine tasks as between FWUA, SDI, and DPIS field staff in the overall systems management. In Kulon Progo district, the first efforts to redefine these actors' tasks and roles³² was initiated only in early 2004. This was at least four years after the formal management transfer of the seven technical irrigation systems took place.

Apart from the project head's motivation to speed up the management transfer, FWUA staff also urged the formal management transfer of their irrigation systems because they viewed this as the policy requirement for the allocation of stimulant fund. As expressed by FWUA staff in West Pengasih: "An FWUA was eager to receive the formal responsibility for systems management because management transfer would enable an FWUA to manage the stimulant fund" (interview with FWUA staff in West Pengasih, 2004). In the words of the head of the SDI: "Under WATSAL, IMT was treated as a development indicator, as well as the precondition for the channeling of stimulant fund not to mention the fact that IMT was often perceived as a precondition to 'pull in' project funds" (interview with the head of the SDI, 2004).

In addition, rapid management transfer was partly driven by WATSAL policy makers' concern that Kimpraswil would regain its bureaucratic power and resist the ongoing policy implementation (as happened in 2003). As stated by key policy actors in WATSAL: "If IMT was to be conducted gradually, sooner or later, Kimpraswil would transform IMT under WATSAL to fit its bureaucratic interests" (interview with key policy actors in WATSAL, 2003). Hence, though rapid management transfer could perhaps endanger the concept of farmer empowerment, these actors were convinced that this was better than allowing IMT to be implemented gradually or waiting till farmers were ready to take over. In their words: "Farmer empowerment could still be undertaken after the systems were formally transferred". Consequently, rapid implementation of IMT policy in Kulon Progo district successfully prevented Kimpraswil from redirecting the policy path towards recentralization.

7.7 Community organizer recruitment: a reflection of the project development approach

The employment of a community organizer (CO) in the aftermath of the IMT policy struggles reflected the way the WATSAL IMT program implementation was

overwhelmed by project procedures and mechanisms. Firstly, I illuminate the way COs had always been viewed as a financial waste by policy actors at district level. Secondly, I illustrate how CO employment in 2005 was continued only because project funds had to be spent.

7.7.1 Who needs a community organizer?

The recruitment of the COs started as early as 2000. A CO's role was to guide and facilitate FWUA organizational development. In Kulon Progo each FWUA was equipped with two COs. Initially, COs were recruited from outside the FWUA and SDI organizational structure, emphasizing its neutral character as the third party in the relation between FWUA and SDI staff. However, later, more and more FWUA staff were recruited as COs. At first, to become a CO, one needed a bachelor degree in agriculture. However, later on, this educational requirement was scrapped because WATSAL policy makers thought that those with a higher academic education did not necessarily function better than those without any academic education. Following this scrapping, every FWUA staff member could easily become a CO.

CO employment in Kulon Progo was necessitated by project fund disbursement. At district level, nobody wanted COs. Most FWUA staff objected to CO employment. As expressed by former FWUA staff in the Papah irrigation system: "An FWUA did not need a CO. A CO received a high salary, but it is not clear what the added value was for the FWUA staff in having this CO" (interview with former FWUA staff in Papah, 2004). Like FWUA staff, SDI staff did not see the need to spend project funds on CO employment. As stated by one of the SDI staff: "Nobody ever expressed their need to have a CO. Even when the CO was introduced, no one saw the actual use of their role in IMT. Nevertheless, COs were recruited everywhere because the project management thought that these COs might be useful to improve FWUAs' organizational development in IMT" (interview with SDI staff, 2004).

In practice, COs were trapped in the power struggle between FWUA staff, SDI staff, and the DPIS field staff. For example, when a CO tried to follow the SDI's instruction to focus on the ISF collection rate, DPIS field staff often criticized his lack of involvement in irrigation practices in the field. Similarly, when a CO focused his empowerment efforts on increasing the FWUA's role in water distribution activities, both SDI staff and DPIS field staff blamed him for being unable to increase the ISF collection rates. In addition, a CO was often misused by both FWUA staff and DPIS field staff because a CO lacked bureaucratic support from the district government (a CO's bureaucratic supervisor was the project head at provincial level). For instance, during the process of proposal writing, FWUA staff often asked the CO to prepare the proposal. In some cases, DPIS field staff instructed the CO to do their O&M tasks. When the CO refused to do this, both FWUA and the DPIS field staff accused him of being uncooperative and arrogant (as expressed by some COs during a CO coordination meeting, 2 August 2004).

In addition, a CO was often viewed as a potential competitor by the DPIS field staff. In fact, CO employment had eliminated DPIS field staff's main informal sources of income. Formerly, DPIS field staff often received a considerable fee from FWUA staff for their effort in preparing the proposal for small repairs and maintenance, as well as in writing the financial report with regard to stimulant fund management. However, since the introduction of the CO in 2000, more and more FWUA staff were using their COs to undertake the reporting work because FWUA staff did not have to pay any fee to these COs. In turn, a CO had to go through the whole bureaucratic procedures of the DPIS in order to gain the information from the DPIS field staff⁹³ (such as data on WUAs staff, their ISF collection rate).

7.7.2 CO employment in the aftermath of the IMT policy struggle

In 2005, CO employment was continued because the disbursed project funds had to be spent. Prior to the policy struggles, the project head proposed CO employment together with other activities to strengthen FWUA organizational functioning as part of the NewISF program. In the aftermath of the IMT policy struggles, CO employment was the only project activity which received funding from the MoHA. SDI staff proposed that the project head at district level should disburse the project funds that were meant for CO employment directly to the FWUA as additional funds support, because nobody wanted the continuation of the CO program. However, the project head insisted on CO employment.

This time the CO's job description was focused on the formal establishment of WUAs. A CO's task concerned updating each WUA's legal and administrative status, as well as encouraging regular WUA staff meetings. A CO had to reach the following targets: that each WUA should replace its staff within a certain defined time period (even when these staff never functioned from the beginning), that the renewed staff should redefine the existing organizational rules (which were standardly defined by the SDI staff in the first place), and that all WUA activities should be administratively registered (even when nobody seemed to know in what way this registration could be useful for the WUA and farmers).

In practice, COs found it extremely difficult to meet the WUA staff because these WUAs existed only on paper. In most cases, after trying several times, a CO only managed to meet the registered head of the WUA, while its staff remained unidentified. Furthermore, a CO was not mandated either to improve the organizational link between these WUAs and their FWUA, or to direct WUA organizational functioning towards a broader context of development outside irrigation practices. For example, when the CO in the Kalibawang irrigation system planned to approach FWUA staff to initiate an FWUA-WUA dialogue with regard to the cost of small repairs that had been conducted in the past, the CO coordinator advised him to focus his tasks mainly on improving the formal functioning of the WUAs. Similarly, when he asked whether he could include farmer activities in agricultural enterprises as part of the WUA empowerment program, he was told to focus his attention on the role of WUAs in irrigation systems management³⁴.

7.8 Conclusion

The incorporation of IMT policy under WATSAL into regional autonomy resulted in the internal fragmentation of the irrigation bureaucracy. Regional autonomy cut the sectoral command line, and thus changed the pattern of alliances in the irrigation sector's development. With the incorporation of former staff of the Division of Provincial Irrigation Services (DPIS) into the Sub-Division of Irrigation (SDI) under the district government, the national irrigation agency had lost its representatives at the district level. This bureaucratic fragmentation was evident from the decision made by the irrigation agency in Kulon Progo district to continue with the WATSAL IMT program. In the aftermath of the IMT policy struggles, apart from its ability to freeze sectoral development fund disbursement, Kimpraswil lacked any bureaucratic power to steer the SDI's position with regard to the WATSAL IMT program.

However, this internal fragmentation does not imply that IMT implementation under WATSAL was not resisted. SDI staff's decision to continue with the WATSAL IMT program was rooted in their ability to sustain its bureaucratic identity amidst the overall process of management transfer and the farmer empowerment program. The preservation of this bureaucratic identity was apparent from the way SDI staff in Kulon Progo district directed FWUA organizational development towards infrastructure-oriented development (see Chapter 3 on the irrigation agency's organizational foundation). The FWUA became a replica of the irrigation agency.

The WATSAL IMT program failed to eradicate the practice of rent-seeking in the irrigation sector's development. On the contrary, the way the IMT program was implemented through the project approach resulted in transferred rent-seeking practices from the irrigation agency to FWUAs. Because of FWUA staff's financial interests, rent-seeking practices in irrigation systems management were not eradicated by transferring the decision-making authority for fund management from the irrigation agency to the FWUA. Put another way, FWUA's access to manage the stimulant fund did not result in greater representation of farmers' needs in irrigation system management, but rather linked FWUAs to the rent-seeking cycle rooted in the management of project funds - this despite the WATSAL policy makers' intention to use the FWUA as a platform to empower farmers. Comparable to IMT implementation under the IOMP 1987 statement, IMT under WATSAL continued to be manipulated by both the district irrigation agency (SDI) and FWUA staff. Like before, IMT under WATSAL failed to address and incorporate farmers' actual development needs.

The WATSAL IMT program did not eliminate farmer dependency on government funding support. FWUAs' access to stimulant fund management preserved the 'cyclical relationship of codependency' (Vermillion, Samad, Pusposutardjo, Arif and Rochdyanto, 2000)(see also Chapter 5 for the explanation of this relationship). As both FWUAs and the irrigation agency based their organizational functioning on government funds support, IMT sustained the vicious cycle of bad construction/deferred maintenance/early rehabilitation.

FWUAs' access to the stimulant fund was designed to eradicate rent-seeking practices. The way this has backfired shows how the implementation of the WATSAL IMT program is shaped primarily by the policy actors' strategy to satisfy their own policy interests. The way IMT policy prescription under the WATSAL program has been manipulated by both FWUA and SDI staff shows how the WATSAL IMT program formulation and its implementation are linked through a series of decisions and actions constructed by the policy actors at the different levels (national and regional). With reference to this link, there is a certain limit within which the designed policy elements were executable to reach the defined policy objectives. Essential in determining this limit is the policy actors' room for maneuver, and thus their perceptions and interests in relation to the proposed policy, as well as their ability to shape and reshape the designed policy elements. In short, it was not only in its formulation that the WATSAL IMT program was contested, but also in its implementation.

The implementation of the WATSAL IMT program through the project approach limited the scope of IMT to that of a policy blueprint. The WATSAL policy makers' attempt to reform the irrigation sector was trapped in the massive project structure as the only way to channel the policy program from national to regional level. Like in the IOMP 1987 statement, IMT implementation under WATSAL was limited by project procedures to be followed and targets to be reached. IMT policy was reduced to a bureaucratic, administrative exercise of the project head because its implementation was monitored exclusively through project reports made by the project head. No attention was given to how the IMT program was perceived by the stakeholders. From this perspective, IMT implementation under WATSAL was similar to the construction and rehabilitation program conducted under the IOMP 1987 statement. Similarly, as IMT implementation under the IOMP had resulted in the formation of WUA as a paper organization, IMT under WATSAL resulted in FWUA bureaucratization. FWUA organizational development was directed towards its staff's administrative ability to meet the defined project procedures regardless of how they perceived the project activities.

¹ These workshops were held, respectively, on 11 March and 18 April 2004.

² Kimpraswil's proposal to halt the implementation of IMT under WATSAL was widely accepted by both the provincial and the district irrigation agencies in Central Java (interviews with PIA staff Yogyakarta, West Java, and East Java, 2004).

³ This was because regional autonomy was not accompanied by a fiscal transfer from central to regional governments. Hence, the central government remained the main financial contributor to the regional development activities.

⁴ I did not include Central Java in my analysis because PIA and PIP officials' strong opposition towards the WATSAL IMT in the province did not allow me to open a discussion on the subject, especially during the aftermath of the IMT policy struggles. In addition, in Central Java, IMT implementation never included the transfer of management authority from government to FWUAs, but was focused on rehabilitation and construction activities (as part of the technical preparation for the management transfer).

⁵ Interviews with officials from PIA Yogyakarta, 2004.

⁶ The PTGA unit was formed in the late 1980s (see Chapter 3). The unit was assigned the task of training and empowering farmers in irrigation systems management. Both at the national and provincial levels, PTGA consisted of officials who lacked the connections to be involved in the irrigation agency's construction and rehabilitation projects.

⁷ In my opinion, the support of the PIP project head would enable the PIA head to continue with IMT

implementation, even when he was not fully supported by the majority of PIA officials.

⁸ The PIP project head adopted Kimpraswil's argument to justify his decision to halt the WATSAL IMT

implementation. For example, he argued that IMT would only give farmers an extra financial burden.

The motivation of the PIA head was shared by the former project heads in the PIP. She thought that the regional government's position on IMT should be based on farmers' needs. Further, she counter-argued Kimpraswil's assumption on farmers' incapability by questioning the capability of the irrigation bureaucracy at all levels to adapt to its new role, as proposed in IMT under WATSAL. In her words: "Development in the irrigation sector should be oriented towards the representation of farmers' needs, and thus the need to change the development mind-set of the government bureaucracy. But, in general, most government staff were not ready to make this change. Instead, they were worried about their future role in irrigation management. They used to confuse farmers through their overlapping instructions, hence, when farmers were independent and knew what they had to do, these government staff were the ones who got confused" (interview with the former project head in PIP Yogyakarta, 2004). In addition, she thought that regional government could also use this moment of policy confusion to rethink the actual meaning of management transfer within the overall context of regional development. For example, the direction towards which IMT policy would take farmers and how the regional government sees its role in this process.

Interviews with PIA officials in East Java, 2004.

¹¹ IMT under the IOMP and later in the pre-WATSAL JIWMP was implemented by provincial government staff, stationed at district level.

¹² At district level, the DPIS was never abolished. This was unlike at the provincial level, where regional autonomy resulted in the abolition of the MPW's regional offices. The decision was made based on the grounds that a bureaucratic vacuum might occur following the abolition of the DPIS. At district level, a bureaucratic vacuum could lead to a massive delay in development, whereas at the provincial level, a bureaucratic vacuum would not affect the actual development activities at district level. Given that the provincial governments' role in irrigation sector development was that of coordinator and facilitator, it was thought that government staff could fulfill these roles, with or without the presence of the MPW's regional offices.

¹³ The formal transfer of some of the key decision makers from the former DPIS staff to the district government had accommodated the process of bureaucratic transformation taking place alongside the WATSAL JMT implementation. For instance, the head of water resources in the District Development Planning Agency (DDPA) was a former DPIS staff member. Similarly, one of the key actors in the WATSAL IMT (from the SDI) was former DPIS staff. Logically, as their new bureaucratic position was shaped by their relationship and interaction with other policy actors in the district government, this enabled them to transfer their bureaucratic loyalty from

their sectoral ministry to the district government.

¹⁴ The Irrigation Committee was formed under WATSAL, mainly to replace the existing Irrigation Administration at district level. In addition to the representative of different government institutions (DWRS, DDPA, DOA), FWUA leaders were also represented within the Irrigation Committee. The formal role of this committee was to coordinate irrigation development activities at district level, in general, and to monitor the WATSAL IMT implementation, in particular. In Kulon Progo, the Irrigation Committee only started functioning in mid 2003, in the aftermath of the IMT policy struggles.

15 SDI staff's ability to pull in some funds from the district government's revenue was conditioned by their good

relationship with other bureaucratic actors in the District Development Planning Agency (DDPA).

¹⁶ In my opinion, the competition reflected the way government staff still treated FWUAs as their policy object. FWUAs were viewed primarily as a government policy instrument, in which organizational functioning needed to be improved. By highlighting the good functioning of particular FWUAs, it was hoped that other FWUAs might learn from them as an example. However, when a particularly well functioning FWUA was declared the winner of the competition, it remained obscure how this could solve the organizational problems of other FWUAs.

¹⁷ IMT under WATSAL remained trapped in the infrastructure-oriented development paradigm during its implementation (see also Chapter 4 for discussion on infrastructure development in IMT). In my opinion, even if

this transfer of decision-making authority for fund management proved effective in eradicating the practice of bureaucratic rent-seeking in the irrigation sector, the eradication did not necessarily enable FWUAs to manage the irrigation system in line with farmers' development needs.

¹⁸ Different versions of financial reports were made repeatedly by the former head of the FWUA West Pengasih to cover his financial misconducts. Each time the SDI staff pointed out the absurdity of the financial report, the FWUA head produced a new report (signed under the name of a different FWUA staff member). For example, in one of these reports, the total budget spent on labor exceeded the standard labor cost, to such an extent that SDI staff questioned whether the FWUA was conducting major demolition activities.

¹⁹ Project heads often prepared the financial reports before development activities were conducted (see Chapter

2).

The project heads' indifferent attitude at district level was evidenced by the fact that even after the financial ordeal in stimulant fund mismanagement had resulted in the replacement of the FWUA head in West Pengasih, the following year, the fund was transferred to the bank account of the former FWUA head.

²¹ This financial ordeal resulted in the organizational restructuring of FWUA in West Pengasih. The FWUA head and the other staff that belonged to his alliance were replaced by new staff. Though this organizational restructuring showed a good organizational dynamic in the FWUA, especially with regard to farmers' and WUA staff's ability to redirect the actual functioning of the FWUA. I have to add here that this restructuring would have never taken place in the first place, had the call for open FWUA meetings not been initiated and urged by the SDI staff.

²² These FWUA heads were also securing their corruption practices by involving as many people as possible in them (see also Chapter 3 for discussion on the way corruption practices within government bureaucracy are sustained and reproduced).

²³ Apart from their efforts to confuse FWUA staff, SDI staff also 'taught' FWUA staff to manipulate the stimulant fund management. For instance, during a meeting with an FWUA in Sapon, SDI staff literally asked FWUA staff about their preferences: to deliver a construction of a smaller size (and keep the material composition according to the defined standard), or to construct according to its proposed size (but reduce the amount of cement in the construction material composition). In general, FWUA staff chose for the first option because they wanted to ensure the construction quality. However, SDI staff suggested that they choose the second option, because when project auditing was applied, the person responsible for monitoring the implementation would not discover anything strange, since the construction matched the proposed size.

²⁴ Later, I discovered that the direct approval was linked to the close relationship between the head of FWUA West Pekik Jamal and an SDI staff member (see Chapter 8 for discussion on the alliance between the FWUA and the SDI).

²⁵ From my interviews with FWUA staff and DPIS staff I learned that cooperation between FWUA and DPIS field staff was quite common. Some of the FWUAs in the Sapon irrigation system (FWUA Wonokasih in particular) even delegated all the working arrangements in relation to stimulant funds to the former DPIS field staff.

²⁶ Interviews with FWUA staff, 2004.

²⁷ Target-oriented IMT implementation was evident from the presentation by the head of the PIA West Java during the MoHA national seminar on IMT in Jakarta (presentation by the head of PIA West Java during the MoHA national seminar in Jakarta, 5 December 2003). In his presentation he focused on the achievement of IMT policy targets, in the form of number of irrigation systems being transferred (in hectares), the number of FWUAs formed, and the amount of development funding spent on system rehabilitation as part of IMT preparation.

28 I use the word 'formal' to emphasize the fact that these targets were only met on paper.

²⁹ The term bureaucratization refers to the way SDI staff directed FWUA organizational development, following the irrigation agency's bureaucratic development path.

³⁰ Different policy actors (from the SDI as well as the DDPA) presented the difficulty of organizing farmers and the non-functioning WUAs as their main argument to limit the process of FWUA formation to several key actors within the village government structure.

31 These interviews were conducted randomly at the head, mid, and tail-end of each irrigation system.

32 However, the district government decided to postpone the discussion on task redefinition because of the stagnant funds disbursement from the central ministries. Instead, the available development funds from regional revenue would be used to cover first priority activity only, such as systems repairs and maintenance.

Interviews with COs in Kulon Progo district, 2004.
 As observed during a CO coordination meeting, 2 August 2004.

8 IMT and water distribution practices in Kulon Progo district

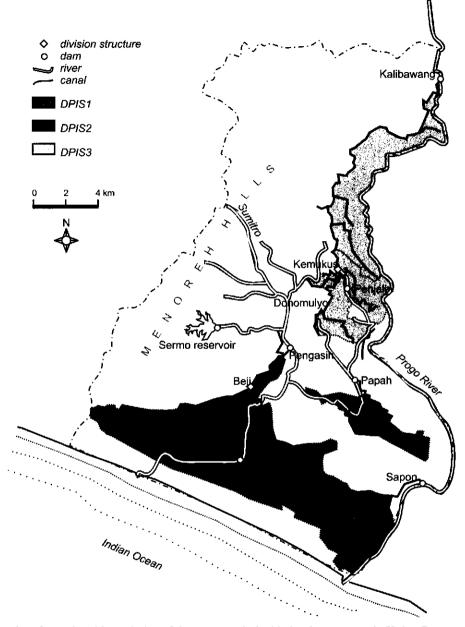
8.1 Introduction

This chapter explores the way the WATSAL IMT program shaped the overall water distribution pattern in the seven technical irrigation systems in Kulon Progo district, Yogyakarta province from June 2004 to July 2005. Moreover, it illustrates the domination of rural elite in FWUA organizational functioning and FWUA-WUA-farmer relationships.

The main findings of the chapter are:

- The implementation of the WATSAL IMT program in Kulon Progo district showed that transfer of management authority to FWUA did not directly result in the establishment of these FWUAs as the new authority in system management
- IMT reshaped the overall process of alliance formation between the irrigation agency (both SDI and DPIS field staff) and FWUAs
- The overall process of alliance formation in the water distribution shows the organizational fragmentation of the district irrigation agency
- IMT in Kulon Progo district resulted in fragmented decision-making authority in water distribution
- IMT intensified and complicated the overall process of negotiations about water distribution at both the system and the inter-system level
- IMT under WATSAL failed to revitalize farmers' role in system water distribution

The general description of the interconnected irrigation systems in Kulon Progo is presented in section 1. Section 2 discusses the way the WATSAL IMT program shaped inter-system water distribution and how the Sub-Division of Irrigation (SDI) tried to cope with this. In section 3, the dominant patterns of alliances in system water distribution are presented. The way IMT contributed to the occurrence of unequal water distribution at the inter-system level down to the farmers' field is discussed in section 4. Section 5 illuminates the rural elite domination in FWUA functioning. Section 6 describes the different types of elite leadership which emerged in the seven technical irrigation systems and how the elite's struggle could shape farmer-elite relationships towards greater representation of farmers' needs in water distribution. Section 7 illuminates the way elite domination in FWUAs shaped WUA organizational functioning. Section 8 illustrates how



Map 8.1: Operational boundaries of the seven technical irrigation systems in Kulon Progo

WUA's role in directing water distribution at the tertiary level was shaped by a single WUA person.

8.2 General description of irrigation systems in Kulon Progo district

The irrigation systems in Kulon Progo district consist of small-scale (mostly smaller than 1,000 hectares), run-off-the-river systems, which are interconnected through networks of irrigation and drainage canals, as well as river tributaries. Each system's location as well as their interconnection in irrigation are presented in Map 7.2.

Technically, irrigation systems in this interconnected system were divided into three jurisdictional areas, with each area operated under the authority of, respectively, DPIS (Division of Provincial Irrigation Services) 1, 2, and 3. DPIS 1 was responsible for the operation of the Pekik Jamal and Sapon irrigation systems. The Papah and Pengasih irrigation systems were operated by DPIS 2 field staff. DPIS 3 covered the Kalibawang, Penjalin, and Donomulyo irrigation systems. After IMT, these field staff maintained their position as system operators.

An overview of each irrigation system and the hydrological/technical inter-system connection between them is presented in, respectively, Table 8.1. and Figure 8.1.

Irrigation system	Size (ha)	Number of FWUAs	Number of WUAs	Number of DPIS staff	Golongan system	Location
Kalibawang	1.488	2	41	2	1	upstream
Donomulyo	534	1	18	1	1	upstream
Penjalin	652	1	12	1	1	upstream
Papah	983	2	16	1	2	mid
East Pengasih	671	1	15	2	1/2	mid/tail
West Pengasih	1,329	1	20	2	2	tail-end
Pekik Jamal	868	2	15	2	1/2	tail-end
Sapon	1,800	3	36	2	1	mid

Table 8.1: Overview of technical irrigation systems in Kulon Progo district

Upstream of the interconnected system, Kalibawang gets its irrigation water directly from Progo river¹. The flow (7m³/s) that enters the Kalibawang intake is also used to irrigate other irrigation systems located downstream from the system. The Kalibawang irrigation system is divided into two water management units, respectively Kalibawang I and II, each with an FWUA (Federation of Water User Associations) responsible for irrigation management in each unit. Unlike other systems, all tertiary intakes in the Kalibawang system are directly linked to the main canal. Both FWUAs' organizational boundaries were defined by dividing the length of the main canal, as secondary canals are lacking in the system. At the end of the Kalibawang main canal, both the remaining irrigation water

Irrigation systems interconnection

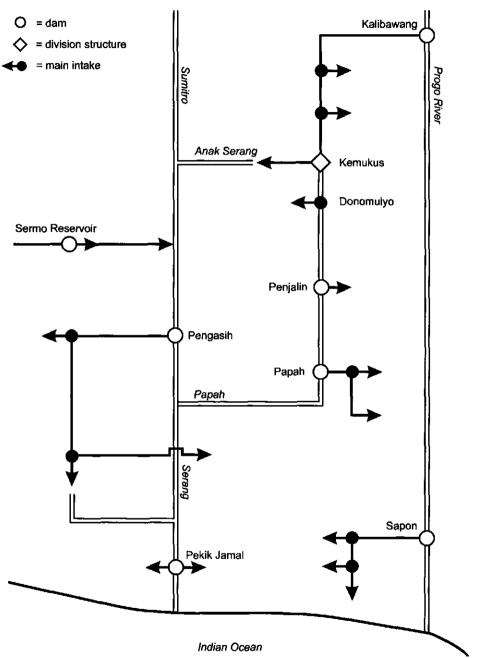


Figure 8.1: Hydrological/technical inter-system connection in irrigation systems management

and the incoming drains from the Kalibawang system are collected and regulated in the Kemukus division structure for further distribution to the downstream systems. These irrigation systems are located on the south-eastern part (Donomulyo, Penjalin and Papah), and on the south-western part (East and West Pengasih) of Kalibawang. Irrigation water is channeled directly to the south-eastern irrigation systems through an irrigation canal network. With regard to the south-western irrigation systems, irrigation water is channeled through a network of natural drainage (Anak Serang tributaries), before it is 'caught' back into the irrigation canal in the Pengasih system. This connection combines irrigation water supply from the Kemukus with additional supply from existing river tributaries.

For the south-eastern part, irrigation water is first channeled to the Donomulyo irrigation system (through an intake). Shortly after the intake, water is channeled respectively to the Penjalin and Papah irrigation systems (through a dam, located upstream of each system). Upon entering the Papah irrigation system, irrigation water is directly divided between two secondary canals, each managed by an FWUA. Lower in the system, drainage water from Papah again reconnects the south-eastern with the south-western irrigation systems. This water is channeled to the Pengasih irrigation system, through Papah river tributaries. For the south-western systems, the government operates a reservoir to ensure irrigation water supply to the Pengasih and Pekik Jamal irrigation systems². Upstream of Pengasih dam, three village irrigation systems³ (under 200 hectares) take the irrigation water released from Sermo reservoir as well as water channeled from Kalibawang, including the amount already added by the actual water supply from Sumitro river tributaries. Passing these village irrigation systems, the water is 'caught' back into the irrigation canal in Pengasih. At the end of Pengasih main canal, there is another division structure (Beji), to divide irrigation water supply between East and West Pengasih, The Beji division structure is a 'proportional' one (the role of this 'proportional' division structure in directing water distribution between the East and West Pengasih irrigation systems will be discussed in section 8.3.). As for the Pekik Jamal irrigation system, it gets its water supply through the irrigation canal in East Pengasih as well as drainage water from the East Pengasih and Papah irrigation systems, channeled through the extension of Sumitro and Serang river tributaries (which are also connected to Papah river tributaries). However, in the event of water scarcity, additional water could be released from Sermo reservoir to East Pekik Jamal. Last but not least, the Sapon irrigation system takes its water directly from Progo river with its direct intake located approximately 34 km downstream from the Kalibawang intake.

An inter-system working relationship is essential for the management of these interconnected irrigation systems. The fact that each system's water supply is related (both technically and naturally) to the other systems' water supply reflects a high degree of technical complexity for overall systems management.

The overview of the inter-system water delivery schedule is presented in Table 8.2.

Table 8.2: Overview of the water distribution schedule at the inter-system level

Irrigation infrastructure	Amount of targeted discharge	System operator	Task	
Kalibawang intake	7 m ³ /s	Z from DPIS 3	Z is responsible for the overall water distribution in the Kalibawang, Penjalin and Donomulyo systems	
Kemukus division structure	3 m ³ /s	B from DPIS 3	B is responsible for the operation of the Kemukus division structure. Water entering the Kemukus should be divided equally between the Papah and Pengasih irrigation systems	
Beji division structure	1.5 m ³ /s	C from DPIS 2	C is responsible for the overall water distribution in the Pengasih irrigation system. From Beji, water is distributed to the East and West Pengasih irrigation systems proportionally. C is supported by two field staff (one each in East and West Pengasih)	
Papah dam	1.5 m³/s	D from DPIS 2	D is responsible for the operation of the gate in Papah dam. From the dam, water is channeled to secondary canals Kongklangan and Cangkring Mulyo	
Pekik Jamal dam	0.8 m ³ /s	E & F from DPIS 1	E is responsible for the operation of the gate in Pekik Jamal dam. F is responsible for the overall water distribution in the Pekik Jamal and Sapon irrigation systems	
Sapon dam	1.5 m ³ /s	G from DPIS 1	G is responsible for the operation of the gate in Sapon dam	

In practice, the absence of water balance at inter-system level highlights the presence of a permanent technical handicap in the management of interconnected run-off-the river irrigation systems. The amount of water discharge recorded at the dam does not technically capture the link between upstream and downstream water supply because irrigation water from both upstream systems and existing river tributaries are mixed before they entered the dam. The way these irrigation systems are interconnected to each other makes it extremely difficult if not impossible to measure the actual water discharge from all the existing river tributaries in the area. Practically and also technically, it is impossible to station measurement structures in each river tributary and natural drainage channel.

Nevertheless, the coexistence of the two networks of water supply (irrigation canals and river tributaries) in interconnected irrigation systems increases the irrigation systems' efficiency, and conditions the application of more flexible irrigation management. In interconnected irrigation systems, irrigation water can be used more efficiently because drainage water (from both natural and technical drainage) from upstream systems can be reused to irrigate agricultural land in downstream systems. Similarly, the possibility to transport water to a certain area increases with the increased number of water sources. For example, during the dry season, drainage canals in upstream systems are used as irrigation

canals to transport irrigation water to downstream systems or tail-end areas. Put differently, in interconnected irrigation systems the concept of water control (Mollinga, 1998) is applied in a broader, more horizontal and thus less hierarchic management context. Also each system's capability to 'store' water is spread over the entire system, rather than concentrated on certain technical infrastructure (such as dams or reservoirs).

In Kulon Progo two golongan systems are applied to cope with the peak water demand during the dry season (between April and October). The application of the golongan system started in 1985. However, the current golongan system has only been in place since 1990. Apart from each system's location or water availability in both Sermo reservoir and Progo river, the way the golongan system is defined also takes into account factors such as the way field-to-field irrigation is practiced, the possible flooding⁴ in certain areas of these systems, as well as the village boundaries⁵ within each irrigation system. The first golongan system primarily includes upstream irrigation systems (Kalibawang, Donomulyo, Penjalin), some parts of East Pengasih and East Pekik Jamal, as well as the Sapon irrigation system. Golongan 1 covers approximately 4,800 hectares of irrigated land. Golongan 2 includes mainly the mid (Papah) and downstream (West Pengasih and some parts of East Pengasih and West Pekik Jamal) irrigation systems. Golongan 2 covers approximately 3,400 hectares of irrigated land. The overview of the golongan system is presented in Figure 8.2.

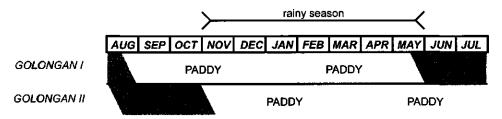


Figure 8.2: Overview of the golongan system in Kulon Progo district

Officially, irrigation systems within the first golongan start with their first paddy crop in August or September. After the first harvest in December or January, the second paddy season is planned between January and May. Between May and July, farmers in golongan 1 cultivate dry crops. As regards the second golongan, farmers start with their first paddy crop only in November or December (at the start of the rainy season), and complete it between March and April. The second paddy season is planned between April and August, followed by the cultivation of dry crops between September and November. In this way, prior to the start of the rainy seasons (between August and September), theoretically, water supply from both Progo river and Sermo reservoir would only be used to irrigate systems in golongan 1. Similarly, at the beginning of the dry season (in May), water supply is solely channeled to farmers in golongan 2 because farmers in golongan 1 have completed their second paddy crop. The way the seven technical irrigation systems are divided into the two golongan is shown in Map 8.1.

Prior to the implementation of the WATSAL IMT program, IMT had already been introduced in the seven technical irrigation systems in Kulon Progo district under the Irrigation Operation and Maintenance Project (IOMP) 1987. Under the IOMP, WUAs were formed at the tertiary level. WUAs' activities were focused primarily on the so-called participatory design and rehabilitation program and ISF (irrigation service fee) collection (Sindorf-Suhardiman, 1998). In practice, WUAs hardly played any role in the water distribution context, as an organization. However, incorporated in the WUA was the village *ulu ulu*, whose task was to arrange irrigation water distribution for farmers (even prior to the WUA formation) (Ambler, 1991).

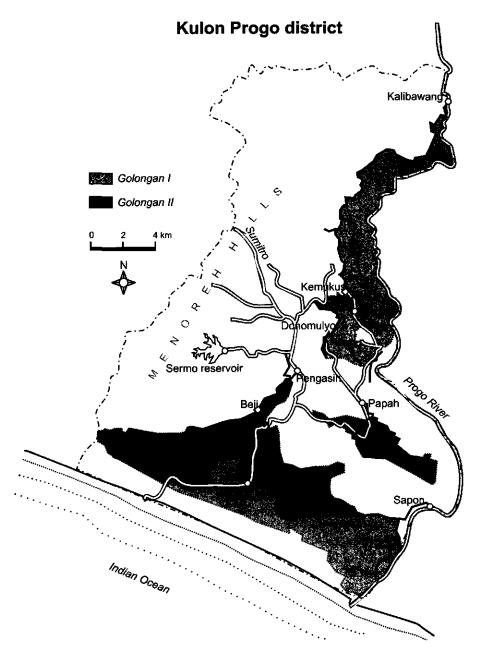
Apart from the role played by the ulu ulu, WUAs hardly represented farmers' development needs in their functioning. Under the IOMP, WUA staff consisted primarily of the rural elite, as WUA formation became one of the project targets in the IOMP (see also Chapter 7 on how FWUA formation under WATSAL was conducted in a similar way). In rural Java, there are two different types of elite group (Koentjaraningrat, 1967). The first group is called the village 'privayi'. The importance of this group is characterized by their access to agricultural land (as big landowner), and their decision-making authority in the village government (as village government members). These rural elite include the village government members and other (retired) civil servants (teachers, staff from different government ministries at village level). Their relationship with farmers takes shape in an owner-tenant relationship. The second group of rural elite is called 'rural entrepreneurs'. The power of this group is rooted in their capability to invest in their agricultural practices (better seeds, fertilizers, use of pumps). This group only gets involved in activities which could bring them financial benefits. This group of elite includes wealthy farmers who farm on a commercial basis. In Kulon Progo district, the domination of these two groups of elite was apparent in all FWUA organizational structures throughout the systems. However, the rural entrepreneurs were most dominant in upstream FWUAs (Kalibawang, Penjalin and Donomulyo).

8.3 IMT and water distribution at the inter-system level

In this section, I firstly illuminate how IMT in Kulon Progo district did not result in the transfer of decision-making authority for water distribution practices to either system level WUAs (or SWUAs) or FWUAs. Secondly, I discuss the SDI staff's attempt to cope with the inter-system water distribution practices after management transfer.

8.3.1 IMT and farmers' decision-making authority for water distribution

IMT in Kulon Progo did not result in the transfer of decision-making authority for water distribution from government to SWUAs or FWUAs. System level WUAs' and FWUAs' decision-making authority in respect of water distribution was restricted by the continuing presence of DPIS field staff. After the formal transfer, DPIS field staff's responsibility was to be replaced by both SWUAs and FWUAs.



Map 8.2: The official division of the *golongan* system for technical irrigation systems in Kulon Progo district

However, in practice, DPIS field staff remained in charge of the actual operation of key irrigation infrastructure at the system level. Logically, SWUAs became dysfunctional. Similarly, the FWUAs' actual role in water distribution was overshadowed by DPIS field staff because they lacked the decision-making authority to define the amount of water that entered into the irrigation system.

The DPIS field staff's remaining importance in overall systems management impeded the establishment of inter-SWUA/FWUA relationships and hampered delegation between the SDI and FWUAs. Under WATSAL, SDI staff were responsible for facilitating the establishment of SWUA-FWUA relationships. This relationship was essential in shaping water distribution practices at the inter-system level. Through the relationship, SDI staff could direct SWUAs to operate the irrigation infrastructure at system level in accordance with the agreed inter-system water delivery schedule. In practice, SDI staff could not fine tune the actual operation of the irrigation infrastructure with the agreed water delivery schedule because SWUAs were dysfunctional. Similarly, SDI staff could not delegate water distribution tasks to FWUAs because these FWUAs were not in charge of the actual operation of the irrigation infrastructure. Furthermore, SDI staff could not integrate DPIS field staff into the overall systems management plan because they lacked the bureaucratic power to direct DPIS field staff in the field (see Chapter 7 for a more detailed explanation on the cut command line between SDI and DPIS field staff, as a consequence of regional autonomy).

IMT resulted in fragmented decision-making authority in water distribution arrangements. At the inter-system level, SDI staff defined the water distribution plan. Yet, at system level, DPIS field staff were in charge of operating the irrigation infrastructure apart from the overall water distribution plan. In turn, FWUAs arranged water distribution at the secondary level without any link to the defined inter-system level water delivery schedule.

The operation of the Kemukus division structure evidenced the fragmented decisionmaking authority in relation to water distribution arrangements after IMT. The Kemukus division structure played a central role in shaping the actual water distribution between upstream, mid, and downstream irrigation systems. The way irrigation water was distributed through the Kemukus division structure (to the south-eastern and southwestern part) was essential in ensuring equal water distribution between all irrigation systems located downstream from Kalibawang. Prior to IMT and regional autonomy, DPIS 3 field staff would discuss the actual operation of the Kemukus division structure with the SDI staff (the former DPIS) because they worked under the SDI staff's authority. For example, both SDI and DPIS field staff would regulate inter-system water distribution by targeting the amount of discharge that should enter the Kemukus division structure. When the amount of water in the Kemukus was below 3m³/s, DPIS 3 field staff would close intakes in the upstream system (Kalibawang) to ensure irrigation water supply for the downstream systems. At present, the Kemukus division structure is operated by DPIS 3 field staff, without reference to the defined water distribution arrangements at the intersystem level. For instance, DPIS 3 field staff would channel more irrigation water to the

Papah irrigation system than to Pengasih because of Z's close connection with farmers in the Papah area.

8.3.2 The ten-day water distribution meeting

In mid 2003 (three years after IMT⁶ under WATSAL was officially implemented in Kulon Progo district), SDI staff introduced the 'ten-day water distribution meeting' (a meeting was to take place every ten days) to integrate DPIS field staff into the overall systems management plan and encourage the establishment of inter-FWUA relationships. This meeting was meant to create a decision-making platform to coordinate water distribution efforts at the inter-system level, by involving all the existing actors. The meeting took place in the SDI office. During this meeting, SDI staff would discuss the defined water distribution schedule in relation to the actual water needs as proposed by the FWUAs and DPIS field staff. At the end of the meeting, an agreement would be made on how to coordinate the overall system water distribution.

In practice, this ten-day water distribution meeting failed to incorporate DPIS field staff's actual involvement into the overall water distribution arrangements at the inter-system level. The meeting could not revitalize SDI's bureaucratic power to direct DPIS field staff's conduct. During one of the meetings, DPIS 1 field staff publicly questioned the actual importance of the ten-day water distribution meeting. In DPIS 1 field staff's words: "If the agreed water distribution plan cannot be materialized to solve water scarcity problems in the downstream irrigation systems, then, what is the actual importance of this meeting?" (as expressed by DPIS 1 field staff during the ten-day water distribution meeting, 11 May 2004). Replying to this, SDI staff agreed that without cooperation from both FWUAs and DPIS field staff, the SDI's effort to ensure equal water distribution at the inter-system level was indeed marginal.

DPIS field staff did not have to follow the water distribution schedule defined by the SDI because they did not view SDI staff as their bureaucratic superiors anymore. For example, in May 2004 SDI staff proposed to Z (DPIS 3 field staff members in charge of the operation of irrigation systems infrastructure in Kalibawang, Penjalin and Donomulyo) that he close the gate at the Kemukus Wudu secondary canal (located downstream of Kalibawang main canal) in order to channel more water to the West Pengasih and West Pekik Jamal irrigation systems (as observed during the ten-day water distribution meeting, 4 May 2004). According to SDI staff, around that particular time irrigation water should be fully channeled to downstream irrigation systems, since based on the actual crop condition in the field (as observed by SDI staff) and the applied golongan system, farmers in the Kalibawang system should no longer need irrigation water. However, Z refused to close this gate until at least a week later because, according to him, farmers in his area still needed irrigation water. He challenged the SDI's opinion, saying that when farmers had not yet closed their intakes, it meant that they still needed the irrigation water. Put another way, Z refused to address farmers' illegal water offtakes in his area, since he thought that he could not stop this as long as they still needed the irrigation water. In his words: "Farmers still need water, no matter how often I close their gates they will reopen them

again" (as expressed by Z during the ten-day water distribution meeting, 4 May 2004). In addition, Z used several severely damaged secondary gates as proof that, even when he closed the gates, farmers would try to reopen these gates, sometimes by damaging them. At the end of the meeting, SDI staff could only agree to release additional water⁷ from the Sermo reservoir to the West Pengasih and West Pekik Jamal systems to prevent water scarcity problems in those areas, because they were unable to force Z to follow the water distribution schedule. Similarly, at the next water distribution meeting when SDI staff repeated their concern about farmers' illegal water activities in the Kalibawang system, as the amount of discharge that entered the Kemukus division structure was still below the defined target (1.9m³/s instead of 3m³/s), Z insisted that farmers in his area still needed irrigation water. When SDI staff asserted that most farmers in the Kalibawang system were ready to harvest their second paddy crop, Z insisted that he could not close the gate at the Kemukus Wudu secondary canal. Later, I discovered that Z's inability to stop farmers' illegal water taking in Kalibawang was rooted in his alliance with FWUA staff in that irrigation system (see section 8.3.). Again, SDI staff could not do otherwise than channel additional water supply from Sermo reservoir to both the West Pengasih and the West Pekik Jamal areas.

In addition, DPIS field staff could violate the agreements made in the ten-day water distribution meeting because SDI staff were not in charge either of enforcing the agreements or of penalizing any violation. For instance, in September 2004, DPIS 2 field staff violated the agreement made between SDI staff, DPIS 2 and 1 field staff, and FWUA East Pekik Jamal to channel additional water supply from the Sermo reservoir to farmers in the East Pekik Jamal area. Agreement with DPIS 2 field staff was necessary because irrigation water would be transported to the East Pekik Jamal area, passing the irrigation canal in the East Pengasih irrigation system. In practice, the DPIS 2 field staff channeled the additional irrigation water to the East Pengasih area before it could reach the East Pekik Jamal area. During the next ten-day water distribution meeting, SDI staff asked C (a DPIS 2 field staff member) about the remarkably high level of water in the secondary canal in the East Pengasih area. The canal was so full that the water level almost caused flooding. However, C denied his involvement in this illegal water-taking activity. In the end, SDI staff only managed to channel the additional water supply to the East Pekik Jamal area by creating an alternative 'water path' from Sermo reservoir to the area and not informing C from DPIS 2 about the water delivery arrangement. Once released from the reservoir, irrigation water would be spilled over into the natural drains through one of the spillways in the East Pengasih secondary canal. Thus, although the water would still pass the secondary canal in upstream Pengasih, it would not stay for a long time in this canal. In this way, water was transported to the East Pekik Jamal area, without the risk of being stolen by farmers in East Pengasih. The overview of both the original and the alternative water channeling path is presented in Figure 8.3.

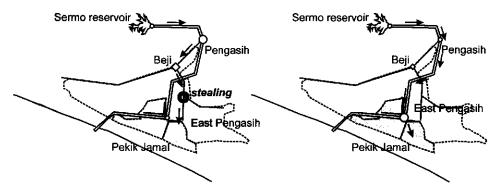


Figure 8.3: Water channeling path from Sermo reservoir to East Pekik Jamal

Moreover, SDI staff deliberately approached the officials from Sermo reservoir to release the water earlier than the defined plan. Informed by the SDI staff about the strategy, FWUA staff from East Pekik Jamal agreed to closely monitor the water flow. Afterwards, C complained that he was not informed about the slight change in the defined water distribution plan (as observed during the ten-day water distribution meeting, 11 September 2004).

Apart from their failure to reestablish a bureaucratic connection with DPIS field staff, SDI staff were unable to establish inter-FWUA relationships and involve them in system level operation. The ten-day meeting functioned primarily as a platform for FWUAs to propose their water requests to the SDI. For example, each FWUA representative would only attend the meeting during the period when irrigation water was still needed by farmers in their respective irrigation systems. Upstream FWUAs (Kalibawang, Donomulyo, and Penjalin) were only present during the meeting in August/September (to ensure irrigation water supply during the starting period of their first cropping seasons). Mid and downstream FWUAs (West/East Pengasih and Pekik Jamal), on the other hand, were only present during the meeting in May/June (to ensure water supply for their second crop). With regard to FWUAs in the Sapon irrigation system, their representative hardly ever attended any ten-day water distribution meeting because of massive technical problems⁹ in Sapon dam that occurred in early 2004.

Each FWUA functioned in isolation from other FWUAs regardless of their hydraulic position in the inter-system. Water requests made by an FWUA were proposed in isolation from the overall water distribution arrangement at the inter-system level. For example, downstream FWUAs did not relate their water scarcity problems to upstream FWUAs' inability to control water theft by farmers in the upstream systems. Similarly, FWUAs from mid and upstream irrigation systems did not link farmers' excessive water abstraction in their area with water scarcity problems in the downstream systems. Upstream FWUAs lacked any interest in reducing water use in their areas (in response to farmers' water needs in the downstream irrigation systems) because they were concerned primarily with their own irrigation water needs. Downstream FWUAs, on the other hand, addressed their

water scarcity problems to the SDI staff, without any attempt to counteract upstream FWUAs' role in illegal water taking by farmers, or to negotiate their water needs with them.

This isolation was evidenced by the way FWUA staff in West Pengasih coped with their water distribution practices. During the dry seasons in May/June 2004, farmers in West Pengasih suffered from water scarcity problems. Apparently, this problem was caused by excessive water taking by farmers in the Kalibawang irrigation system, as well as by unequal water distribution between the Papah and Pengasih irrigation systems. Yet, FWUA staff from West Pengasih did not link water scarcity problems in their area to this. Instead, they relied mainly on their ability to maneuver the received discharge in such a way that this would meet farmers' water needs. In most cases, this was done through rotation at, respectively, secondary and tertiary canals, as well as by finding alternative water sources (by reinstating the actual use of natural drains and the existing river tributaries). In addition, when water scarcity was too severe, farmers even changed from cultivating paddy crops to dry crops (as was the case in the West Pengasih area in May 2004).

8.4 Dominant alliances in water distribution

From May 2004 until July 2005, I observed two dominant patterns of alliances in overall water distribution in the seven technical irrigation systems. I first discuss the alliance between mid/upstream FWUAs with DPIS field staff, then illustrate the alliance between downstream FWUAs with SDI staff.

8.4.1 The FWUA-DPIS field staff alliance

The alliance between FWUAs in Kalibawang and DPIS 3 field staff (Z in particular) showed in the way Z tolerated illegal water taking by farmers in the area. Z focused his role in systems operation primarily on satisfying farmers' actual water demands in the Kalibawang area. In return for the 'water service' provided, FWUA staff rewarded Z with financial compensation. As mentioned in the previous section, Z refused to channel irrigation water to downstream irrigation systems before farmers' needs in Kalibawang were completely satisfied. For instance, farmers were obliged to plant dry crops in their third cropping seasons (paddy-paddy-dry crop) even after IMT. In practice, farmers in Kalibawang cultivated paddy as their 'dry crop' because the FWUA-Kalibawang alliance with DPIS 3 field staff ensured farmers' access to irrigation water all year long.

Further, the alliance between DPIS 3 field staff and FWUA Papah was evidenced by the way Z directed the actual operation of the Kemukus division structure in favor of farmers in the Papah irrigation system. Z often instructed B (a DPIS 3 field staff member in charge of the operation of this structure) to partly close the two gates in the Kemukus division structure: this would channel irrigation water supply to the Pengasih irrigation system, while at the same time leaving completely open the other two gates that would channel water supply to Papah. This practice was observed during my field visit to the area. When

we arrived at the location, the two gates through which water to Pengasih would be channeled were only partly open. Furthermore, the actual water level at that moment showed that the discharge into the left canal (going to Papah) was higher than in the right canal (going to Pengasih), as compared to the water distribution plan. More water was actually channeled to the Papah irrigation system bearing in mind that both canals are of approximately the same width. During May 2004, this unequal water distribution between the Papah and Pengasih irrigation systems became so obvious that, while water scarcity occurred in the West Pengasih area, water spilled from the Papah dam. Like FWUA staff in Kalibawang, FWUA Papah gave Z financial rewards for his effort in ensuring irrigation water supply to the area. In addition, FWUA staff from Papah were able to skip almost all the ten-day water distribution meetings because their water needs were already met through their alliance with Z. They would attend the meeting only to inform SDI staff about the starting period of their dry crops (usually between late June and early July), so that SDI staff would not conduct canal cleaning at that particular time.

The third alliance was formed between FWUA East Pengasih and DPIS 2 field staff (C in particular). C was responsible for water distribution arrangements in both the Pengasih and the Papah irrigation systems. The alliance was evident in the way C manipulated the principle of proportional water distribution in the Beji division structure in favor of farmers in East Pengasih. During the night, C would close and lock the left gate in the Beji division structure so that water from Pengasih dam would be fully channeled to the East Pengasih secondary canal, at the expense of farmers in the West Pengasih area. Prior to IMT, the Beji division structure was operated through gate regulation by DPIS 2 field staff. Following IMT, in 2001, SDI staff redesigned and reconstructed the Beji division structure, from sluice gate to a proportional division structure, to reduce conflicts between farmers from both the East and the West Pengasih areas. However, the previously installed gates remained attached to the structure¹¹ even after the reconstruction. The keys of these gates were still in the hands of DPIS 2 field staff.

C's alliance with FWUA East Pengasih is also evident from the way C strategically ignored the technical fault in the reconstructed Beji division structure. This technical fault affected the way the structure divided irrigation water between the East and West Pengasih secondary canals. Technically, water flow that enters the division structure should be proportionally distributed to both of the secondary canals (the width of the opening to the east canal proportional to the area irrigating from that canal, and the same for the west). However, the actual functioning of the Beji division structure was hampered by a siphon, just downstream of the west intake. The discharge capacity of this siphon was less than what should proportionally flow to West Pengasih. This resulted in a backwater curve over the west opening, while water flowed freely into the east canal. Due to this backwater effect, relatively less water was received by farmers in the West Pengasih area than was formally designed and agreed. This again resulted in extra water being channeled to the East Pengasih secondary canal. An overview of this division structure is presented in Figure 8.4.

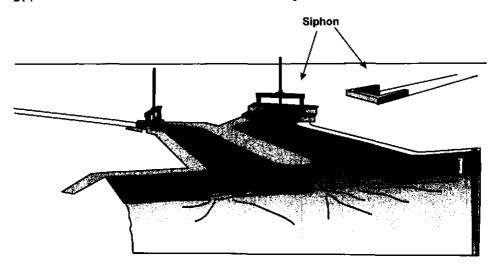


Figure 8.4: Overview of the water distribution between West and East Pengasih

However, according to C, the Beji division structure functioned as a proportional division structure should work. In his words: "The Beji division structure is designed and functions as a proportional division structure" (as stated by C during an interview, 2004). When confronted by FWUA West Pengasih about the fact that more water was channeled to the East Pengasih area, C insisted that nothing could be done about the present regulation of the Beji division structure. In C's words: "East Pengasih might receive more water than was designed. But nothing can be done about that because the Beji division structure was already designed and functioned as a proportional division structure" (as observed during the discussion during the ten-day water distribution meeting, 4 May 2004). Later, C's knowledge with regard to the technical fault in the Beji's functioning emerged when he expressed his objection to the SDI staff's proposal to fix the fault. Both C and FWUA staff from East Pengasih insisted that the division structure should be left in its present condition.

8.4.2 The FWUA-SDI staff alliance

The FWUAs from the downstream irrigation systems (Pekik Jamal and West Pengasih) had the tendency to form an alliance with the SDI staff because of DPIS 1 field staff's limited actual power to influence inter-system water distribution practices (due to its disadvantaged position at the downstream of the interconnected systems).

Firstly, the alliance between SDI staff and both FWUA West and East Pekik Jamal emerged as a result of the way SDI staff repeatedly maneuvered the water channeling to both areas. As mentioned earlier in section 8.2., in September 2004, when water scarcity occurred in the Pekik Jamal area, SDI staff negotiated with officials from the Sermo reservoir to enable additional water to be delivered to the area. Furthermore, when the additional water supply from the Sermo reservoir was not sufficient for farmers to irrigate

their crop, SDI staff arranged water supply by channeling drainage water from Papah directly to the area, through a natural drain.

Secondly, the alliance between SDI staff and FWUA West Pengasih was evident from the different efforts made by SDI staff to ensure irrigation water supply for farmers in the West Pengasih area. In the first place, it was SDI staff who repeatedly brought up the issue of water scarcity in the West Pengasih area (during the ten-day water distribution meeting, 11 May 2004), even before this was reported by the FWUA staff. One day prior to the meeting, an SDI staff member visited FWUA West Pengasih to inform them that the water scarcity problem in the area was caused by excessive water use by farmers in the upstream areas (as observed during my field visit to FWUA West Pengasih office, 10 May 2004). During his visit, he urged FWUA staff to raise this issue in the next ten-day water distribution meeting, so that he could put some pressure on DPIS 3 field staff. Besides, SDI staff had got themselves in conflict with both FWUA staff in East Pengasih and DPIS 2 field staff with regard to the proposed reconstruction of the Beji division structure. Although this conflict was also rooted in the bureaucratic competition between SDI staff and DPIS field staff, in my opinion, this proposal would not have been made if SDI staff were not allied with the new FWUA staff from West Pengasih.

In the next section, I discuss how these alliances marked the emergence of a new type of authority in system water distribution, which I refer to as 'spatial authority'.

8.5 The establishment of "spatial authority"

I use the words 'spatial authority' to describe the condition in which an FWUA focuses its role in water distribution to ensure irrigation water supply to its area, in isolation from the system/inter-system level water distribution arrangement. An FWUA's spatial authority does not necessarily refer to an FWUA's attempt to promote equal water distribution in its irrigation systems, but more importantly, to ensure water supply to a specific area, where their interest lies. The word 'spatial' refers to a particular area (an irrigation system, as well as a certain area within the system) upon which the FWUA's efforts in water distribution are solely focused. The word 'authority' is used to highlight the FWUA's actual decision-making power, and capabilities for its enforcement, in shaping the actual water distribution practices within this particular area.

Spatial authority was established at mid/upstream and downstream irrigation systems following the formation of water distribution alliances at the different hydraulic positions of the interconnected systems. Firstly, I discuss the application of spatial authority by the FWUA in the East Pengasih, Papah, Kalibawang and West Pekik Jamal irrigation systems. Secondly, I discuss the consequences of the applied spatial authority for intersystem water distribution practices.

8.5.1 Spatial authority in inter-system water distribution

The majority of FWUAs in Kulon Progo applied their spatial authority primarily to ensure irrigation water supply for bengkok lands. Bengkok lands¹² are agricultural lands which belong to a village and can only be used by members of the village government. In general, bengkok lands are located in the upstream fields of the head tertiary units. In East Pekik Jamal, FWUA staff would first channel irrigation water to the bengkok lands, even when they had to waste a considerable amount of irrigation water due to the higher position of the land in comparison with other adjacent fields. The same situation occurred in the West Pengasih and West Pekik Jamal systems. Irrigation water was channeled to bengkok land first, sometimes causing canal flooding in other parts. In 2004, irrigation water supply to Papah and Kalibawang was focused on sugarcane cultivation raised in bengkok lands in, respectively, Kedung Sari village (covering three tertiary units at the head of the secondary canal) and Kembang village (covering four tertiary units immediately below the Kalibawang intake).

In a more extreme case, FWUA East Pengasih decided to apply the water distribution schedule at the secondary level in opposite sequence to that defined in the golongan system, to favor the bengkok lands in the Tambak Rejo tertiary unit. According to the defined golongan system, irrigation water supply should be first channeled to segment 1¹³ at the tail-end of the Depok secondary canal during the months August/September. In practice. FWUA staff prioritized the actual water channeling to farmers in the Tambak Rejo tertiary unit (located in segment 2) at the expense of farmers in segment 1 who needed the irrigation water to start their first paddy crop. Unlike farmers in segment 1. farmers in segment 2 needed the irrigation water to increase the groundwater level in their field wells. Later, these farmers would use the field wells to irrigate their dry crops. Consequently, farmers in segment 1 had to start later with their first paddy because they could only start to irrigate their fields once farmers in segment 2 had augmented their field wells. In May 2004, this changed sequence of water delivery in East Pengasih distorted the overall water distribution schedule¹⁴ between the East and West Pengasih areas. Nevertheless, relying on their alliance with DPIS 2 field staff, FWUA East Pengasih managed to downplay the seriousness of the water scarcity problem in the West Pengasih area so that the gate at the secondary canal in East Pengasih could be left fully open.

Apart from its effort to ensure irrigation water supply for bengkok lands, FWUA West Pekik Jamal also managed to use its spatial authority to promote equal water distribution between head-end and tail-end farmers in the area. During the first year of IMT implementation, farmers at the tail-end of West Pekik Jamal could not plant a paddy crop in their second cropping season because head-end farmers always took the irrigation water before it could reach the tail-end area. However, since 2002, tail-end farmers have been able to cultivate paddy crop in their second cropping seasons due to FWUA staff's efforts to invent an alternative water path to the tail-end area. FWUA staff arranged irrigation water supply for tail-end farmers (most belonging to the Suka Maju tertiary unit which is located at the tail end of the Wojowalur secondary canal) by directly channeling the irrigation water through a natural drain instead of using the existing irrigation canal. In this way, FWUA staff ensured that the irrigation water would be received by farmers in

Suka Maju because upstream farmers did not know that irrigation water was channeled through the drain (which runs parallel to the Wojowalur secondary canal). The overview of this water channeling is presented in Figure 8.5.

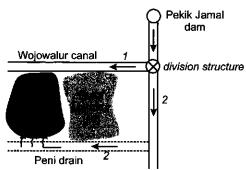


Figure 8.5: Overview of FWUA West Pekik Jamal's strategy to channel water to the Suka Maju tertiary unit

8.5.2 Spatial authority and unequal water distribution

The application of spatial authority (with the exception of the West Pekik Jamal irrigation system) resulted in unequal water distribution at the system level down to farmer's fields. In the majority of the irrigation systems (Papah, Donomulyo, Penjalin, West Pengasih East Pengasih, even Kalibawang to a certain degree), the water scarcity problem for tailend farmers was caused by head-end farmers taking excessive water¹⁶ In the West Pengasih area, tail-end farmers had to rotate irrigation throughout almost the entire period of dry season (from May to early July 2004).

Consequently, unequal water distribution between head-end and tail-end farmers resulted in the staggered application of the defined *golongan* system. Formally, farmers within one *golongan* system would start and complete their first, second, and third cropping seasons at the same time. In practice, due to unequal water distribution, tail-end farmers were forced to start later (sometimes more than one month later). According to data I gathered from interviews with farmers¹⁷, a tail-end farmer's decision to start later with his/her cropping season was not based on water availability in the irrigation system, but rather on the reliability of irrigation water supply to his/her fields. For example, in the Kalibawang system, tail-end farmers would only start in early October with their first paddy crop (that was almost two months later than the defined cropping schedule) because they could only start with their land preparation after head-end farmers' water needs were satisfied. Similarly, in East Pengasih, tail-end farmers could only start with their first paddy crop as late as mid/late October.

In turn, staggered application of the *golongan* system resulted in the accumulation of a peak water demand, which intensified unequal water distribution and distorted water delivery even more. A vicious cycle of distorted water delivery schedule-unequal water distribution-distorted cropping schedule emerged.

In addition, the way the spatial authority was applied disrupted the organizational link of the DPIS field staff. Prior to IMT, DPIS field staff from, respectively, DPIS 1, 2, and 3 communicated with each other frequently to fine-tune the water distribution arrangement at the inter-system level, following the instruction given by SDI staff, After IMT, DPIS 1, 2. and 3 field staff functioned in isolation from each other because they focused their role in systems management on delivering 'water service provision' to their FWUA alliance. This isolation became evident in the way Z and C separately ensured water supply for farmers in Kalibawang, Papah, and East Pengasih. Unlike before, Z operated the Kemukus division structure without any coordination with C. Similarly, C channeled irrigation water that entered the Pengasih dam to farmers in the East Pengasih area without further coordination with F from DPIS 1 (F was responsible for the water distribution arrangement in the Pekik Jamal and Sapon irrigation systems). Consequently, DPIS 2 and 3 field staff's decision to tolerate illegal water taking in upstream systems indirectly decreased DPIS 1 field staff's actual power to ensure irrigation water supply for farmers in the downstream irrigation systems. In F's words: "DPIS 1 field staff's effort to ensure irrigation water supply for downstream irrigation systems was useless, when both Z and C continued with their illegal water taking" (as stated during the ten-day water distribution meeting, 11 May 2004).

In the next section I discuss the reason behind FWUA's inability to promote equal water distribution at the secondary level.

8.6 Rural elite domination in FWUA organizational functioning

The FWUAs' involvement in irrigation systems management did not result in equal water distribution because an FWUA functioned primarily as an instrument of the rural elite to gain access to stimulant funds and ISFs (see Chapter 7 for the origin of the rural elite's domination in FWUA organizational structure, given their financial interests). In this section, I illuminate FWUA staff interest in ISF collection.

FWUA staff interest in ISF collection was shaped by two factors. Firstly, higher amounts of ISF would result in higher amounts of stimulant fund allocation (see also Chapter 7 on how FWUA staff interest in acquiring higher amounts of stimulant funds lay in transforming part of the fund for their financial benefit). Secondly, higher amounts of ISF would mean higher salaries for FWUA staff, as ISF was set, collected, kept and used by the FWUA/WUA following the regional autonomy in 1999. Generally, the ISF amount collected would be divided between FWUA staff. In Papah, the FWUA head got thirty percent of the total ISF amount. In Pekik Jamal, the *ulu ulu*¹⁸ received the greatest share of the ISF collection (up to twenty-five percent). In East Pengasih¹⁹, the FWUA head attempted to increase FWUA staff salaries by increasing the ISF.

FWUA staff perceived WUAs as the FWUA's organizational foundation only in relation to their role in ISF collection. As expressed by FWUA staff in East Pengasih: "ISF was the basic strength of FWUAs. Without ISF, FWUAs would not function. Hence, a WUA's role of collecting ISF from farmers was pre-eminent for FWUAs' organizational

existence" (as stated by FWUA staff in East Pengasih during the SWOT exercise in the area, 21 August 2004). In East Pengasih, Papah, West Pekik Jamal, and Kalibawang, the regular FWUA-WUA meeting, held every 35 days, was conducted primarily to enforce ISF collection by WUAs.

The imposition of ISFs did not result in improved water distribution between secondary/tertiary level and farmers' fields because ISF collection was not linked to the FWUA/WUA's role as water service provider. With the exception of FWUA West Pekik Jamal, the majority of FWUA staff were indifferent to farmers' water needs in general. In the Papah and Pengasih irrigation systems, tail-end farmers voiced their concern that paying ISFs did not at all improve their irrigation water supply²⁰. In the words of one of the farmers: "Farmers were willing to pay ISF. However, if WUA/FWUA staff do not perform their task to ensure irrigation water supply for farmers, farmers should be relieved of ISF payment" (interview with farmers, March 2004).

A farmer-WUAs relationship failed to emerge because the WUA did not play any role in water distribution arrangements at the tertiary level (apart from its role in ISF collection). In practice, farmers continued to take water individually. Both head-end and tail-end farmers' water-taking activities remained unlinked to each other. In most cases, head-end farmers would take irrigation water whenever they needed it and close the gate when their water need was satisfied. If there was enough irrigation water in the secondary/tertiary canal, tail-end farmers would do the same, even when considerable amounts of water would be spilled. As expressed by head-end farmers in Kalibawang: "When I did not need the irrigation water, I would close the tertiary gate. However, tail-end farmers would reopen the gate. In turn, a lot of water was spilled because, to reach the tail-end fields, a considerable amount of water still needed to be channeled" (interview with head-end farmer in Kalibawang, March 2004). If there was not enough water, tail-end farmers would cope with their water scarcity problem by simply waiting for the water, or finding alternative sources (from drainage canals/existing river tributaries, or through illegal water taking). In the most extreme case, farmers would change their cropping pattern from paddy to dry crops. In addition, some farmers who knew the WUA head would inform him about the water scarcity problem. But, in general, WUA staff seldom responded to farmers' water requests. In fact, less than ten out of thirty farmers (n=30) I interviewed in, respectively, the Kalibawang, Papah and Pengasih irrigation systems knew about their WUA. In addition to this, only three out of eight farmers knew about the role of the WUA as their representative. In most cases, farmers knew this WUA only from its role in ISF collection. An overview of the data²¹ is presented in Figure 8.6.

Both FWUA and WUA staff's lack of interest was evident from the way they turned down a tail-end farmer's proposal to improve his irrigation water supply in Kalibawang. Facing water scarcity, a tail-end farmer proposed building an alternative water channel, running from a head-end farmer's field drain directly to his field. In this way, he could reuse the irrigation water which otherwise would be spilled in a natural drain. However, FWUA/WUA staff did not react to this practical proposal. Similarly, when tail-end farmers in East Pengasih requested WUA staff to address head-end farmers' excessive

water taking, WUA staff did nothing about it. In addition, tail-end farmers' proposal to rehabilitate the tertiary canal to reduce leakage was turned down by WUA staff in Papah and Pengasih.

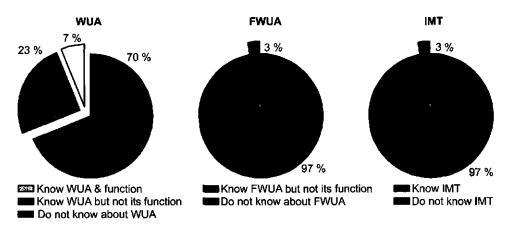


Figure 8.6: Data overview with regard to field farmers' knowledge about WUA/FWUA and IMT

Last but not least, the rural elite's financial interest in FWUA was evidenced by the fact that all FWUAs in Kulon Progo district were actively involved in agricultural cooperative activities. Cooperative members could borrow and lend money, and, at the end of the year, the financial benefit from the cooperatives was shared between its members. Every 35 days, an FWUA-WUA meeting was held so that cooperative members could deliver their monthly contribution to the FWUA. Formally, cooperative membership was open to all farmers. However, in practice, cooperative members were limited to FWUA/WUA staff. In Kalibawang, elite domination boosted the actual capital of the cooperatives (reaching the amount of Rp. 30 million or the equivalent of US\$ 3,000, which was thirty times more than its initial capital). In Donomulyo, the actual capital of the cooperatives reached the amount of Rp.18 million or the equivalent of US\$ 1,800 (that was eighteen times more than when the cooperative was started).

8.7 Elite-farmer relationships

Firstly, I describe the different types of elite leadership which emerged in the seven technical irrigation systems in Kulon Progo district. Secondly, I discuss how struggle among elites could shape the farmer-elite relationship towards greater representation of farmers' needs in water distribution.

8.7.1 Elite leadership taxonomy

Different types of elite leadership are presented in Table 8.3.

Table 8.3: Different types of elite leadership in the seven technical irrigation systems in Kulon Progo district, as observed from May 2004 to August 2005

FWUA	Type of elite leadership	Farmer-elite relationship	The channeling of farmers' needs
Kali ba wang	Financial-focused	Focus on elite interest in increasing their financial benefits from their involvement in FWUA	Only if farmers are cooperative members, managed by the elite.
Pap ah	Project-oriented	Focus on elite interest in gaining financial benefit from the management of development funds	Only if farmers coincidentally benefit from the rehabilitation and maintenance works proposed by the elite.
East Pengasih, East Pekik Jamai	Dictatorial	Focus on FWUA heads' interest	If farmers have personal connection with FWUA heads.
West Pengasih, West Pekik Jamal	Dynamic	Focus on elite struggle in the FWUA	Elite struggle enlarges farmers' room for maneuver to steer elite decision making.
Sapon	Political	Focus on elite's political interest	If farmers' needs are used as elite political weapon.

In the Kalibawang irrigation system, elite domination in the FWUA was characterized by strong involvement in financial aspects of FWUA organizational development. The FWUA's activity was focused on its agricultural cooperative, in addition to the management of the stimulant fund. As mentioned earlier, FWUA Kalibawang was able to increase the financial assets of the cooperative thirty times more than its initial capital. Furthermore, in Kalibawang, the cooperative activities included supply of agricultural products (such as fertilizers, seeds, pesticides) to its members. In Papah, the rural elite's administrative capability shaped FWUA organizational development towards a contracting agency. FWUA functioning was totally focused on the actual management of stimulant funds. In Sapon, FWUA organizational functioning was directed towards a political pressure group to urge the reconstruction of Sapon dam. FWUA Sapon's activities were focused on arranging farmer demonstrations against the respective government institutions. Farmers' needs were presented as part of the rural elite's negotiation strategy. For instance, FWUA staff used water scarcity experienced by farmers as their entry point to exercise political pressure on the district parliament, provincial and district government to obtain resources from the development fund for the reconstruction of Sapon dam.

In East Pengasih and East Pekik Jamal, FWUA organizational functioning was shaped primarily by absolute leadership from the FWUA heads. Being the direct relative of the

district head, the FWUA head in East Pengasih was able to direct FWUA organizational development according to his actual interests and elite connection. Similarly, the FWUA head in East Pekik Jamal used his position as village elder to dominate FWUA's organizational functioning. For instance, he would define FWUA staff composition based primarily on his connection with them, regardless of whether farmers had elected other WUA heads to be their representatives at the FWUA; but farmers were unable to challenge the FWUA head's decision, bearing in mind his position as village elder.

In West Pengasih and West Pekik Jamal, on the other hand, FWUA functioning was shaped by struggles between elite leaders. In FWUA West Pekik Jamal, leadership was conditioned by continuous struggle between the village priyayi and the agricultural entrepreneurs' group. Actual FWUA functioning relied mainly on the efforts made by the entrepreneurs group, whereas the village *priyayis'* interest was focused on the establishment of their leadership position in the FWUA. The entrepreneurs' group was the one who shaped the FWUA's role as water service provider for tail-end farmers. Similarly, it was this elite group who prepared the development proposal for the SDI, went through the whole procedure of fund allocation, and prepared the financial report. As in West Pengasih, the dynamic elite's leadership was a result of its recent organizational restructuring (see Chapter 7). The newly elected FWUA head was determined to ensure equal water distribution in the area because he wanted to show others that he was different from the former FWUA head and that he was to be trusted.

8.7.2 FWUA unification and farmer-elite relationships

In July 2004, SDI staff proposed an organizational restructuring of FWUAs. This restructuring was to be conducted by unifying the existing FWUAs within one irrigation system into one system level WUA (or SWUA). Automatically, the FWUAs' decision-making access to managing the stimulant fund was transferred to this SWUA. Unlike the FWUA, a SWUA would only have one secretary and one treasurer. Furthermore, the number of *ulu ulu* positions was increased from one to two on each secondary canal.

This restructuring was proposed to increase FWUA/WUA staff involvement in water distribution practices. As stated by the SDI staff during an FWUA meeting: "At first, FWUA staff were selected by the village and district government staff. However, after their four years of functioning, WUA representatives could view FWUA organizational performance and decide whether these staff were still motivated to continue their tasks in water distribution" (as expressed by SDI staff during FWUA meetings in the Pekik Jamal and Papah irrigation systems, respectively, 2 and 6 July 2004). In addition, the restructuring was proposed in relation to the SDI's attempt to weaken the alliance between FWUA staff and DPIS field staff (see section 8.4. on the establishment of spatial authority). SDI staff thought that FWUA restructuring would enable them to form a new alliance²² with the newly formed system-level WUAs (interview with SDI staff, 2004).

FWUA unification was proposed in the Pengasih, Papah, and Pekik Jamal irrigation systems. However, the unification was conducted only in the Papah and Pekik Jamal

systems because in Pengasih²³ it was strongly opposed by the head of FWUA East Pengasih. Initially, FWUA heads in Pekik Jamal and Papah also opposed the idea of unification. In the words of the FWUA head from West Pekik Jamal: "FWUA West Pekik Jamal functions well. Hence, there is no reason to change anything" (as stated by the head of FWUA West Pekik Jamal during a joint FWUA-WUA meeting, 2 July 2004). In Papah, similar resistance was expressed by the head of FWUA Kongklangan and Cangkring Mulyo. However, when the majority of FWUA/WUA staff agreed on the SDI's proposal to unify FWUAs into system level WUAs, these FWUA heads agreed to go ahead with the unification.

SDI staff proposed the unification during a joint FWUA-WUA meeting. At this meeting WUA staff could express their opinion on the proposed unification. If agreed by the majority of the staff, a special team was to be formed to arrange the election meeting. This special team consisted of the former staff of both FWUAs. Its task was to propose candidates for the positions of secretary, treasurer, ulu ulu and head of the system-level WUA, as well as to arrange the set-up of the election meeting (the time and place of the meeting, as well as sending invitation letters to all FWUA-WUA staff who were not present during the pre-election meeting). During the election meeting, this special team presented their proposed candidates, and FWUA-WUA staff decided on the candidate for each position by voting. SDI staff distributed a piece of blank paper on which FWUA-WUA staff could write the name of their favorite candidate. Later, SDI staff collected these pieces of paper and started to count the votes for each proposed candidate. At the end of the election meeting, the newly formed system-level WUA staff were legalized by the official from the District Development Planning Agency.

From the case of Pekik Jamal, I discovered that, in the context of elite struggle, the farmer-elite relationship is shaped not only by an elite's ability or willingness to incorporate farmers' needs into their interest, but also by farmers' ability to maneuver the elite's conduct in respect of representation of their needs. In short, elite struggle could become the medium through which to channel farmers' needs. In Pekik Jamal, the unification increased farmers' room for maneuver to channel their water needs to the WUA/FWUA because, when confronted²⁴ by his elite opponents, the newly elected head of the system-level WUA (referred to as O) decided to align his leadership with farmers' water needs. This elite struggle occurred when the unification shifted the leadership position from the village priyayi to the agriculture entrepreneurs' group. For instance, O asked farmers about their water distribution schedule and told them that he would monitor the gate position at the secondary canal. In addition, he also told farmers that, whenever they encountered a water scarcity problem, they could contact him directly.

Unlike in Pekik Jamal, in Papah the newly elected staff of the system-level WUA existed on paper only. The unification failed to counteract the power accumulation of elites in both FWUAs. The unification did not result in an increased role and involvement of an SWUA in system water distribution because both FWUAs continued to focus their organizational functioning on the actual management of stimulant fund, operating separately. Elite power accumulation was evident in the way the head of FWUA

Kongklangan arranged and secured his candidacy with the members of the special team. Shortly after the pre-election meeting, together with the members of the special team, he named the candidates for each position. Later, the special team from Kongklangan proposed only one candidate for the position of system-level WUA head (the existing FWUA head).

8.8 WUA bureaucratization

staff directed WUA organizational development towards WUA bureaucratization²⁵ parallel to FWUA organizational development (see Chapter 7 for FWUA bureaucratization). Except for the ulu ulu whose task was focused on water distribution activities, WUA staff functioning was focused on administrative tasks, such as preparing meeting invitations/notes, ISF registration forms, and reimbursing transportation/consumption costs. In addition, FWUA staff instructed WUA staff to conduct routine administrative improvements, such as the renewal of WUA staff, the renewal of its basic organizational rules, and proper registration of ISF collection. In more extreme cases, FWUA staff in East Pengasih, West Pekik Jamal, and Sapon insisted that WUA staff should have everything well documented in their administrative reports. In addition, WUA training was focused on administrative and financial aspects.

WUA bureaucratization was evident in the way WUA meetings were conducted. In general, WUA meetings could only be conducted if the WUA head arranged a formal invitation letter to all WUA staff. This precondition was applied by the majority of actively functioning WUAs. In East Pengasih, this bureaucratization became apparent when the WUA head asked me how he should address me in the invitation letter for the upcoming WUA meeting. Furthermore, WUA meetings were conducted following the meeting agenda defined by a WUA head prior to the meeting. During the meeting, only issues on the agenda would be addressed and included in the meeting notes. Thus, WUA staff's ability to address specific issues depended mainly on their relation with the WUA head. In addition, next to staff salaries, the largest part of ISF collection was spent on acquiring office materials (paper, notebook, pen, desk, file storage).

WUA bureaucratization preserved elite domination in the WUA organizational structure. The presence of farmer representatives in WUAs was overshadowed by the rural elite's administrative capability and experience. In the Papah, Pengasih, Pekik Jamal, Sapon and Kalibawang irrigation systems, actively functioning WUAs consisted mainly of village government personnel and civil servants.

Elite domination in WUAs was most apparent in the Sapon, East Pengasih, and Kalibawang irrigation systems. Represented by the WUA head, the rural elite defined the actual use of ISFs, the cropping schedule in the tertiary unit, and the exact date farmers had to contribute their labor for tertiary canal maintenance. WUA staff who did not belong to the rural elite, on the other hand, could only agree with whatever was said and decided during WUA meetings. For instance, when some staff raised their concern about water scarcity problems at the tail-end, the rural elite hardly responded to the matter. In addition,

they insisted that all farmers should be involved in maintenance activities despite the fact that irrigation water never reached farmers' fields at the tail-end. In East Pengasih, elite domination in the WUA organizational structure became highly concentrated, so much so that WUA staff renewal resulted only in the circulation of existing staff in the different positions. Prior to the meeting, the WUA head named the candidates for each position in the WUA. Later in the meeting, WUA staff could only elect these selected candidates. Unsurprisingly, most of these candidates were from the village government. When some WUA staff proposed other candidates outside the pre-defined candidates, the WUA head simply ignored the proposal.

In the water distribution context, elite domination transformed the role of the *ulu ulu* from water service provider for farmers to a protégé of the rural elite. The *ulu ulu's* task was concentrated on ensuring irrigation water to the *bengkok* lands (see also section 8.4.1. on the emergence of spatial authority in inter-system water distribution).

8.9 WUAs tasks and activities

During my field research, I discovered that the majority of WUAs were inactive, except for their role as ISF collectors. WUAs existed merely as paper organizations. Later, I learned that among the minority of WUAs still active, only WUA Suka Maju in the West Pekik Jamal area had an eminent role in water distribution arrangements at the tertiary level. Unlike other still actively functioning WUAs, WUA Suka Maju functioned through a single WUA person (referred as Q). Q's main activity was to ensure irrigation water supply for farmers in his tertiary unit. As mentioned earlier in section 8.4., through his connection with the rural elite in FWUA West Pekik Jamal, Q ensured irrigation water supply to farmers in the Suka Maju area by using the Peni drainage canal, which runs parallel to the Wojowalur secondary canal.

At the tertiary unit, Q promoted equal water distribution between head-end and tail-end farmers. O was able to direct farmers' water-taking activities in the area according to the agreed water distribution arrangement. Q divided farmers' fields in the unit into two irrigation blocks following the village administrative boundary. Block 1 consisted of the irrigated area of farmers in sub-village 1, while block 2 consisted of the irrigated area of farmers in sub-village 2. Based on block 2's hydraulic position, water was channeled to that block first. Guided by Q, farmers in block 2 would channel the irrigation back to the drainage canal (instead of being spilled away into the sea) so that the drainage water could be reused by farmers in block 1 to irrigate their fields. In this way, farmers' water-taking activities in block 2 were linked to farmers' water needs in block 1. O let farmers in block 2 take water first, without disadvantaging irrigation water supply for farmers in block 1. However, if farmers from block 2 channeled the irrigation water directly to the sea, O could direct farmers in block 1 to take water before their irrigation turn, which in turn would disturb farmers' water-taking activities in block 2 as well. In addition, O would warn them that the next time they needed irrigation water he would not bother to arrange it.

At block level, Q based his water distribution regulation on field location and the available amount of irrigation water. Thus, if irrigation water was abundant, Q would first channel the water to farmers' fields which were located on higher land. In this way, an abundant amount of water could reach these fields easily, and the remaining irrigation water could still be channeled to farmers' fields located on the lower land. However, in time of water scarcity, Q arranged water distribution in the tertiary unit in such a way that the available irrigation water would be used to irrigate as many farmers' fields as possible. Water would first be channeled to farmers' fields located on the lower land. In Q's words: "In this way, the scarce amount of water would not be wasted to irrigate those higher fields. Perhaps, water would not be able to reach these fields. And even so, water would be finished when it reached these fields" (interview with WUA staff, 2004).

Q's case shows how a WUA's organizational development could be directed towards the representation of farmers' needs in water distribution. In Q's words: "The most important thing in WUA organizational development is that a WUA solves problems encountered by farmers in the fields. With regard to its administrative tasks, no farmers are waiting for that. Everything that is stated on a piece of paper was not really important here. It can be written and rewritten by everybody" (interview with Q, 2004). Q did not understand why he should arrange regular WUA staff meetings, or staff renewal²⁶ if it was obvious that most of the staff as stated in the WUA papers no longer performed. Similarly, Q did not see the need to have extensive staff in the WUA, especially when none of them was actually functioning.

8.10 Conclusion

The implementation of the WATSAL IMT program in Kulon Progo district showed that transfer of management authority to FWUA did not establish these FWUAs as the new authority in system water distribution. Like in IMT under the IOMP, with the WATSAL IMT program FWUAs remained dependent on the irrigation agency for their water distribution practices. The irrigation agency remained in charge of the operation of the major irrigation infrastructure. This dependency was evident from the way FWUAs used the ten-day water distribution meeting as a platform to request irrigation water from the agency. Put another way, even after management transfer, an FWUA's decision-making authority to direct water distribution practices was primarily linked to its connection with the irrigation agency.

IMT reshaped the overall process of alliance formation between the irrigation agency (both SDI and DPIS field staff) and FWUAs. Prior to IMT, the pattern of alliances at the inter-system water distribution level was defined primarily by personal connections between farmers and the irrigation agency staff. With IMT, the pattern of alliances at the inter-system water distribution level is defined by the system's technical hierarchy, and by the way technical infrastructure in the system is composed to regulate water delivery. This is evident from the way upstream FWUAs form alliances with the DPIS field staff in their areas. Being at the head-end of the interconnected system, these FWUAs see the advantage of being allied with the DPIS field staff as the direct system operators. In this

way, FWUAs can ensure irrigation water supply to their areas, in isolation from the defined inter-system water delivery schedule. Similarly, downstream FWUAs form alliances with SDI staff rather than DPIS field staff, because the DPIS field staff's position as system operator at the tail-end of the interconnected system has lost its significance in that it cannot ensure irrigation water supply to these FWUAs' areas. Put another way, being at the tail-end, downstream FWUAs have more interests in SDI efforts to ensure equal water distribution at the inter-system level.

The overall process of alliance formation in water distribution shows the organizational fragmentation of the district irrigation agency (between the SDI and DPIS field staff, as well as between the upstream and downstream DPIS field staff themselves). Unlike in IMT under the IOMP, in the WATSAL IMT program, the process of alliance formation was not related to either the irrigation agency's or the FWUA's organizational origin. This organizational fragmentation was evident from the alliance of upstream FWUAs with DPIS field staff, as well as the alliance of downstream FWUAs with SDI staff. In this context, the extension of farmers' decision-making authority up to system level in the WATSAL IMT program improves the FWUA bargaining position in the overall process of alliance formation in water distribution. Unlike before, an FWUA's alliance with, respectively, SDI and DPIS field staff enabled them to ensure irrigation water supply to their particular area of interest. This ability was evident in the establishment of spatial authority.

IMT in Kulon Progo district resulted in fragmented decision-making authority at both the system and the inter-system water distribution level. The severed command line between SDI staff and DPIS field staff and the establishment of spatial authority at the system level diffused the line of authority in system water distribution. DPIS field staff and FWUAs' access to the ten-day water distribution meeting did not result in coordinated efforts to link water distribution practices at either the systems or the inter-system level. This diffused line of authority highlights the complementary role of system-level WUA/FWUA, DPIS field staff and SDI staff in promoting equal water distribution at inter-system level down to farmers' fields. In my opinion, the issue remains of how to synchronize the existing patterns of alliances in irrigation systems into the inter-system water distribution arrangements.

IMT intensified and complicated the overall process of negotiations at both the system and the inter-system water distribution level. IMT changed the decision-making pattern in inter-system level water distribution from centralized management by the irrigation agency (under the former DPIS) to a polycentric one, involving DPIS field staff, FWUA, and SDI staff. In turn, this change resulted in increased interdependencies between the different actors and organizations involved in system water distribution. This increased interdependency was evident in the way C (a DPIS 2 field staff member) hampered the pre-arranged water supply to farmers in the East Pekik Jamal area. Unlike before, water arrangements in the area demand a coordinated effort from FWUA East Pekik Jamal, SDI staff, DPIS 2 and 3 field staff as well as staff from the Sermo reservoir. Similarly, Z's (a DPIS 3 field staff member) decision not to follow the SDI staff's suggestion to close

farmers' illegal offtakes in the Kalibawang irrigation system was based on his relationship with FWUA Kalibawang. Because of these increased interdependencies, the actual operation of the key irrigation infrastructure in the seven technical irrigation systems in Kulon Progo became extremely contested. For instance, unlike before, the actual operation of the Kemukus division structure was contested in relation to the SDI staff's water delivery plan and the DPIS 2 field staff's (Z) insistence on operating the division structure in favor of farmers in the Kalibawang irrigation system. Similarly, the actual operation of the Beji division structure was contested in relation to the SDI staff's water delivery plan and their alliance with FWUA West Pengasih, as well as the DPIS 2 field staff's alliance with FWUA East Pengasih.

IMT under WATSAL failed to revitalize the farmers' role in system water distribution. The formation of system-level WUAs and FWUAs did not result in greater representation of farmers' needs in water distribution. Instead, FWUAs/WUAs acted as power instruments for the rural elite. The way FWUA/WUA organizational development was directed by both the district government and the rural elite resulted in the establishment of elite-based government-induced farmer organizations. FWUA/WUA bureaucratization and rural elite domination in both the FWUA and the WUA organizational structure highlighted the poor organizational link between FWUA-WUA and farmers. Farmers' needs could only be addressed through contestation in the farmer-elite relationship.

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¹ Progo river starts a few kilometers southwest of Parakan on the northeastern slopes of the Sumbing volcano, flows through the city of Magelang, and along the Borobodur temple complex, before it reaches the Indonesian ocean.

² In fact, the construction of the reservoir was immediately followed by the expansion of irrigated area in both Donomulyo and Kalibawang. Therefore water from this reservoir could not always compensate for water scarcity experienced by farmers in the downstream systems.

³ In Kulon Progo district, technical irrigation systems coexist with village irrigation systems though in general they do not share the water source for irrigation. Village irrigation systems are managed by farmers and consist mainly of earthen canals and temporary dams. However, since the implementation of the Village Irrigation Development Project in 1997, several permanent dams have been constructed. Recently, the district government conducted canal rehabilitation in the area, through its small repairs program. Several other village irrigation systems are located near the Kalibawang, Penjalin and Papah irrigation systems.

⁴ Irrigated areas prone to flooding were included in the first *golongan*, regardless to their location at the intersystem level. In this way, the earlier planted paddy would have reached sufficient height at the time flooding occurred.

⁵ Field experience showed that it was easier to direct farmers from two villages into two different *golongan*, than when farmers from one village had to apply two different *golongan*. Farmers would feel they were unequally treated and tended to break the defined rules, knowing that their neighbors would start earlier with their first cropping season (interview with SDI staff in Kulon Progo, 2004).

⁶ This proves how IMT implementation was focused on the FWUA's role in rehabilitation activities, and how policy makers in WATSAL had overlooked or perhaps taken for granted the FWUA's role in water distribution.

⁷ If this additional water supply was to be continued in the following weeks, the water level in the reservoir might reach its lowest level before the end of the dry seasons.

This additional supply was given so that farmers in the area could start their first paddy crop together with farmers in Kalibawang, Donomulyo, Penjalin and some part of East Pengasih. With this, the SDI attempted to

reduce peak irrigation water demand in the Pekik Jamal system during the months of May and June. According to the golongan system, farmers in East Pekik Jamal would start their first cropping in August/September. In practice, farmers had to wait until farmers from upstream irrigation systems had completed their land preparation and seedling activities before they could start to plant their first paddy crop.

⁹ Unlike before when irrigation water for Sapon was channeled directly from Progo river, at present farmers could only get water from the adjacent river tributaries. During my field research in Kulon Progo, farmers in Sapon only planted one paddy crop because water discharge carried by these tributaries was erratic. Hence, except for the role of rural elite in shaping FWUA/WUA functioning in water distribution, I exclude FWUA Sapon from my overall description and analysis in this chapter.

¹⁰ Based on this condition, during the ten-day water distribution meeting of 4 May 2004, SDI staff urged Z to channel more water to Pengasih. However, arguing that the additional water supply to Papah was also given to ensure water supply in the Pekik Jamal irrigation system, Z insisted on the present operation of the Kemukus division structure

¹¹ Neither FWUAs nor district government were entitled to conduct major technical change to the existing irrigation infrastructure even after formal management transfer. Officially, SDI staff were not authorized to remove the sluice gates because the gates remained part of central government's assets.

¹² The detailed regulation about the amount of bengkok land for each village government member varied between villages. For example, in Gotakan village, the village head had the right to use 1 hectare of bengkok land, whereas in Giripeni village he could only use 0.8 hectare (both villages were located in the East Pengasih area).

¹³ Irrigated lands in East Pengasih are divided between golongan 1 and 2. This means that some farmers (in golongan 1) start earlier with their first cropping season than other farmers in the same area. These two segments are referred to as segment 1 and 2. Segment 1 is located at the tail-end of the Depok secondary canal (this part was also referred to as Depok Galur secondary canal), whereas segment 2 is located at the head of the Depok secondary canal.

¹⁴ Water conflict occurred between farmers in the West and East Pengasih areas due to the accumulation of peak irrigation water demand in the Pengasih irrigation system during the months May/June. During these months, officially less irrigation water should be channeled to the East Pengasih area because, according to the defined golongan system, farmers in segment 1 no longer needed irrigation water (see the defined golongan system in section 8.1.). In practice, farmers in segment 1 still needed irrigation water because they could not start with their first paddy crop in August/September.

¹⁵ FWUA West Pekik Jamal's role as water service provider for farmers emerged in relation to FWUA staff's attempt to increase their ISF collection rate. According to the SDI evaluation report, FWUA West Pekik Jamal had the highest ISF collection rate in 2003 and 2004 (DWRS evaluation report, 2003, 2004). Unlike other areas, almost all tertiary units in West Pekik Jamal collected ISF willingly. For example, to ensure irrigation water supply to their fields, farmers in the Suka Maju tertiary unit paid the ISF to FWUA staff even before the start of each cropping season.

¹⁶ The terms head-end and tail-end farmers were used to include the head-tail relationship at each hydraulic level in the irrigation systems. Head-end farmers were those farmers who had better access to irrigation water. They can be located at the system level, secondary, or tertiary level.

¹⁷ The interviews were conducted with at least ten farmers from each irrigation system.

¹⁸ Under WATSAL, the ulu ulu was also incorporated into the FWUA organizational structure.

¹⁹ In 2004, each farmer had to pay Rp. 25,000 equivalent to US\$ 2.5, for each hectare of his/her agriculture land (this was twenty percent more than the ISF rate in the previous year).

²⁰ In practice, farmers continued to pay ISF only to maintain good relationship with the rural elite.

²¹ The data are gathered from interviews with farmers in the fields. Random interviews were conducted with thirty farmers in the Kalibawang, Papah and Pengasih irrigation systems during March 2004. The interview focused on these farmers' actual presence in the field, as well as their field location (at the head-, mid-, and tailend) of the secondary canal in the respective systems. My reason for interviewing farmers on-site was to be able to interview 'real' farmers. During my fieldwork, whenever I tried to interview farmers recommended through WUA/FWUA staff connections, I discovered that these 'farmers' were either village government personnel or retired civil servants.

²² For instance, the unification of both FWUA East and FWUA West Pengasih would automatically break the

alliance between FWUA East Pengasih and DPIS 2 field staff.

²³ The unification in Pengasih was canceled because SDI staff were hesitant to counter the refusal of the head of FWUA East Pengasih. As mentioned earlier, he had a close connection with the district head.

²⁴ Using his close connection with one of the *ulu ulu*, the former head of FWUA West Pekik Jamal (referred to as X) used the recent reconstruction of the sluice gate as his opportunity to challenge O's leadership. Following X's instruction, this *ulu ulu* did not inform other system-level WUA staff that the key of the gate was still in the SDI office. Later, when irrigation water supply was to be channeled to farmers in his secondary canal, farmers consulted him about the fact that the gate was locked. However, this *ulu ulu* asked them to ask the SWUA head about the key of the gate. Following the *ulu ulu*'s suggestion, these farmers went to O's house to complain about their irrigation water supply. After hearing the farmers' explanation, O immediately contacted the *ulu ulu*, to ask about the key of the sluice gate. Unable to avoid the confrontation, the *ulu ulu* told him that the key was still in the SDI office. On the same day, O arranged the key with the SDI staff, and immediately opened the sluice gates. Similarly, using the new staff's lack of knowledge with regard to the cropping schedule in the East Pekik Jamal area, the former FWUA head instructed one of the *ulu ulu* to delay the channeling of irrigation water supply for farmers in *golongan* 1. Later, when water scarcity occurred in the area, he told farmers that this was due to the bad functioning of the new staff. He instructed these farmers to go to O's house, to confront his bad leadership. Again, O apologized for his lack of knowledge and explained that he was still learning about his new leadership. He immediately arranged the water channeling to the area.

²⁵ The term 'bureaucratization' refers to the way SDI staff directed FWUA organizational development, following

the irrigation agency's bureaucratic development path (see also Chapter 7).

²⁶ According to both FWUA staff and the CO, WUA Suka Maju staff should be renewed because its staff composition was unchanged since its formation.

9. Conclusions

9.1 Introduction

This study attempted to provide empirical evidence and conceptual arguments to support IMT policy (re)conceptualization and particularly to demonstrate the political dimensions embedded in policy strategies and the 'politics' of policy. It began by illuminating the basic assumptions in IMT policy formulation and why the actual scope of IMT in Indonesia was limited to the level of written policy. Under the Irrigation Operation and Maintenance Project (IOMP) 1987 the irrigation agency reduced IMT to a construction program. Similarly, the later WATSAL IMT program remained trapped in agency-oriented practices, despite the WATSAL policy makers' attempt to use IMT as a tool to eradicate bureaucratic rent-seeking in the irrigation sector. The WATSAL policy makers failed to reach farmers with their reform initiatives, as the district irrigation agency adapted the policy elements in IMT in accordance with their bureaucratic interests.

Using Indonesia as a case, this research shows that the national government's partial initiative in IMT policy formulation and implementation was rooted in the fact that a core IMT policy controversy was never addressed in the IMT policy discourse. The WATSAL IMT conflicts with the irrigation agency's bureaucratic identity in Indonesia. The irrigation agency perceived IMT policy as a threat to its existence and survival, as IMT proposed the transfer of decision-making authority in sectoral development from the agency to WUAs/FWUAs. Similarly, the irrigation agency viewed IMT as a potential danger to the agency's organizational foundation, as IMT proposed a shift from infrastructure-oriented to a more farmer-focused development. Rooted in this perception, the irrigation agency's position towards IMT was primarily related to its motivation to defend and protect its bureaucratic territory and interests.

I analyzed how negotiation processes in the WATSAL IMT policy formulation and implementation were directed by policy actors within the different central ministries, in parliament, and at the different administrative levels down to field level. Central in these negotiation processes were the policy actors' interests, strategies, and access to resources; these factors also shape the actual outcomes of management transfer.

This chapter first considers elements to reconceptualize IMT in relation to the political dimensions of policy strategies and bureaucratic design. The core concepts of bureaucratic

identity; policy actors' reshaping of policy characteristics; policy channeling; policy struggle; the farmer-agency dichotomy and spatial authority are illuminated in section 9.2 to section 9.4. Section 9.5 examines the core paradoxes found in IMT and the future research areas to which they lead. These conclusions end with some final reflections on bureaucratic designs for IMT in Indonesia.

9.2 Sectoral ministry policy actors and the reshaping of IMT policy elements

In Indonesia, the IMT policy agenda was established out of political contestation between the different alliance groups within the central government ministries. This study showed the way the management problems in government irrigation systems were defined differently (if not contradictorily) by the irrigation agency in the IOMP 1987 and by the WATSAL policy makers in the 1999 IMT renewal. These differences and contradictions bring to light how the shaping of the IMT policy agenda was defined primarily by the policy elite's interests and their perceptions on the problem situation. IMT policy characteristics were shaped and reshaped by constant power struggles between the core policy actors in the irrigation agency and the WATSAL initiative.

In the 1999 IMT renewal, IMT policy evolved from being the irrigation agency's tool to mobilize the sectoral fund allocation into the WATSAL policy makers' instrument to eradicate bureaucratic rent-seeking practices within the irrigation agency. Following the political reform in 1998, the abolition of the Ministry of Public Works (MPW) and the overall application of the regional autonomy program allowed the WATSAL policy makers to proceed with their idea of sectoral reform. Unlike before, IMT policy renewal in 1999 represented the Indonesian government's first genuine attempt to conduct sectoral reform. Nevertheless, the 1999 IMT policy renewal did not originate from any changing position of the core policy actors in the irrigation agency towards IMT. The core policy actors' unchanged position was evident from the manifestation of policy struggle on the principles of IMT in 2003, whereby the irrigation agency used the to-be-promulgated new Water Act as the legal means to limit the scope of management transfer to the tertiary level, and thus halt the WATSAL IMT program.

The IMT policy characteristics as embodied in the new Water Act were shaped by different networks of bureaucratic and political alliances at the central ministries and within the parliament. The promulgation process of the new Water Act linked the political aspects of IMT with the inter-ministerial struggle in relation to sectoral development funds and with the higher level political practices around Indonesia's national election. At the inter-ministerial level, the struggle over the principles of IMT policy was rooted in the WATSAL policy makers' strategy to position both the National Development Planning Agency (NDPA) and the Ministry of Home Affairs (MoHA) as the irrigation agency's (within Kimpraswil) bureaucratic counter-force, as a substitute for bureaucratic reform. In parliament, the struggle on the principles of IMT policy was characterized by the formation of coalition and counter-coalition in both the Working Committee and Commission IV as part of the political struggles in Indonesia's national election. Central in

the formation of these coalitions and counter-coalitions was been the Kimpraswil-PDI-P bureaucratic-political alliance which had its origins in the political party partisanship system.

The IMT policy characteristics were shaped by both bureaucratic and political interests. The new Water Act was reduced to a political commodity. Financial interests and resources became the main forces that shaped the negotiation process at each stage of the parliamentary decision-making process. Access to parliamentary decision making was traded for access to financial resources, and vice versa. The position of the members of the Working Committee and Commission IV on IMT was related primarily with their strategy to trade their access to parliamentary decision making for access to financial resources. In my opinion, these members never had the intention of resolving the existing contradiction in the scope and degree of IMT (as stated in the draft Water Act and as defined under WATSAL). Their position in the promulgation process of the draft Water Act related primarily to their interest in increasing their funding to finance their political campaigns. At the parliamentary level, the struggle over the principles of IMT lost its substance. What mattered was not the argument presented to continue or halt the WATSAL IMT program, but, rather, who was able to supply these parliament members' financial requirements in order to start their political campaigns. This situation was comparable to how the WATSAL IMT program was shaped by vested government interests at the different administrative levels. Discussion on IMT policy characteristics was reduced to how parliament members could use the IMT policy struggle to improve their bargaining position.

9.3 Policy channeling and vested government interests

In the Indonesian IMT, the interdependency relationships between the policy actors concentrated primarily on their access to sectoral development funds for IMT implementation. Government's interest in gaining or sustaining their access to the sectoral development funds linked IMT policy formulation at the national level with its implementation at the regional and field level. Similarly, rules and procedures in IMT policy formulation and implementation under the WATSAL program were formed and reproduced in accordance with vested government interests at the different administrative levels. In the aftermath of the political reform in 1998, the WATSAL IMT program continued to be implemented through the project approach.

At the national level, the policy struggle on the principles of IMT policy was shaped by the central government ministries' interest in sustaining their access to sectoral development funds and decision making. MoHA's interest in sustaining its access to sectoral development funds was evident from the Kimpraswil-MoHA agreement, made prior to the second Working Committee meeting. Prior to the agreement, the MoHA opposed Kimpraswil's attempt to halt the WATSAL IMT program. Nevertheless, as stated in the agreement later on, MoHA agreed with Kimpraswil's position on IMT as long as MoHA's access to the sectoral development funds was sustained. Similarly, the NDPA's interest in regaining its inter-sectoral decision-making authority under WATSAL was

evident from its attempt to launch a national seminar on IMT, in which an interministerial coalition would be established to counteract Kimpraswil's sectoral decision-making authority. Furthermore, in the aftermath of the IMT policy struggles, both MoHA and the NDPA supported Kimpraswil's position on IMT for the sake of foreign fund allocation under the 'newly' funded World Bank project, the Water Resources and Irrigation Sector Management Project (or WISMP).

At the regional level, these interests were apparent from the regional governments' position on IMT in the aftermath of the IMT policy struggle. With the promulgation of the new Water Act in February 2004, Kimpraswil halted the WATSAL IMT program under its IWIRIP-JIWMP project. At the regional level, both provincial and district governments were left to fund the WATSAL IMT activities from their own resources, as sectoral fund disbursement from the central ministries was temporarily frozen. Following the promulgation of the new Water Act, IMT activities in MoHA's NewISF program were limited to new recruitment of community organizers' (COs) (see Chapter 7).

At the provincial level, the majority of Provincial Irrigation Agency (PIA) officials based their position on IMT primarily in relation to how IMT could ensure continuous fund disbursement to the PIA. Hence, the PIA officials agreed with Kimpraswil's attempt to halt the WATSAL IMT program as long as Kimpraswil compensated them with fund disbursement for other activities. Prior to the IMT policy struggle, the PIA officials' decision to adopt the WATSAL IMT program in 1999 was also based on their interest in gaining access to the project fund for program implementation. Apart from the PIA's interest in gaining access to these funds, the PIA's position on IMT was primarily defined by its ability to ensure fund disbursement for the implementation of the WATSAL IMT program from their own regional revenue. In addition, the relationship between the PIA head and Kimpraswil's project head at the Provincial Irrigation Project (PIP) was decisive in supporting the PIA's ability to conduct sectoral reform (independent of the central ministries' financial support).

In Kulon Progo, the decision of the district irrigation agency or the Sub-Division of Irrigation (SDI) to continue with the WATSAL IMT program was rooted in its ability to direct FWUA/WUA organizational development in IMT to suit its own bureaucratic interests, rather than to empower farmers. Comparable with the central government ministries' interest in gaining access to sectoral development funds, the SDI's motivation to continue with IMT was also based on its interest in sustaining its bureaucratic importance rather than increasing farmers' decision-making authority in relation to irrigation development.

These interests were evident from the way the SDI designed FWUA organizational development in such a way that the organizational characteristic of FWUAs was a replica of that of the irrigation agency. Chapter 7 showed that FWUAs' main organizational activities, like those of the irrigation agency, were focused on infrastructure-oriented development. The FWUAs' functioning was focused on developing proposals for system repairs, preparing project financial reports, and conducting rehabilitation activities in the

field. In the context of infrastructure development, FWUA organizational characteristics shared those of the contracting agency. The FWUAs' interest was to 'pull in' as much funding as possible under FWUA management. Also, the way the irrigation agency shaped the FWUAs' role as ISF (irrigation service fee) collectors resulted in FWUA bureaucratization. Like the irrigation agency, the FWUA functioned primarily as part of the government bureaucracy, whose activities related to formal and administrative rules. As part of the government bureaucracy, FWUAs viewed WUAs and farmers primarily as their ISF collection points. For instance, FWUA-WUA meetings were arranged primarily as a forum to collect ISFs from the WUAs. Similarly, with the exception of FWUA West Pekik Jamal, all the other FWUAs in Kulon Progo did not link this ISF collection with FWUAs' role as water service provider for farmers. FWUA bureaucratization was also evident from the way FWUA staff prepared FWUA-WUA meeting invitations, the registration forms for ISF collection, the receipts for ISF collection, and the printing of ISF collection forms. In addition, FWUA organizational development was shaped by the need to regularly renew FWUA/WUA staff and the organizations' organizational basis, even when some of these WUAs only existed on paper.

The WATSAL IMT program extended the line of rent-seeking in irrigation sector development. It transferred rent-seeking rules in and around the management of project funds from the irrigation agency to FWUAs. The FWUAs' access to stimulant fund management linked them with the cycle of rent-seeking in project fund management, centered on the relationship between the project head and his/her bureaucratic supervisors. In managing the stimulant fund, FWUAs operated like the irrigation agency. The majority of FWUAs in Kulon Progo district managed the stimulant fund following the same management procedures as applied by the project heads in the irrigation agency. Consequently, just like project financial reports, the financial reports on stimulant fund management as prepared by the FWUA bore hardly any relation to actual fund expenditure. For instance, the way FWUA West Pengasih kept changing the project financial report illuminates the discrepancy between actual fund expenditure and how this expenditure was stated in the report. Similarly, the way FWUA staff took a certain portion of the fund as part of staff salaries highlights how stimulant fund management was reduced to an administrative exercise. Also, the way 'benefits' gained from stimulant fund management were distributed within the FWUAs following certain rules was comparable to procedures in the management of project funds.

9.4 The meaning of IMT for farmers and the district irrigation agency

The implementation of the WATSAL IMT program in Kulon Progo district showed that the transfer of management authority to SWUAs/FWUAs did not establish these as the new authority in system water distribution. Like before, DPIS field staff remained in charge of the operation of the major irrigation infrastructure. Similarly, SDI staff were responsible for arranging the inter-system water delivery schedule. Hence, even after management transfer, an SWUA/FWUA's decision-making authority to direct water distribution practices was primarily linked to its connection with the irrigation agency (either with SDI or DPIS). However, IMT resulted in increased interdependencies

between the different actors and organizations involved in system water distribution. IMT intensified and thickened the overall process of negotiations at both the system and the inter-system water distribution level.

The formation of FWUAs did not result in greater representation of farmers' needs. The WATSAL IMT program hardly reached farmers despite the WATSAL policy makers' strategy to use FWUAs' access to the stimulant fund to empower farmers. In contrast, the way FWUA/WUA organizational development was directed by both the district government and the rural elite resulted in the establishment of elite-based government-induced farmer organizations. Farmers were hardly informed about the essence of management transfer or about the WUA/FWUAs' role as their representatives in systems management.

The representation of farmers' needs in FWUA/WUAs was shaped primarily through the farmer-elite relationship. Farmers' development needs could be addressed, but only if those needs coincided with the rural elite's interests. For instance, in the Kalibawang irrigation system, the representation of farmers' needs solely related to the active involvement of FWUA staff in promoting the role of cooperatives in relation to farmers' agricultural undertakings. In this context, farmers could reduce the overall costs of their farming activities by buying the seeds, fertilizers, and insecticides from the cooperatives, or hiring the tractor and other materials owned by the cooperatives for their land preparations. Similarly, farmers could make additional investments in their farms by borrowing money from the cooperatives. In the Papah irrigation system, on the other hand, the representation of farmers' needs was focused on the FWUA's role in systems rehabilitation. For instance, when FWUA staff were successful in pulling in development funds for systems rehabilitation, farmers were able to propose that FWUA staff should use the funds to conduct the necessary repairs. The type of elite leadership that governed the functioning of the FWUA was an essential factor in determining how farmers' needs would be represented. For instance, the dynamic leadership in FWUA West Pekik Jamal allowed farmers to negotiate their water needs in return for their ISF contribution. However, the dictatorial leadership in FWUA East Pengasih did not allow any channeling of farmers' needs if they did not suit the FWUA head's interest.

In Kulon Progo district, IMT implementation did not break the vicious cycle of bad construction/deferred maintenance/early rehabilitation in irrigation systems management. As under the IOMP, the FWUAs' access to stimulant fund management in the WATSAL IMT program preserved the 'cyclical relationship of codependency' (Vermillion, Samad, Pusposutardjo, Arif and Rochdyanto, 2000). Only this time, the codependency relationship was established between the FWUAs and the Sub-Division of Irrigation at the district level, instead of the irrigation agency at the national level. Like the irrigation agency, the main concern of FWUA staff was how to spend the allocated project fund, rather than to use this as effectively as possible, in relation to farmers' needs. The FWUA perceived this fund as a 'giff', for which nobody could be held responsible for mismanagement. Consequently, IMT did not reduce government expenditure on irrigation sector development.

The WATSAL IMT program did not eliminate farmer dependency on government funding support. On the contrary, FWUA organizational functioning relied on the disbursement of project funds (in the form of the stimulant fund). FWUA organizational development was focused on the ability of its staff to pull in as much project funding as possible (from the central ministries as well as from the regional governments' revenues). Though ISF collection increased with IMT, this increase was primarily linked to the FWUAs' attempts to receive the highest possible amount of stimulant fund.

The implementation of the WATSAL IMT program did not result in more equal water or more effective water distribution in the seven technical irrigation systems in Kulon Progo. In contrast, the establishment of 'spatial authority', rooted in the alliances between, respectively, upstream FWUAs with DPIS field staff, and downstream FWUAs with SDI staff, resulted in a vicious cycle of 'distorted water delivery schedule/unequal water distribution/distorted cropping schedule'. IMT distorted the application of the golongan system in the seven technical irrigation systems in Kulon Progo, as excessive water taking by the upstream alliances resulted in water scarcity problems for the downstream FWUAs. Similarly, unable to counteract the FWUA-DPIS field staff alliances, whose primary concern was to ensure irrigation water supply to a particular area (usually belonging to the FWUA's operational unit), SDI staff often had to use the limited water storage in the Sermo reservoir to solve water scarcity problems experienced by farmers in the downstream systems that resulted from excessive water taking by farmers in the upstream systems.

The establishment of spatial authority as the result of FWUA-SDI staff and FWUA-DPIS field staff alliances showed that the primary essence of management transfer should not lie in the transfer of decision-making authority for irrigation system management from the district irrigation agency to farmer organizations. Rather, it should focus on synchronizing the existing patterns of alliances at each water distribution level into the inter-system water distribution arrangements. The key issue to promote equal water distribution in the seven technical irrigation systems in Kulon Progo district lies in the complementary roles of SWUA/FWUA, DPIS field staff, and SDI staff at both the system and the inter-system water distribution level. These complementary roles were evident from the way the SDI staff did try to cope with the changing decision-making pattern in inter-system level water distribution, from centralized management by the irrigation agency (under the former DPIS) to a polycentric one, involving DPIS field staff, FWUA and SDI staff. This illustrated the SDI's attempt to reshape its role from government agency responsible for systems management, to water service provider for farmers. Similarly, the way the SDI staff initiated the ten-day water distribution meeting showed the SDI's attempt to extend the farmers' role in system water distribution from water users to direct counterparts of the irrigation agency in arranging inter-system level water distribution.

9.5 The IMT paradoxes and future research

The way the international donors treated the irrigation agency as the government agent primarily responsible for sectoral reform illuminates the first paradox in IMT policy

formulation. This paradox concerns how the international donors first addressed the need to conduct sectoral reform (primarily due to the poor performance of the irrigation agency), and later appointed the very agency at which sectoral reform was targeted as the reform agent. In IMT policies, the irrigation agency is viewed both as government agent incapable of managing the irrigation system and as reform agent responsible for the formulation and implementation of the sectoral reform program.

The way the Indonesian IMT policy was formulated in isolation from the irrigation agency's eminent role and bureaucratic power in sector development implies that international donors and IMT policy makers assumed an a-political approach towards IMT. With reference to this approach, the role of the irrigation agency in IMT was limited to that of a government agent responsible for policy formulation and implementation. Apart from its role and tasks in directing the sector's development, the irrigation agency was assumed to lack any identity, or interests of its own. Similarly, the relationship between the irrigation agency (as the power holder) and farmers (as the future power takers) in IMT was viewed as a-political if not neutral. In addition, the transfer of decision-making authority from the irrigation agency to farmers was approached primarily as a technical and managerial matter. With reference to this a-political approach towards IMT, the irrigation agency's resistance to proceeding with IMT was treated primarily as one of the 'escape hatches' (Clay and Schaffer, 1984) in IMT policy development. For instance, the slow progress of IMT policy under the IOMP 1987 policy statement was referred to the irrigation agency's lack of political will. Similarly, the halting of the WATSAL IMT program in 2004 was linked to the irrigation agency's lack of political commitment. Nevertheless, reasons behind this lack of political will and commitment were never explored in the IMT policy discourse.

In Indonesia, the World Bank treated the irrigation agency's decision to adopt an IMT policy as a kind of formal evidence of the agency's motivation to conduct the proposed sectoral reform, quite apart from the agency's interest in project fund allocation. In practice, the way IMT under both the IOMP and WATSAL was resisted by the irrigation agency showed that the agency's decision to adopt IMT policy was not always in line with the global attempt to promote IMT. Nevertheless, the World Bank continued to uncritically promote IMT formulation and implementation in Indonesia, even after the irrigation agency had so openly opposed the idea of management transfer. In the aftermath of the IMT policy struggles in 2004, the World Bank halted the third tranche of WATSAL funds disbursement. Yet, almost immediately the Bank started to finance another IMT program implementation under the WISMP.

The international donors repeatedly promoted IMT policy formulation and implementation in Indonesia in parallel with the irrigation agency's continuous attempts to redirect the principles of IMT to preserve their importance in the sector's development. This reflects the fact that, like the irrigation agency, international donors also had an interest in sustaining their role as fund providers for the irrigation agency. Further research should be focused on international donors' organizational function in promoting the adoption of policy trends by developing country governments, and how this function is

linked with donors' interests and organizational characteristics. The way the international policy agenda in irrigation has been defined by international donors reflects their interest in sustaining their importance in directing water sector development, both as financial provider and development agency. The question remains as to how these two identities and roles shaped the international donors' position as trend setters in irrigation development.

The second paradox in IMT policy formulation concerns how the idea of management transfer was justified as part of the neo-liberal development perspective (Carney and Farrington, 1998) and later also as part of political empowerment, related to the concept of decentralization and democratization (Grindle, 1997). As part of the neo-liberal development perspective, IMT was promoted to increase farmers' financial capability as the direct beneficiaries of irrigation sector development. With reference to the concept of decentralization and democratization, IMT was encouraged to increase farmers' decision-making authority in irrigation systems management. In this context, farmers' willingness to take over the systems management was no longer rooted in how farmers perceived IMT in relation to their development needs. Ironically, farmers often did not have a choice about whether or not they were interested in IMT, despite the fact that IMT supposedly promoted increased farmer decision-making authority in irrigation systems management.

In reality, nothing can be said about farmers' willingness to take over systems management, or how they perceived IMT, since farmers continue to be treated as a homogenous group in IMT (see also the concept of labeling by Schaeffer, 1986, and Wood, 1985). International policy makers assumed that farmers' development needs were incorporated in the WATSAL IMT program, without taking into account how IMT might be perceived differently by farmers, depending on their location in the irrigation system, their farming practices, their social and economic status, and their access to decision making in both WUAs and FWUAs. In Indonesia, the WATSAL policy makers, like the international policy makers, assumed that farmers were willing and prepared to take over irrigation systems management from the irrigation agency. The WATSAL policy makers took for granted how farmers would actually perceive the idea of management transfer, viewing FWUA as the agent of reform in irrigation sector development.

Farmers perceived IMT differently. For instance, from my interviews with farmers, headend farmers were not willing to take over systems management (after I explained the idea of IMT to them) since they did not see how IMT could improve their water distribution practices. Tail-end farmers, on the other hand, were enthusiastic about the idea of management transfer, but only if IMT could ensure their irrigation water supply. Thus, when a shortage of trained and capable farmers was defined as one of the IMT policy barriers, this diagnosis failed to grasp the fact that such shortages occur perhaps because farmers do not see the need to organize themselves in the way proposed by the government. Similarly, FWUA/WUAs could have different and often conflicting roles in irrigation systems management. For instance, in the Kalibawang system, FWUA staff had more interest in cooperative activities than in regulating farmers' water distribution according to the defined inter-system water delivery schedule. In West Pekik Jamal, on

the other hand, FWUA staff increased their ISF collection by providing farmers with sufficient irrigation water supply. In the Sapon irrigation system, the FWUA's organizational functioning was focused on its role as pressure group, to speed the rehabilitation of the Sapon dam.

Future research on IMT should focus on how farmers perceive management transfer in relation to their actual roles and capability in irrigation systems management. In this way, if farmers indeed decided to take it over, farmers' decision-making authority would be then rooted in their development needs, rather than in the irrigation agency's attempt to design FWUA/WUAs as their bureaucratic replica. Similarly, the attempt to improve or revitalize farmers' capability in irrigation systems management should be based on farmers' needs, rather than on the WATSAL policy makers' attempt to use the FWUA/WUA as their grass-roots weapon to eradicate rent-seeking practices in the irrigation sector.

Last but not least, the way the WATSAL IMT program continued to be implemented using the project structure and mechanisms illustrated another paradox in IMT. This paradox concerned the WATSAL policy makers' strategy to use IMT as a tool to eradicate bureaucratic rent-seeking on the one hand, and the way the WATSAL IMT program was implemented through the project structure and mechanisms on the other hand. Apart from the project structure, there was an absence of alternative structures to channel policy programs to the regional level in Indonesia. Ironically, the implementation of the WATSAL IMT program through the project approach preserved the very foundation upon which rent-seeking practices were based in Indonesia.

9.6 Final reflections on bureaucratic reform for IMT in Indonesia

The policy controversy in IMT remains unresolved as the issue of bureaucratic reform in IMT remains unaddressed in the WATSAL IMT program. With the abolition of the MPW, the core policy actors in the irrigation agency were excluded from the overall process of IMT formulation and implementation under WATSAL. However, this 'bureaucratic reform' hardly touched the core policy actors' belief system (Sabatier and Jenkins-Smith, 1993). Isolated in the State Ministry of Public Works (Meneg PU), the core policy actors' belief system remained intact as in the Ministry of Settlement and Regional Development (Kimbangwil), which was formed to replace the MPW in sectoral development, the scope of the bureaucratic reform was limited to the appointment of a new Kimbangwil minister with a strong NGO background. Hence, with the unification of the Meneg PU and Kimbangwil in the Ministry of Settlement and Regional Infrastructure (Kimpraswil) in 2001, the core policy actors resumed their bureaucratic power and (re)directed irrigation sector development towards infrastructure-oriented development.

The irrigation agency continued to play an eminent role in shaping IMT policy formulation and implementation. Despite the bureaucratic fragmentation within the agency as a consequence of the regional autonomy program, both the national and regional irrigation agencies sustained their bureaucratic identity and power to direct the

sector's development. At the national level, the irrigation agency's bureaucratic power was evident from the way it successfully halted the WATSAL IMT program, following the promulgation of the new Water Act. Despite the WATSAL policy makers' earlier success in hiding the real implications of IMT under WATSAL, the core policy actors in the irrigation agency redirected the IMT policy development path towards the agency's interests and organizational foundation by freezing sectoral fund disbursement for IMT implementation. At the provincial level, the preservation of the irrigation agency's bureaucratic interests was evident from the way the majority of officials in the Provincial Irrigation Agency (PIA) viewed IMT primarily as a tool to mobilize the project fund. The agency's bureaucratic power was evident from the way the project head in the Provincial Irrigation Project (PIP) and the officials in the PIA defined the provincial government's position on IMT in the aftermath of the IMT policy struggles. At district level, the irrigation agency's bureaucratic interests and power were evident from the way it directed FWUAs' organizational development in such a way that they became replicas of the agency. FWUAs' access to the stimulant fund was designed to eradicate rent-seeking practices. The way it has backfired shows the decisive role of the agency's bureaucratic identity in shaping FWUA organizational characteristics and functioning. Logically, one could not expect the FWUA to manage the stimulant fund transparently, as the FWUAs' organizational development was directed by the district irrigation agency, following the agency's development path.

Apart from the irrigation agency's resistance to change, recognition of the need for bureaucratic reform was present at both the national and the regional level. At the national level, the way the WATSAL IMT program was formulated by mid-level officials in the NDPA shows that there was motivation to reform from within the government ministries. Most importantly, the way high officials in the irrigation agency joined the 'conspiracy' to hide the real implications of IMT under WATSAL illuminates that the need for bureaucratic reform was also seen within the irrigation agency not to mention how some officials in the irrigation agency insisted on their position on IMT (despite the Kimpraswil's moratorium). In addition, the Sub-Directorate of Water Resources (SDWR) in MoHA continued to support the consortium of NGOs and universities members' idea to halt the promulgation process of the new Water Act (even after the Kimpraswil-MoHA agreement). This shows that MoHA's decision to be the second government agent responsible for IMT implementation was also linked to the motivation of some of its officials (primarily in the SDWR) to promote sectoral reform. At the regional level, the way the PIA heads in East Java and Yogyakarta, and the former project head of the PIP in Yogyakarta debated the changing role of the irrigation agency from decision maker to farmers' facilitator illuminates reflection on the prospects for bureaucratic reform from within the irrigation agency. Despite the agency's interest in sustaining its bureaucratic importance, and thus access to sectoral development funds, there is thus a segment within the agency that is motivated to improve the agency's organizational performance. In addition, the way the PIA officials in East Java maneuvered the government fund disbursement procedure to continue with the WATSAL IMT program shows the dynamic force of reform within the irrigation agency. Finally, in Kulon Progo district in particular, the way the SDI staff gradually changed their role from decision maker at the inter-system

water distribution level to water service provider for farmers illustrates the irrigation agency's capability to reform itself.

The question remains as to how these reform forces can be bundled to counteract the dominant, mainstream interests of the irrigation bureaucracy in Indonesia. The WATSAL policy makers' strategy to use both the NDPA and MoHA as external forces to reform the irrigation agency failed as neither government agency could counteract the Kimpraswil minister's power, which was rooted in his political relationship with the president. Similarly, the WATSAL policy makers' strategy to use FWUA access to sectoral development funds to eradicate rent-seeking practices in irrigation sector development failed since bureaucratic rent-seeking had become embedded in the fabric of the bureaucracy.

In my opinion, bureaucratic reform in the irrigation sector should start at the level where farmers can interact with their bureaucratic counterpart, that is at the level of the irrigation system¹ firstly, because I believe that bureaucratic reform in the irrigation sector should first be linked to farmers¹ actual development needs, independent of the way IMT policy has been linked to the concept of decentralization and democratization. I think that the essence of IMT should lie in farmers¹ ability to choose their own development paths and thus to decide whether or not management transfer will improve their standard of living. In this context, IMT should be promoted as a development option rather than a policy prescription.

Secondly, my reason for choosing the irrigation system level as the starting point to initiate bureaucratic reform relates to the role of the SDI in shaping and reshaping the overall implementation of the WATSAL IMT program. I showed the way the SDI shaped the FWUAs' organizational functioning towards being the irrigation agency's replica, on the one hand, and the way the SDI promoted polycentric decision-making processes at the inter-system water distribution level, on the other hand. This identifies the transitional character of the district irrigation agency as the key point to create better links in the relationship between the Indonesian state and its citizens in the irrigation sector. Unlike their bureaucratic counterpart at the provincial and national level, SDI staff are directly involved with farmers in their day-to-day work. Hence, in my opinion, they are the ones who would be most likely to initiate reform, if they see the need for it, in relation to their role in directing overall systems management. Further, regardless of how SDI staff view IMT policy, they have tremendous knowledge not only of the irrigation system's technical characteristics, but also of the social and political interplay in overall systems management. For instance, I think that the main reason behind the failure of the WATSAL IMT program to reach farmers was that WATSAL policy makers were not directly linked to farmers, and were less knowledgeable about their farming and irrigation practices than the SDI staff. The SDI staff's position on IMT is crucial in defining the actual meaning of IMT for farmers.

Consequently, the scope and degree of this bureaucratic reform should be flexibly defined in accordance with farmers' needs and how the irrigation agency views its present role in

relation to the representation of these needs. The decision for management transfer should relate not only to farmers' willingness to take over systems management but also to the perception of SDI staff on how the problems in government irrigation systems should be addressed in the first place. In this way, the essence of bureaucratic reform would be directly linked with problems encountered by both the SDI staff and farmers in the field, and thus with their development needs and interest as the frontrunners in irrigation systems management. For instance, the WATSAL policy makers' strategy to use the KIIF concept to counteract the irrigation agency's bureaucratic power in the sector failed to empower farmers since the concept was not rooted in farmers' actual development needs, but rather in the irrigation agency's organizational foundation and bureaucratic identity. Despite their attempt to counteract the irrigation agency's bureaucratic identity, the way IMT policy strategies were formulated by the WATSAL policy makers meant that they remained trapped within the agency's bureaucratic mind-set.

One major impediment to initiating bureaucratic reform from the irrigation system level is the fact that it remains trapped in the existing power structure, such that farmers are in a relatively weaker bargaining position as compared to the irrigation agency. For instance, unlike the irrigation agency, farmers are not in charge of the operation of the major irrigation infrastructure. Similarly, there is no guarantee that FWUA/WUA organizational functioning would not be dominated by the rural elite. Nevertheless, the way the farmeragency developed in the seven technical irrigation systems in Kulon Progo shows how farmers could represent their needs, even when this was done through the rural elite. The crucial point here is how to shape the farmer-elite relationship, so that it can facilitate the representation of farmers' needs.

Last but not least, I think bureaucratic reform should include an attempt and strategy to persuade the irrigation agency to participate, instead of excluding them from the overall process of IMT policy formulation and implementation. For better or for worse, the irrigation sector's development in Indonesia could not be directed without the irrigation agency's knowledge and experience.

¹ See also the way bureaucratic transformation in the Philippines during the 1980s was limited to the irrigation system level (Oorthuizen, 2003; Korten and Siy, 1989).

Angoedi, Abdullah, 1984, Sejarah irigasi di Indonesia, Indonesian National Committee and ICID, Jakarta.

Adinugroho, Bambang, 2003, "IMT implementation framework", paper presented on the IMT training in Denpasar 5-10 October 2003.

Alatas, S.H., 1986. The problem of corruption, Times Books International, Singapore.

Aluwihare, P. B. and M. Kikuchi, 1991, Irrigation investment trends in Sri Lanka: New construction and beyond, International Irrigation Management Institute, Colombo, Sri Lanka.

Ambler, John S., 1991, Irigasi di Indonesia: Dinamika kelembagaan petani, LP3ES, Jakarta.

Anderson, James E., 1997, Public policymaking: An introduction, Houghton Miflin Company, New York.

Anderson, Benedict R. O'G., 1990, Language and power: Exploring political cultures in Indonesia, Cornell University Press, Ithaca.

Antlov, Hans and Sven Cederroth, 2004, *Elections in Indonesia: The New Order and beyond*, Routledge publisher.

Apthorpe, R., 1996, "Reading development policy and policy analysis: On framing, naming, numbering and coding", in: R. Apthorpe and D. Gasper (eds.), Arguing development policy: Frames and discourses, EADI, Geneva.

Apthorpe, R. and D. Gasper (eds.), 1996, Arguing development policy: Frames and discourses, EADI, Geneva.

Apthorpe, R., 1986, "Development Policy Discourse", in: *Public Administration and Development*, Vol. 6, No. 4, pp.377-389.

Asia Foundation, 2002, Indonesian Rapid Decentralization Appraisal (IRDA): Second report, Asia Foundation, Jakarta.

Aspinall, Edward and G. Fealy, 2003, "Introduction: decentralisation, democratisation and the rise of the local", in: Aspinal and Fealy (eds.), Local power and politics in Indonesia: Decentralisation & democratization, Institute of Southeast Asian Studies, Singapore.

Baardewijk, F. van, 1993, "The cultivation system: Java 1834-1880", in: Changing Economy in Indonesia, No. 14.

Bacon, Francis, 1996, The essays of Francis Bacon, Project Guttenberg, Reprinted edition.

Bahl, Roy W. and B. Tumennasan, 2002, "How should revenue from natural resources be shared in Indonesia?", Working Paper No. 02-14, presented at Andrew Young School of Public Policy conference on 1-3 May 2002, Can Decentralization help rebuild Indonesia? Georgia State University

Barnard, Chester, 1938, The functions of the executive, Harvard University Press, Cambridge.

Barker, Randolph and Francois Molle, 2000, Evolution of Irrigation in Asia, IWMI Research Report, Comprehensive Assessment of Water Management in Agriculture, IWMI, Sri Lanka.

Basedau, M., 2005, "Context matters: Rethinking the resource curse in sub-saharan Africa", Working Papers Global and Area Studies, No. 1, German Overseas Institute, Hamburg.

Basedau, M. and Wolfram Lacher, 2006, "A paradox of plenty? Rent distribution and political stability in oil states", Working Paper No. 21, German Institute of Global and Area Studies, Hamburg.

Batley, R., 1983, Power through bureaucracy: urban political analysis in Brazil, Aldershot, Gower.

Bauer, C. J., 1997, "Bringing water markets down to earth: the political economy of water rights in Chile 1976-1995", in: *World Development*, Vol. 25, No. 5, pp. 639-656.

Bayart, J. C., Stephen Ellis and Beatrice Hibou, 1999, The criminalization of the state in Africa, Indiana University Press, Oxford and Bloomington.

Bayley, David H., 1970, "The effects of corruption in a developing nation", in: A.J. Heidenheimer (ed.), *Political corruption, readings in comparative analysis*, Holt, Rinehart and Winston, Inc., USA.

Benda-Beckmann, F. von, 1989, "Scapegoat and magic charm: law in development theory and practice", in: *Journal of Legal Pluralism and Unofficial Law*, Vol. 28, pp.129-149.

Bhatia, R., and M. Falkenmark, 1992, "Water resource policies and the urban poor: Innovative approaches and policy imperatives", background paper prepared for the ICWE, Dublin, 26-31 January 1992.

Bisnis Indonesia newspaper, 3 September 1998a, Bank dunia dan masyarakat madani siap berantas korupsi.

Bisnis Indonesia newspaper, 18 February 1998b, LP3ES: Koruspi Indonesia terparah di dunia.

Boelens, Rutgerd and Gloria Davila, 1998, Searching for equity: Conceptions of justice and equity in peasant irrigation, van Gorcum, The Netherlands.

Bogdan, R. and S. J. Taylor, 1975, Introduction to qualitative research methods: A phenomenological approach to the social sciences, Wiley, New York.

Booth, A., 1988, Agricultural Development in Indonesia, Allen and Unwin, Sidney.

Booth, David, 1994, Rethinking social development: Theory, research and practice, Centre of Developing Area Studies, University of Hull, Longman Scientific and Technical.

Bottrall, A F., 1981, "Comparative study of the management and organization of irrigation projects", World Bank Staff Working Paper No. 458, The World Bank, Washington D.C.

Bozeman, Barry and Hal G. Rainey, 1998, "Organizational rules and the bureaucratic personality", in: *American Journal of Political Science*, Vol. 42, No. 1, pp. 163-189.

Brautigam, Deborah and Stephen Knack, 2004, "Foreign aid, institutions and governance in sub-saharan Africa", in: Economic Development and Cultural Change, Vol. 52.

Brehm, Monica Rios and Jorge Quiroz, 1995, "The market for water rights in Chile", World Bank Technical Paper No. 285, The World Bank, Washington D.C.

Briscoe, I., 2006, "Debt crises, political change and the state in the developing world", Working Paper No. 1, ICEL

Brodjonegoro, Bambang, H. Paddue and M. Sato, 2003, "Intergovernmental transfers and tax sharing in Indonesia: Theories, practices and policy recommendation", paper presented at a symposium on Indonesia's decentralization policy: Problems and policy directions, Jakarta, 4-5 September 2003.

Brodjonegoro, Bambang and A. T. Pakpahan, 2003, "Evaluasi atas alokasi DAU 2001 dan permasalahannya", in: Machfud Sidik (eds.), *DAU: Konsep, hambatan dan prospek di era otonomi daerah*, Penerbit Buku Kompas, Jakarta.

Brodjonegoro, B. and S. Asanuma, 2000, "Regional autonomy and fiscal decentralization in democratic Indonesia", *Hitotsubashi Journal of Economics*, Vol. 41, No. 2, pp. 111-122.

Bromley, Daniel W. and Michael M. Cernea, 1989, "The management of common property natural resources: Some conceptual and operational fallacies", World Bank Discussion Paper No. 57, The World Bank, Washington D.C.

Bruns, Bryan, 2003, "From voice to empowerment: Rerouting irrigation reform in Indonesia", in: Peter P. Mollinga and Alex Bolding (eds.), The politics of irrigation reform: Contested policy formulation and Implementation in Asia, Africa and Latin America, Ashgate.

Bruns, Bryan and Ruth Meinzen-Dick, 1999, Negotiating water rights, Intermediate Technology, London.

Bruns, Bryan and Helmi, 1996, "Participatory irrigation management in Indonesia: Lessons from experience and issues for the future", paper presented at the Indonesia national workshop on Participatory Irrigation Management, 4-8 November 1996.

Bruns, Bryan, and Sudar Dwi Atmanto, 1992, "How to turn over irrigation systems to farmers? Questions and decisions in Indonesia", Irrigation Management Network Paper No. 10, ODI, London.

Burawoy, M., 1991, "The extended case method", in: M. Burawoy (ed.), *Ehtnography unbound: Power and resistance in the modern metropolis*, University of California Press, Los Angeles, pp. 271-287.

Byrnes, K. J., 1992, "Water users associations in World Bank assisted irrigation projects in Pakistan", World Bank Technical Paper No. 173, The World Bank, Washington D.C.

Carney, D., 1998, Changing public and private roles in agricultural services provision, Natural Resources Group ODI, London.

Carney, D. and John Farrington, 1998, Natural resource management and institutional change, Routledge, London/New York.

Carruthers, I. And J.A. Morrisson, 1996, "Institutions in water resources management: Insights from new institutional economics", in: Howsam, P. and Carter, R. C. (eds.), *Water policy: Allocation and management in practice*, E & FN Spon, London, pp. 205-212.

Cernea, Michael M., ed. 1991, Putting people first: Sociological variables in rural development, Oxford University Press, UK.

Chambers, Robert, 1997, Whose reality counts? Putting the first last, Intermediate Technology Publications, UK.

Chambers, Robert, 1988, Managing canal irrigation: Practical analysis from South Asia, New Delhi and Calcutta.

Clay, E. and B. Schaffer (eds.), 1984, Room for manoeuvre: An exploration of public policy in agriculture and rural Development, Heinemann, London.

Cohen, H., 1965, The demonic of bureaucracy: problems of change in government agency, Ames.

Cole, William S., 2001, "Roots of corruption in the Indonesia system of governance in old game or new? Corruption in today's Indonesia", Asia Program Special Report, December 2001, pp. 13-18.

Consortium of NGOs and universities, 2003, Final report: study on impact of Irrigation Management Policy Reform Implementation in Indonesia.

Coward, E. Walter, 1986a, "State and locality in Asian irrigation development: The property factor", in: K.C. Nobe and R. K. Sampath (eds.), *Irrigation management in developing countries: current issues and approaches*, Studies in Water Policy and Management No. 8, Westview Press, Colorado.

Coward, E. Walter, 1986b, "Direct or indirect alternatives for irrigation investment and the creation of property", in: K.W. Easter (ed.), *Irrigation investment, technology and management strategies for development*, Studies in Water Policy and Management No. 8, Westview Press, Colorado.

Coward, E. Walter, 1984, Improving policies and programs for the development of small-scale irrigation systems, Cornell University Press, Ithaca.

Coward, E. Walter, 1980, Irrigation and agricultural development in Asia: Perspective from the social sciences, Cornell University Press, Ithaca.

Cribb, R., 1994, The late colonial state in Indonesia: Political and economic foundations of the Netherlands Indies, 1880-1942, KITLV Press, Leiden.

Crouch, Harold, 1986, "Patrimonialism and military rule in Indonesia", in: Atuh Kohli (ed.), *The state and development in the third world*, Princeton University Press, pp. 242-258.

Danziger, M., 1995, "Policy analysis postmodernized: Some political and pedagogical ramifications", in: *Policy Studies Journal*, Vol. 23, No. 3, pp. 435-450.

Darwin, Charles, 1985, The origin of species, Penguin books, Reprinted edition.

Devas, Nick, 1997, "Indonesia: what do we mean by decentralization?", in: *Public Administration and Development*, Vol. 17, pp. 351-367.

Diemer, G. and J. Slabbers, 1992, *Irrigators and Engineers*, Essays in Honour of Lucas Horst, Thesis Publishers, Amsterdam.

Dinar, Ariel and Ashok Subramanian, 1997, "Water Pricing Experience: An international perspective", World Bank Technical Paper No. 386, The World Bank, Washington D.C.

District government of Kulon Progo, 2003, District head Decree Number 183 of 2003 on the formation of Irrigation Committee.

District government of Kulon Progo, 2003, District head Decree Number 296 of 2003 on tasks and responsibilities of irrigation institutions.

District government of Kulon Progo, 2002, Regional Regulation Number 17 of 2002 on irrigation management.

District government of Kulon Progo, 2001, District head Decree Number 589 of 2001 on the organizational structure of the district irrigation agency.

District government of Kulon Progo, 2000, Regional Regulation Number 11 of 2000 on formation, organization and work procedure of district irrigation agency.

District government of Kulon Progo, 1996, Regional Regulation Number 9 of 1996 on WUA formation in Kulon Progo district.

District Water Resources Services of Kulon Progo, 2004, Financial Audit for Rehabilitation Activities conducted by the FWUAs in Kulon Progo district.

District Water Resources Services of Kulon Progo, 2004, Evaluation on WUAs Activities in Kulon Progo district.

District Water Resources Services of Kulon Progo, 2003, Evaluation on WUAs Activities in Kulon Progo district.

Doom, J. A. A. van, 1994, De laatste eeuw van Indie: Ontwikkeling en ondergang van een koloniaal project, Amsterdam.

Doom, J. van, 1983, "The engineers and the colonial system technocratic tendencies in the dutch East Indies", in: Comparative Asian Studies Programme (CASP) series 6, Erasmus University Rotterdam.

Douwes-Dekker, Edward, 1995, Max Havelaar, Penguin, USA.

Dowding, K., 1995, "Model or metaphor? A critical review of the policy network approach", in: *Political Studies*, Vol. 43, pp.136-158.

Dryzek, John S., 1993, "Policy analysis and planning: From science to argument", in: F. Fischer and J. Forester (eds.), *The argumentative turn in policy analysis and planning*, Duke University Press, Durham.

Duewel, J. W., 1995, Peasant irrigation social organization and agrarian change: A comparative study of Dharma Tirta water users associations in lowland Central Java, Cornell University, PhD thesis.

Easter K. William and Robert R. Hearne, 1995, "Water Allocation and Water Markets: An Analysis of Gains from Trade in Chile", World Bank Technical Paper No. 315, The World Bank, Washington, D.C.

Easter K. William and Robert R. Hearne, 1993, "Decentralizing water resource management: Economic incentives, accountability and assurance", Policy Research Working Paper 1219, Agriculture and Natural Resource Department, Agricultural Policies Division, The World Bank, Washington D.C.

Economic Development Institute (EDI) of the World Bank, 1996, Handbook on participatory irrigation management, The World Bank, Washington D.C.

Edelman, M., 1988, Constructing the political spectacle, University of Illinois Press, Urbana, Illinois.

Egeberg, Morten, 1999, "The impact of bureaucratic structure on policy making", in: *Public Administration*, Vol. 77, No. 1, pp. 155-170.

Eggink, J. W. and J. Ubels, 1984, *Irrigation, peasants and development*, Wageningen University Press, The Netherlands.

Eijsvogel, W. F., 1946, De verbetering van den oostmoesson-bevloeiingtoestand op Java, Veenman, Wageningen.

Eisenstadt, S. N., 1963, The political systems of empires, the free press of Glencoe.

Elson, R. E., 1979, Sugar and peasants: The social impact of the western sugar industry on the peasantry of the Pasuruan area, East Java, from the cultivation system to the great depression, Clayton.

Emilia, R., 2005, "Dilema perimbangan keuangan pusat-daerah", in: Haris (ed.), Desentralisasi dan otonomi daerah: Desentralisasi, demokratisasi dan akuntabilitas pemerintahan daerah, LIPI Press, Jakarta.

ERA and partners law firm, 2004, Law suit filed to the Central Jakarta Judiciary Office on judicial review of the Water Act Number 7 of 2004, 19 February 2004.

Esman, M. J. and Norman T. Uphoff, 1984, Local organizations: Intermediaries in rural development, Cornell University Press, Ithaca.

Esman, M. J. and Norman T. Uphoff, 1982, Local organization and rural development: The state of the art, Cornell University Press, Ithaca.

Evers, Hans-Dieter, 1985, "Bureaucratization of Southeast Asia", Working Paper No. 71, Sociology of Development Research Centre, University of Bielefeld.

Evers, Hans-Dieter, 1982, "Sequential patterns of strategic group formation and political change in Southeast Asia", Working Paper No. 14, Sociology of Development Research Centre, University of Bielefeld.

Evers, Hans-Djeter (ed.), 1973, Modernization in Southeast Asia, Oxford University Press, Oxford.

Fane, G., 2003, "Change and continuity in Indonesia's new fiscal decentralization arrangements", in: *Bulletin of Indonesian Economic Studies*, Vol. 39, No. 2, pp. 159-176.

Fasseur, C., 1975, Kultuurstelsel en koloniale baten: De nederlandse exploitatie van Java, 1840-1860, Leiden.

Ferguson, James, 1997, The anti-politics machine: Development, depoliticisation and bureaucratic power in Lesotho, University of Minnesota Press, Minneapolis.

Fischer, F., 1998, "Beyond empiricism: Policy inquiry in postpositivist perspective", in: *Policy Studies Journal*, Vol. 26, No. 1, pp. 1-21.

Fischer, F. and J. Forester (eds.), 1993, *The argumentative turn in policy analysis and planning*, Duke University Press, Durham.

Frederiksen, Harald D., 1992, "Water resources institutions: Some principles and practices", World Bank Technical Paper No. 191, The World Bank, Washington D.C.

Freeman, David M., 1989, Local organizations for social development: Concepts and cases in local irrigation organization, Westview Press, Colorado.

Freeman, David M. and J. Wilkins-Wells, 1989, Local organizations for social development: concepts and cases of irrigation organization, Westview Press, Colorado.

Freeman, David M., and Max L. Lowdermilk, 1985, "Middle-level organizational linkages in irrigation projects", in: Michael M. Cernea (ed.), *Putting people first: Sociological variables in rural development*, Oxford University Press, pp. 91-118.

FWUA Banaran (Sapon), 2004, Proposal for rehabilitation.

FWUA East Pengasih, 2003, Financial audit from 2002-2007.

FWUA East Pengasih, 2003, Proposal for rehabilitation.

FWUA West Pengasih, Fiscal year 2003 planning.

Gany, A. H. A., S. Mahdi and E. Pasandaran, 2004, *Irrigation history of Indonesia*, Ministry of Settlement and Regional Infrastructure in collaboration with the Indonesian National Committee of International Commission on Irrigation and Drainage (INACID), Jakarta.

Gerards, J., 1992, No money, no water (water has value): Water resources management in Indonesia for the next twenty five years (1992-2018), Gaia International Management, Jakarta.

Gerring, John, 2001, Social science methodology: A critical framework, Cambridge University Press, Cambridge, United Kingdom.

Gerth, H. H. and C. Wright Mills, 1948, From Max Weber: Essays in Sociology, London.

Giddens, A., 1984, The constitution of society: Outline of the theory of structuration, Polity Press, Cambridge.

Government of Indonesia, 2004, Water Act Number 7 of 2004.

Government of Indonesia, 2003, Revised draft Water Act, 20 September 2003 version, Ministry of Settlement and Infrastructure Development.

Government of Indonesia, 2003, Revised draft Water Act, 15 December 2003 version, Ministry of Settlement and Infrastructure Development.

Government of Indonesia, 2001, Government Regulation Number 77 of 2001 on irrigation, Coordination Team WATSAL, Directorate of Irrigation of the National Development Planning Agency.

Government of Indonesia, 2003, Ministry of Finance Ministerial Decree Number 298 of 2003 on the fund allocation guideline for the Kabupaten Irrigation Improvement Fund.

Government of Indonesia, 2001, Kimpraswil Ministerial Decree Number 529 of 2001 on IMT guideline, Coordination Team WATSAL, Directorate of Irrigation of the National Development Planning Agency.

Government of Indonesia, 2001, MoHA Ministerial Decree Number 50 of 2001 on the empowerment guidelines for WUAs, Coordination Team WATSAL, Directorate of Irrigation of the National Development Planning Agency.

Government of Indonesia, 2001, Coordinating Minister of Economic Affairs Ministerial Decree Number 15 of 2001 on the formation of Coordination Team.

Government of Indonesia, 2000, Coordinating Minister of Economic Affairs Ministerial Decree Number 34 of 2000 on the membership composition of the WATSAL Working Teams.

Government of Indonesia, 1999, Presidential Instruction Number 3 of 1999 on irrigation reform.

Government of Indonesia, 1999, Letter of Sector Policy (LoSP) 1999, National Development Planning Agency.

Government of Indonesia, 1999, Regional Autonomy Act Number 22.

Government of Indonesia, 1999, Fiscal Decentralization Act Number 25.

Government of Indonesia, 1998, Decree of the People General Assembly Number XV of 1998 on the regional autonomy.

Government of Indonesia, 1989, Ministry of Public Works Ministerial Regulation Number 42/PRT of 1989 on implementing procedures for turnover of small-scale irrigation systems and operating authority for water user associations.

Government of Indonesia, 1987, Irrigation Operation and Maintenance Project (IOMP) policy statement 1987, Ministry of Public Works.

Government of Indonesia, 1984, Presidential Instruction Number 2 of 1984 on water user associations.

Government of Indonesia, 1982, Government Regulation Number 23 of 1982 on irrigation, Ministry of Public Works.

Government of Indonesia, 2003, Agreement note between the Ministry of Settlement and Regional Infrastructure and the Ministry of Home Affairs, 16 October 2003.

Government of Indonesia, 2004, Letter from the National Development Planning Agency to the World Bank on the WATSAL IMT programme: The government's decision on IMT, 28 May 2004.

Government of Indonesia, 2003, Moratorium letter from the Ministry of Settlement and Regional Infrastructure. 3 September 2003.

Government of Indonesia, 2003, Letter from the Ministry of Settlement and Regional Infrastructure to the Coordinating Minister of Economic Affairs on the moratorium of the WATSAL IMT programme, 3 September 2003.

Government of Indonesia, 2003, Letter from the Ministry of Home Affairs to the Working Committee in Commission IV at the parliament on the proposed changes for the draft Water Act, 8 September 2003.

Government of Indonesia, 2003, Letter from the Ministry of Settlement and Regional Infrastructure to the President on the need to proceed with the promulgation of the new Water Act, 2 October 2003.

Government of Indonesia, 2003, Letter from the Ministry of Home Affairs to the President on the need to continue with the WATSAL IMT programme. 13 October 2003.

Government of Indonesia, 2003, Letter from the Ministry of Settlement and Regional Infrastructure to the twelve government ministries involved in the WATSAL IMT programme on the progress of draft Water Act. 22 December 2003.

Government of Indonesia, 2003, Letter from the Ministry of Home Affairs to the Ministry of Settlement and Regional Infrastructure on the proposed changes for the draft Water Act, 24 December 2003.

Government of Indonesia, 1999, Letter from the National Development Planning Agency to the World Bank on the water resources and irrigation sector policy: Institutional, legislative and regulatory reform program, 21 April 1999.

Government of Indonesia, 1983, Letter from the Ministry of Home Affairs Number 611/11516/SJ of 1983 on the tertiary level guidance.

Government of Indonesia, 2003, Planning and activities report, Coordination Team WATSAL.

Government of Indonesia, 2003, WATSAL Coordination Team meeting note, 3 September 2003.

Goldensohn, M. D., 1994, Participation and empowerment: An assessment of water user associations in Asia and Egypt, Irrigation Support Project for Asia and the Near East, Virginia, USA.

Gorriz Cecilia M., Ashok Subramanian and Jose Simas, 1995, "Irrigation management transfer in Mexico: Process and progress", World Bank Technical Paper No. 292, The World Bank, Washington D.C.

Griffin, K., 1975, Political economy of agrarian change, Macmillan, London.

Grindle, M. S., 1997, Getting good government: Capacity building in the public sectors of developing countries, Harvard Studies in International Development, Harvard University Press.

Grindle, M. S., 1990, "After the decision: Implementing policy reforms in developing countries", in: *World Development*, Vol. 18, No. 8, pp. 1163-1181.

Grindle, M. S., 1980, Politics and policy implementation in the third world, Princeton University Press, Princeton.

Groenfeldt, D., 2000, "Introduction: A global consensus on Participatory Irrigation Management", in: D. Groenfeldt and M. Svendsen (eds.), *Case studies in Participatory Irrigation Management*, World Bank Institute Learning Resource Series, The World Bank, Washington D.C.

Hadiz, Vedi R., 2003, "Decentralization and democracy in Indonesia: A critique of neo-institutionalist perspective", Working Papers Series No. 47, Southeast Asia Research Centre (SEARC), City University of Hong Kong.

Hanneman, S. and Henk Schulte-Nordholt (eds.), 2004, Indonesia in transition: Rethinking civil society, region and crisis, Pustaka Pelajar, Yogyakarta.

Hansen, G. E., 1972, "Indonesia's green revolution: The abandonment of a non-market strategy towards change", Seadag Paper No. 72, Asia Society, New York.

Harahap, Rudy M., 1999, "Strategies for preventing corruption in Indonesia", Asia Pacific School of economics and management working paper, Australian National University.

Haringhuizen, J., 1931, "Nachtwadoeks", in: De Waterstaatsingenieur, Vol.19, pp. 335-353.

Haris, S., 2005, Desentralisasi dan otonomi daerah: Desentralisasi, demokratisasi dan akuntabilitas pemerintahan daerah, LIPI Press, Jakarta.

Heclo, Hugh, 1985, Issue networks and the executive establishment, Mimeo.

Heclo, Hugh, 1972, "Review article: Policy analysis", in: British Journal of Political Science, Vol. 2, pp. 83-108.

Heidenheimer, A. J., 1970, Political corruption, readings in comparative analysis, Holt, Rinehart and Winston, Inc., USA.

Helmi, 2000, "Transition of irrigation system management in Indonesia: Challenges and opportunities for sustainability", paper presented at *Constituting the commons: crafting sustainable commons in the new millenium*, the eighth conference of the International Association for the study of common property, Bloomington, 31 May - 4 June 2000.

Hendriks, Carolyn M., 2005, "Participatory storylines and their influence on deliberative forums", in: *Policy Sciences*, Vol. 38, No. 1, pp. 1-20.

Herb, Michael, 2003, Taxation and representation, Studies in Comparative International Development, forthcoming.

Herman, Theodore., 2003, Indonesia's water sector policy and institutional reform process, Draft.

Hiltgartner, S., and C. L. Bosk, 1988, "The rise and fall of social problems: A public arenas model", in: *American Journal of Sociology*, Vol. 94, No. 1, pp. 53-78.

Hoebink, Paul, 2007, The Netherlands Yearbook on International Cooperation, van Gorcum, Assen.

Hofstede, Ko ter and Jan van Santbrink, 1979, Neerlands Indie: Koloniaal waterbeheer, Wageningen Agricultural University, M.Sc. Thesis.

Holloran, S., and G. L. Corey and T. Mahoney, 1982, Sederhana: Indonesia small scale irrigation, Washington,

Holtzappel, Coen, Martin Sanders and Milan Titus (eds.), 2004, Riding a tiger: Dilemmas of integration and decentralization in Indonesia, Rozenberg Publishers, Amsterdam

Horst, L., 1998, The dilemmas of water division: Considerations and criteria for irrigation system design, International Irrigation Management Institute and Wageningen Agricultural University, Sri Lanka and The Netherlands.

Horst, L., 1994, Irrigation water division technology in Indonesia: A case of ambivalent development, Wageningen Agricultural University, The Netherlands.

Howlett, M. and M. Ramesh, 1998, "Policy subsystem configurations and policy changes: Operationalising the post positivist analysis of the policies of the policy process", in: *Policy Studies Journal*, Vol. 26, No. 3, pp. 466-481.

Hulme, D., 1995, "Projects politics and professionals: Alternative approaches for project identification and project planning", in: *Agricultural Systems*, Vol. 47, pp. 211-233.

Hunt, Robert C., 1989, "Appropriate social organization? Water user associations in bureaucratic canal irrigation systems", in: *Human Organization*, No. 48, November 1989.

Huntington, Samuel P., 1970, "Modernization and corruption", in: A.J. Heidenheimer (ed.), *Political corruption: Readings in comparative analysis*, Holt, Rinehart and Winston, Inc., USA.

Huppert, W. and B. Wolff, 2002, "Principal-agent problem in irrigation-inviting rent seeking and corruption", in: *Journal of Applied Irrigation Science*, Vol. 37, No. 2.

Huppert, W., Mark Svendsen and Douglas Vermillion, 2001, Governing maintenance provision in irrigation, GTZ, Eschborn.

Huppert, W., 1997, "Irrigation management transfer: Changing complex delivery systems for O&M services", DVWK Bulletin No. 20.

Huppert, W., 1989, Situation conformity and service orientation in irrigation management, GTZ, Eschborn.

International Irrigation Management Institute (IIMI), 1987, Public Intervention in Farmer-Managed Irrigation Systems, IIMI, Sri Lanka.

International Herald Tribune, Wahid Is Good for Indonesia and Deserves Help, 7 June 2000.

Irrigation Communication Network of Indonesia (JKII), 2004, Letter to the Ministry of Settlement and Infrastructure Development on the proposed changes for the draft Water Act, 17 December 2004.

Isham, Jonathan, Lant Pritchett, Michael Woolcock and Gwen Busby, 2002, The varieties of rentier experience: How natural resource endowments affect the political economy of economic growth.

ISSP II, 1993, Turnover evaluation report: Irrigation O&M and turnover component, Mott MacDonald International Ltd., Jakarta.

IWIRIP, Progress report: Thirty second quarterly period April-June, 2003, DHV Consultants BV.

Jatileksono, T., 1987, Equity Achievement in the Indonesian Rice Economy, Gadjah Mada University Press, Yogyakarta.

Jackson, Karl D. and Lucian W. Pye, 1980, *Political power and communications in Indonesia*, University of California Press, Berkeley, Los Angeles, London.

Jenkins-Smith, H. C., and Paul A. Sabatier, 1994, "Evaluating the advocacy coalition framework", in: *Journal of Public Policy*, Vol. 14, No. 2, pp. 175-203.

Jenkins-Smith, H. C., and G. K. St. Clair and B. Woods, 1991, "Explaining change in policy subsystems: Analysis of coalition stability and defection over time", in: *American Journal of Political Science*, Vol. 35, No. 3, pp. 851-880.

JIWMP-IDTO, Progress report: Twenty eighth quarterly period (April-June (August)) 2002, DHV Consultants BV.

JIWMP-IDTO, 1995, Inception report, DHV Consultants BV.

Jodha, N. S., 1995, "Common property resources: A missing dimension of development strategies", World Bank Discussion Paper No. 169, The World Bank, Washington D.C.

Johnson, A.W., 1978, Research methods in social anthropology, Arnold, London.

Johnson III, Sam H., Mark Svendsen and Fernando Gonzales, 2004, "Institutional reform options in the irrigation sector", Agriculture and Rural Development Discussion Paper No. 5, The World Bank, Washington D.C.

Johnson III, Sam H., Mark Svendsen and Fernando Gonzalez, 2002, "Options for institutional reform in the irrigation sector", discussion paper prepared for the International Seminar on Participatory Irrigation Management, Beijing, 21-27 April 2002.

Johnson III, Sam H., 1997, "Irrigation management transfer: Decentralizing public irrigation in Mexico", in: *Deregulation, decentralization and privatization in agriculture: State functions move to the free market*, DVWK Bulletin No. 20, Federal Republic of Germany.

Johnson III, Sam H., 1995, "Selected experiences with Irrigation Management Transfer: Economic implications", in: *Water Resources Development*, Vol. 11, No. 1, pp. 61-72.

Johnson III, Sam H., Douglas L. Vermillion and Juan A. Sagardoy (eds.), 1995, "Irrigation management transfer", Water Report No. 5, FAO Rome and IWMI Colombo.

Jones, W. I., 1995, *The World Bank and Irrigation*, Operational Evaluation Development of the World Bank, Washington D.C.

Kaplan, Thomas J., 1993, "Reading policy narratives: Beginnings, middles and ends", in: F. Fischer and J. Forester (eds.), Argumentative turn in policy analysis and planning, Duke University Press, Durham.

Kapur, Devesh, John P. Lewis and Richard Webb, 1997, *The World Bank: Its first half century,* Volume 1 History, Brookings Institution Press, Washington.

Kaviraj, Sudipta, 1999, Politics in India, Oxford University Press, UK.

Kelly, Roy, 2004, "Property tax reform in Indonesia: Emerging challenges from decentralization", in: *The Asia Pacific Journal of Public Administration*, Vol. 26, No.1 (June 2004), pp. 71-90.

Kemper, Karin, Ariel Dinar and William Blomquist (eds.), 2005, Institutional and policy analysis of river basin management decentralization: The principle of managing water resources at the lowest appropriate level-when and why does it (not) work in practice?, The World Bank, Washington D.C.

Kemper, Karin and D. Olson, 2000, "Water pricing: The dynamics of institutional change in Mexico and Ceara, Brazil", in: A. Dinar (ed.), *The political economy of water pricing reform*, Oxford University Press.

Kerkvliet, Benedict J. Tria., 1990, Everyday politics in the Philippines: Class and status relations in a central Luzon village, California University Press, Berkeley.

Kessides, Christine, 1993, "The contributions of infrastructure to economic development: A review of experience and policy implications", World Bank Discussion Papers No. 213, The World Bank, Washington D.C.

Khanal, Puspa Raj, 2003, Engineering participation: The processes and outcomes of irrigation management transfer in the Terai of Nepal, Phd thesis, Wageningen University, The Netherlands.

Khudori, Darwis, 2006, "Towards a Bandung spirit-based civil society movement: reflection from Yogyakarta commemoration of Bandung Asian-African Conference", in: *Inter-Asia Cultural Studies*, Vol. 7, pp. 121-138.

King, Dwight Y., 1979, "Indonesia's New Order as a bureaucratic policy: A neo-patrimonial regime or a bureaucratic authoritarian regime, what difference does it make?", in: Benedict Anderson and Audrey Kahin (eds.), *Interpreting Indonesian politics: Thirteen contribution to the debate*, Cornell Modern Indonesia Project, Interim Report Series No. 62, Ithaca.

King, Peter, 2005, KKN and the future of Indonesia, paper presented in the public lecture of the International Institute for Asian Studies, Leiden, the Netherlands.

Kingdon, J., 1995, Agendas, alternatives and public policies, Little Brown, Boston.

Klaveren, Jacob van, 1970, "The concept of corruption", in: A.J. Heidenheimer (ed.), *Political corruption, readings in comparative analysis*, Holt, Rinehart and Winston, Inc., USA.

Kleden, Ignas, 2004, Masyarakat dan negara: Sebuah persoalan, Yayasan Indonesiatera, Jakarta.

Kleden, Ignas, 2001, Menulis politik: Indonesia sebagai utopia, Kompas, Jakarta.

Klijn, E. H., 1996, "Analyzing and managing policy processes in complex networks: A theoretical examination of the concept of policy network and its problems", in: *Administration and Society*, Vol. 28, No. 1, pp. 90-119.

Klitgaard, R., 1998, Corruption: beyond shame, apathy, futility, paper presented at the book launch of Membasmi Korupsi, Jakarta, 17 September 1998.

Kloezen, Wim H., 2002, Accounting for water: Institutional viability and impacts of market-oriented irrigation interventions in Central Mexico, PhD thesis, Wageningen University, the Netherlands.

Kloezen, Wim H. and Peter P. Mollinga, 1992, "Opening closed gates: Recognising the social nature of irrigation artifacts", in: G. Diemer and J. Slabbers (eds.), *Irrigators and engineers*, essays in honour of Lucas Horst, Thesis Publishers, Amsterdam.

Koentjaraningrat, 1967, Villages in Indonesia, Cornell University Press, Ithaca.

Kompas newspapers, 15 October 2003, Kwik Kian Gie's analysis on KKN in Indonesia.

Kompas newspaper, 6 December 2001, Calo untuk urus DAU gentayangan di Depdagri (Brokers to Process DAU Roam at the Ministry of Home Affairs).

Korten, F. F. and R. Y. Siy, Jr. (eds.), 1989, Transforming a bureaucracy: The experience of the Philippine National Irrigation Administration, Kumarian Press, Connecticut.

Kothari, Shanti and Ramashray Roy, 1969, Relation between politicians and administrators at the district level, New Delhi, Indian Institute of Public Administration.

Lamminga, A. G., 1910, Beshouwingen over den tegenwoordigen stand van het irrigatiewezen in Nederlandsch-Indie, rede bij de aanvaarding van het tijdelijk ambt van buitengewoon Hoogleeraar in de Waterbouwkunde aan de Technische Hoogeschool te Delft, den 12 April 1910.

Lamminga, A. G., 1905, "Pekalen irrigatiewerken in de afdeeling Kraksaan der residentie Pasoeroean", in: *De Ingenieur*, Vol. 20, pp. 758-793.

Lamminga, A. G., 1885/1886, "Irrigatie uit de rivier Pekalen", in: Tijdschrijft van het Koninklijk Instituut van Ingenieurs, 1885/1886, pp. 56-57.

Lasswell, Harold D., 1962, "The public interest: Proposing principles of content and procedure", in: Carl J. Friedrich (ed.), *The public interest*, Atherton Press, New York, pp. 54-79.

Lasswell, Harold D., 1958, "Clarifying value judgement: Principles of content and procedure", in: *Inquiry*, Vol. 1, pp. 87-98.

Leftwich, A., 2000, States of development: On the primary of politics in development, Polity Press, Cambridge.

Leftwich, A. (ed.), 1996, Democracy and development: Theory and practice, Polity Press, Cambridge.

Legge, J. D., 1961, Central authority and regional autonomy in Indonesia: A study in local administration 1950-1960, Cornell University Press, Ithaca.

Lele, C., 2000, "Godsend, sleight of hand, or just muddling through: Joint water and forest management in India", Natural Resource Perspective No. 53, April 2000, ODI, London.

Leon, P. de, 1998, "Models of policy discourse: Insights versus prediction", in: *Policy Studies Journal*, Vol. 26, No.1, pp. 147-161.

Levine, G., 1999, Maintenance, rehabilitation and betterment: How much and when?, Draft paper.

Lewis, Blane D., 2003, "Indonesia", in: Yun-Hwan Kim and Paul Smoke (eds.), *Intergovernmental transfers in Asia*, Asian Development Bank, Manila.

Lipsky, M., 1980, Street level bureaucracy: Dilemmas of the individual in public services, Russell Sage Foundation, New York.

Long, Norman and Jan Douwe van der Ploeg. 1989, "Demythologizing planned intervention: An actor perspective", in: *Sociologia Ruralis*, Vol. 29, No. 3-4, pp. 226-249.

Lowdermilk, Max K., 1986, "Improved irrigation management: Why involve farmers", in: K.C. Nobe and R. K. Sampath (eds.), Irrigation management in developing countries: Current issues and approaches, Westview Press, Colorado.

Lowi, T. J., 1985, "The state in politics: The relations between policy and administration", in: G. Roger, Noll (eds.), Regulatory policy and the social sciences, University of California Press, Berkeley.

MacIntyre, Andrew, 1994, "Power, prosperity and patrimonialism: Business and government in Indonesia", in: A. MacIntyre (ed.), Business and government in industrializing Asia, Cornell University Press, Ithaca, pp. 244-267.

MacRae, Duncan, Jr., 1993, "Guidelines for policy discourse: Consensual versus adversarial", in: F. Fischer and J. Forester (eds.), *The argumentative turn in policy analysis and planning*, Duke University Press, Durham.

Magnis-Suseno, Franz, 2001, Etika Jawa, Gramedia, Jakarta.

Mahdavy, H., 1970, "The patterns and problems of economic development in rentier states: The case of Iran", in: M. A. Cook (ed.), Studies in the Economic History of the Middle East, Oxford University Press.

Mahi, B. Raksaka and Adriansyah, 2003, "Sejarah Transfer Keuangan Pusat ke Daerah", in: Machfud Sidik at al (eds.), Dana Alokasi Umum (DAU): Konsep, Hambatan, dan Prospek di Era Otonomi Daerah, Penerbit Buku Kompas, Jakarta.

Maksum, Mochammad, 2007, Nasionalisme dan Nasionalisasi Penindasan Petani, Center for Rural and Regional Development Studies, Gadjah Mada University, Yogyakarta.

Malano, H. M. and P.L.M. Hofwegen, 1999, Management of irrigation and drainage systems: A service approach, IHE monograph No. 3, A.A. Balkema, Rotterdam.

Makarim, Nono Anwar, Robert N. Hornick and William S. Cole, 2001, "Old game or new? Corruption in today's Indonesia", Asia Program Special Report No. 100, Woodrow Wilson International Center for Scholars, Washington D.C.

Malley, Michael S., 2003, "New rules, old structures and the limits of democratic decentralization", in: E. Aspinal and G. Fealy (eds.): Local power and politics in Indonesia: Decentralisation & democratization, Institute of Southeast Asian Studies, Singapore.

Marshall, Andrew, 2008, "The gods must be restless: Living in the shadow of Indonesia's volcanoes", in: *Indonesia's ring of fire: Volcano gods*, National Geographic magazine, January 2008.

Matsui, Kazuhisa, 2003, "Decentralization in national state building in Indonesia", Research Paper No. 2, IDE-JETRO, Tokyo.

McLeod, Ross H., 2004, "Dealing with Bank system failure", in: Bulletin of Indonesian Economic Studies, Vol. 40, No. 3, pp. 423-425.

Meinzen-Dick, Ruth, K.V. Raju and A. Gulati, 2002, "What affects organization and collective action for managing resources? Evidence from canal irrigation systems in India", in: *World Development*, Vol. 30, No. 4, pp. 649-666.

Meinzen-Dick, Ruth, R. Reidinger and A. Manzardo, 1995, "Participation in irrigation", Participation Series 3, World Bank Social Policy and Resettlement Division, The World Bank, Washington D.C.

Metzelaar, J. Th., 1926/1927, "Waterverdeeling, waterbehoefte, veldwadoeks", in: *Landbouw*, jrg 1926/1927, pp. 817-836.

Migdal, J.S., 2001, State in society: Studying how states and societies transform and constitute one another, Cambridge University Press, Cambridge.

Migdal, Joel S., 1988, Strong societies and weak states: State-society relations and state capabilities in the third world, Princeton University Press.

Ministry of Public Works, 1994a, Prosedur Operasi, Jakarta.

Ministry of Public Works, 1994b, Prosedur Pemeliharaan, Jakarta.

Ministry of Public Works and the National Development Planning Agency, 1992, Proceedings of the international seminar on water resources for sustainable use in Indonesia, Cisarua, Bogor, 29 October-1 November 1992.

Ministry of Public Works, 1984, Organizational structure of the Ministry of Public Works, as stated in the Ministerial Decree Number 21 of 1984.

Ministry of Public Works, 1984, Organizational structure and working framework of MPW, as decided by the minister of MPW, Number 211 of 1984.

Mintzberg, H., 1994, The rise and fall of strategic planning, Prentice Hall, New York.

Mintzberg, H., 1983, Power in and around organizations, Prentice Hall, Englewood Cliffs.

Moe, T. M. and Scott A. Wilson, 1994, "President and the politics of structure", in: Law and Contemporary Problems, Vol. 57, pp. 1-44.

Moe, T. M., 1989, "The politics of bureaucratic structure", in: John E. Chubb and Paul E. Peterson (eds.), Can the government govern?, The Brooking Institution, Washington D.C.

Moedjanto, G., 1993, The concept of power in javanese culture, Gadjah Mada University Press, Yogyakarta.

Moigne, Guy Le, K. William Easter, Walter J. Ochs and Sandra Giltner, 1994, "Water policy and water markets", selected papers and proceedings from the World Bank's Ninth Annual Irrigation and Drainage Seminar, Annapolis, Maryland, 8-10 December 1992, World Bank Technical Paper No. 249, The World Bank, Washington D.C.

Mollinga, Peter P. and Alex Bolding (eds.), 2003, The Politics of Irrigation Reform: Contested Policy Formulation and Implementation in Asia, Africa and Latin America, Global Environmental Governance Series, Ashgate.

Mollinga, Peter P., R. Doraiswamy and Kim Engbersen, 2001, "Participatory irrigation management in Andhra Pradesh, India: Policy implementation and transformation in the Tungabhadra right bank low level canal", in: *International Journal for Water*, Vol. 1, No. 3-4, pp. 369-379.

Mollinga, Peter P., 2001, "Water and politics: Levels, rational choice and South India canal irrigation", in: Futures, Vol. 33, pp. 733-752.

Mollinga, Peter P., 1998, On the waterfront: Water distribution, technology and agrarian change in a south Indian canal irrigation system, PhD thesis, Wageningen University, The Netherlands.

Mooij, Jos and Veronica de Vos, 2003, "Policy processes: An annotated bibliography on policy processes, with particular emphasis on India", ODI Working Paper 221, ODI, London.

Moore, Mick, 2004, "Revenues, state formation and the quality of governance in developing countries", in: *International Political Science Review*, Vol. 25, No. 3, pp. 297-319.

Moore, Mick, 2001, *Political underdevelopment: What causes bad governance?*, The Institute of Development Studies, United Kingdom.

Moore, Mick, 1990, "The rational choice paradigm and the allocation of agricultural development resources", in: *Development and Change*, Vol. 21, pp. 225-246.

Moore, Mick, 1989, "The fruits and fallacies of neo-liberalism: The case of irrigation policy", in: *World Development*, Vol. 11, No. 7, pp. 1733-1750.

Moss, Todd, Gunilla Pettersson and Nicolas van de Walle, 2006, "An aid-institutions paradox? A review essay on aid dependency and state building in sub-saharan Africa", Working Paper 74, Center for Global Development, Washington D.C.

Mosse, David, 2005, Cultivating development: an ethnography of aid policy and practice, Pluto press, London.

Mosse, David, 2004, "Is good policy unimplementable? Reflections on the ethnography of aid policy and practice", in: *Development and Change*, Vol. 35, No. 4, pp. 639-671.

Moustafa, M. M., 2004, "Can farmers in Egypt shoulder the burden of irrigation management?", in: *Journal of Irrigation and Drainage Systems*, Vol. 18, No. 2.

Mulkay, Michael, 1979, "Knowledge and utility: Implications for the sociology of knowledge", in: Social Studies of Sciences, Vol. 9, pp. 63-80.

Murtiningrum, 2002, Assessment of performance indicators for irrigation management transfer program in Papah system, Indonesia, M.Sc. thesis, Asian Institute of Technology, Thailand.

Nanto, D. K., 1998, The 1997 Asian Financial Crisis, CRS Report for Congress.

Narrain, Vishal, 2003, Institutions, technology and water control: Water user associations and irrigation management reform in two large-scale systems in India, Phd thesis Wageningen University, the Netherlands.

NEDECO, 1978, First interim report on agronomy, operation and maintenance, Sedeku, Prosida Semarang-Demak-Kudus irrigation rehabilitation project.

NEDECO, 1974, Irrigation rehabilitation project series B: Final report.

NEDECO, 1974, Irrigation rehabilitation project series B: Manual for design of tertiary units.

Nikku, Balaraju, 2006, The politics of policy: Participatory irrigation management in Andhra Pradesh, Ph.D thesis, Wageningen University, The Netherlands.

North, D. C., 1990, Institutions, institutional change and economic performance, Cambridge university press, Cambridge.

Olken, Benjamin A, 2006, "Monitoring corruption: Evidence from a field experiment in Indonesia", in: *Journal of Political Economy*, forthcoming.

O'Mara, Gerald T., 1990, "Making Bank irrigation investments more sustainable", Policy Research and External Affairs Working Papers, Agriculture and Rural Development Department, The World Bank, Washington D.C.

Oorthuizen, J., 2003, Water, works and wages: The everyday politics of irrigation management reform in the Philippines, Ph.D thesis, Wageningen University Water Resources Series, Orient Longman, New Delhi.

Ostrom, E., 1999, "Institutional rational choice: An assessment of the institutional analysis and development framework", in: Paul Sabatier (ed.), *Theories of the policy processes: Theoretical leases on public policy*, Westview Press, Colorado, pp 35-71.

Ostrom, E., 1996, "Incentives, rules of the game, and development", in: proceedings of the annual World Bank conference on Development Economics 1995, pp. 207-234, The World Bank, Washington D.C.

Ostrom E., L. Schroeder and S. Wynne, 1993, *Institutional incentives and sustainable development: Infrastructure policies in perspective*, Westview Press, Colorado.

Ostrom, E., and R. Gardner, 1993, "Coping with asymmetries in the commons: Self-governing irrigation systems can work", in: *Journal of Economic Perspectives*, Vol. 7, No. 4, pp. 93-112.

Ostrom, E., 1992, Crafting institutions for self-governing irrigation systems, ICS Press, San Fransisco.

Ostrom, E., 1991, "Rational choice theory and institutional analysis: Toward complementarity", in: *American Political Science Review*, Vol. 85, No. 1, pp. 237-243.

Ostrom, E., 1990, Governing the commons: The evolution of institutions for collective action, Cambridge University Press, Cambridge.

Parsons, W., 1995, Public policy: An introduction to the theory and practice of policy analysis, Edward Elgar, Cheltenham, UK and Northampton, MA, USA.

Pasandaran, Effendi, 2003, *Politik Ekonomi Reformasi Irigasi di Indonesia*, paper presented at seminar on the modernization of irrigation, Jakarta, 12 August 2003, Research and Development Unit, Ministry of Agriculture, Jakarta, Indonesia.

Pasandaran, Effendi, 1991, Irigasi di Indonesia: Strategi dan Pengembangan, LP3ES, Jakarta.

Pasandaran, Effendi and Mark Rosegrant, 1995, "Irrigation investment in Indonesia: Trend and determinants", Agro Economic Journal, Vol. 14, No. 1, pp. 1-17.

Perrow, Charles, 1972, Complex organizations: A critical essay, Glenview, Illinois.

Peters, B.G., 1984, The politics of bureaucracy, Longman, New York,

Pfaffenberger, B., 1988, "Fetishised objects and humanized nature: Towards an anthropology of technology", in: *Man*, Vol. 23, pp. 236-252.

Pielke Jr., Roger A., 2004, "What future for the policy sciences?", in: *Policy Sciences*, Vol. 37, No. 3-4, pp. 209-225.

Political and Economic Risk Consultation Limited, 1998, Report on bureaucracy in Asia.

Politt, C., and S. Harrisons, and J. D. Hunter and M. Gordon, 1990, "No hiding place: On the discomforts of researching the contemporary policy process", in: *Journal of Social Policy*, Vol. 19, No. 2, pp. 169-190.

Prakoso, D. and Ati Suryati, 1986, Upetisme: Ditinjau dari Undang-Undang pemberantasan tindak pidana korupsi tahun 1971, Bina Aksara, Jakarta.

Pressman, Jeffrey L., and Aaron B. Wildavsky, 1984, *Implementation*, University of California Press, Berkeley.

Priyono, A.E., Stanley Adi Prasetyo and Olle Tornquist, 2003, Gerakan Demokrasi di Indonesia Pasca Soeharto, Demos, Jakarta.

Provincial government of Yogyakarta, Regional Regulation Number 9 of 1993 on irrigation service fees in the Yogyakarta province.

Provincial government of Yogyakarta, Regional Regulation Number 13 of 1990 on irrigation in the Yogyakarta province.

Quarles van Ufford, Philip, 1988, "The hidden crisis in development: Development bureaucracies in between intentions and outcomes", in: P. Quarles van Ufford, Dirk Kruijt, Theodore Downing (eds.), The hidden crisis in development: Development bureaucracies, United Nations Publications, pp. 9-38.

Rachbini, Didik J., 2002, "Political economy of business and competition issues in Indonesia", note submitted for the session I of the second meeting of the Global Forum on competition, Paris 14-15 February 2002, Organization for Economic Cooperative Development, Paris.

Ramsay, Kristopher W., 2006, The price of oil and democracy, first draft August 2006.

Rap, Edwin, 2004, The success of a policy model: Irrigation management transfer in Mexico, PhD thesis. Wageningen University, The Netherlands.

Rasyid, R., 2005, "Otonomi daerah: Latar belakang dan masa depannya", in: Haris (ed.), Desentralisasi dan otonomi daerah: Desentralisasi, demokratisasi dan akuntabilitas pemerintahan daerah. LIPI Press, Jakarta.

Ravesteijn, Wim, 1997, De zegenrijke heeren der wateren: Irrigatie en staat op Java: 1832-1942, Ph.D thesis, Delft University Press, The Netherlands.

Rein, Martin and Donald Schön, 1993, "Reframing policy discourse", in: F. Fischer and J. Forester (eds.), *The argumentative turn in policy analysis and planning*, Duke University Press, Durham, pp. 145-166.

Repetto, R., 1986, "Skimming the water: Rent-seeking and the performance of public irrigation systems", Research Report No. 4, World Resources Institute, Washington, D.C.

Ricci, D. M., 1984, The tragedy of political science: Politics, scholarship, and democracy, Yale University Press, New Haven.

Riggs, Fred W., 1966, Thailand: The modernization of a bureaucratic polity, East-West Center Press, Honolulu.

Ringskog, Klas, 2001, "Opportunity in crisis", opening speech for the International Seminar on Water Supply and Sanitation Sector Reform in the Context of Regional Autonomy, Jakarta, 21-23 May 2001.

Robison, Richard, 1978, "Toward a class analysis of the Indonesian military bureaucratic state", in: *Indonesia*, Vol. 25, pp. 17-39.

Roe, E., 1994, Narrative policy analysis: Theory and practice, Duke University Press, Durham.

Roe, E., 1991, "Development narratives or making the best of blueprint development", in: World Development, Vol. 19, No. 4, pp. 287-300.

Roesad, Kurnya, 2000, "Dangerous liaisons? Financial crisis, IMF and the Indonesian state", Economic Working Paper Series No. 55, Centre for Strategic and International Studies, Jakarta.

Rocherfort, A. D., and W. R. Cobb, 1993, "Problem definition, agenda access and policy choice", in: *Policy Studies Journal*, Vol. 21, No. 1, pp. 56-71.

Rondinelli, Dennis A., 1983, "Projects as instruments of development administration: A qualified defence and suggestions for improvement", in: *Public Administration and Development*, Vol. 3, pp. 307-327.

Rosegrant, Mark W and Hans P. Binswanger, 1993, "Markets in tradable water rights: Potential for efficiency gains in developing country water resource allocation", in: *World Development*, Vol. 22, No. 11, pp. 1613-1625.

Rorty, R., 1979, Philosophy and the mirror of nature, Princeton University Press, Princeton.

Saad, Ilyas, 2001, "Indonesia's decentralization policy: The budget allocation and its implications for the business environment", paper prepared for the 3rd EUROSEAS Conference Panel on Decentralization and Democratization in Southeast Asia, SMERU working paper, SMERU Research Institute, Jakarta.

Sabatier, P. A. (ed.), 1999, Theories of the policy process, Westview Press, Colorado.

Sabatier, P. A. and H. C. Jenkins-Smith, 1993, Policy change and learning: An advocacy coalition approach, Westview Press, Colorado.

Sabatier, P. A. and S. Hunter, 1988, "The incorporation of causal perceptions into models of elite belief systems", in: *Western Political Quarterly*, Vol. 42, No. 9, pp. 229-261.

Said, Edward, 1978, Orientalism, Penguin books.

Samad, M., 2001, "Impact of irrigation management transfer on the performance of irrigation systems: A review of selected Asian experiences", paper presented at the ACIAR Water Policy Workshop, Bangkok, 8-9 June 2001.

Samad, M. and Douglas L. Vermillion, 1997, "Assessment of participatory management of irrigation schemes in Sri Lanka: Partial reforms and partial Benefits", IIMI Research Report No??, Colombo, Sri Lanka.

Sayer, Andrew, 1981, Method in social science: A realist approach, Hutchinson, London

Schrevel, A., 1993, Access to water: A socio-economic study into the practice of irrigation development in Indonesia, Institute of Social Studies, The Hague.

Schulte-Nordholt, Henk G. C., 2003, "Renegotiating boundaries: Access, agency and identity in post-Suharto Indonesia", in: *Bijdragen tot de Taal-Land-en-Volkenkunde*, Vol.159, No. 4, pp. 550-589.

Schulte-Nordholt, Henk G. C., 2002, "A genealogy of violence", in: F. Columbijn and Th. Lindblad (eds.), Roots of violence in Indonesia, KITLV press, pp.33-61.

Scott, James C., 1970, "Corruption, machine politics and political change", in: A.J. Heidenheimer (ed.), *Political corruption, readings in comparative analysis*, Holt, Rinehart and Winston, Inc., USA.

Shore, C. and S. Wright (eds.), 1997, Anthropology of policy: Critical perspectives on governance and power, Routledge, London and New York.

Siegel, James T., 1998, A new criminal type in Jakarta: Counter revolution today, Duke University Press, Durham and London.

Sindorf, Nikolai and Diana Suhardiman, 1998, Interactive irrigation: Policies and practices in irrigation management transfer in West-Java, Indonesia, M.Sc. Thesis, Wageningen University, The Netherlands.

Small, L.E. And Carruthers, I., 1991, Farmer-financed irrigation: The economics of reform, Cambridge University Press (in association with IIMI), Cambridge.

Small, L.E., 1989, "User charges in irrigation: potential and limitations", in: *Irrigation and Drainage Systems*, Vol. 3, No. 2, pp. 125-142.

Soenarno, 1995, "Irrigation management transfer in Indonesia", in: J. C. M. A. Geijer (ed.), *Irrigation management transfer in Asia*, papers from the expert consultation on irrigation management transfer in Asia, Bangkok and Chiang Mai, 25-29 September 1995, FAO and IWMI.

Soenarno, Effendi Pasandaran, Achmadi Partowijoto, Soeseno Sosrodimoeljo and Kuswanto SA, 2004, Academic paper: Basic foundation for the revision of the government regulation on irrigation, Jakarta.

Soeparmono and Sutardi, 1998, "Institutional and technical options in the development and management of small-scale irrigation", paper presented at the Third Session of the Multilateral Workshops (GCP/INT/629/JPN) on Institutional and Technical Options in the Development and Management of Small-Scale Irrigation, Tokyo, 3-6 February 1998.

Spector, Malcolm and John I. Kitsuse, 1977, Constructing social problems, Menlo Park, California.

Stiglitz, J., 2002, Globalization and its Discontents, Penguin Books Ltd., London.

Stone, D. A., 1989, "Causal stories and the formation of policy agendas", in: *Political Science Quarterly*, Vol. 104, No. 2, pp. 281-300.

Strauss, A. and J. Corbin, 1990, Basics of qualitative research: Grounded theory procedures and techniques, Sage Publications, New Delhi.

Suara Pembaruan newspaper, 24 November 2004, Penyidikan korupsi di DPRD kota Malang dinilai lamban.

Suara Pembaruan newspaper, 1 November 2004, Anggota DPRD Buru ditangkap: Terkait korupsi, mantan ketua dan wakil ketua DPRD Banggai diperiksa.

Suara Pembaruan newspaper, 27 August 2004, Bawasda Maluku berbohong: Kejati belum terima kasus korupsi.

Subramanian A., N. Vijay Jagannathan and Ruth Meinzen-Dick, 1997, "User organizations for sustainable water services", World Bank Technical Paper No. 354, The World Bank, Washington D.C.

Suparno, Riyadi, 2004, The political economy of intergovernmental transfers in Indonesia, M.Sc. Thesis, University of Birmingham, UK.

Svendsen, Mark, 1994, "Financial autonomy, institutional reform and irrigation performance", in: Vikalpa, Vol. 19, No. 2.

Svendsen, Mark, 1993, "The impact of financial autonomy on irrigation system performance in the Philippines", in: *World Development*, Vol. 21, No. 6, pp. 989-1005.

Svendsen, Mark and Gladys Nott, 1997, Irrigation management transfer in Turkey: Early experiences with a national program under rapid implementation, Short Report Series on Locally Managed Irrigation, IIMI, Colombo.

Syarnsuddin, H. (ed.), 2005, Desentralisasi dan otonomi daerah: Desentralisasi, demokratisasi dan akuntabilitas pemerintahan daerah, LIPI Press, Jakarta.

Torgerson, D., 1986, "Between knowledge and politics: Three faces of policy analysis", in: *Policy Sciences*, Vol. 19, No. 1, pp. 33-59.

Toye, John, 1988, "Political economy and the analysis of Indian development", in: *Modern Asian Studies*, Vol. 22, No. 1, pp. 97-122.

Transparency International, 1998, Transparency International Corruption Perceptions Index.

Turner, M. and D. Hulme, 1997, Governance, administration and development: Making the state work, MacMillan Press, Houndsmill, Basingtoke and London.

Turral, H., 1995, Recent trends in irrigation management: Changing directions for the public sector, Natural Resource Perspective, ODI series, London.

Uphoff, N., 1986, Getting the process right: Improving irrigation water management with farmer organization and participation, Cornell University Press, Ithaca.

Uphoff, N., 1981, "Farmer participation in project formulation, design and operation in promoting increased food production in the 1980s", proceedings of second annual Agricultural Sector Symposium, The World Bank, Washington D.C.

Uphoff, N. with Priti Ramamurthy and Roy Steiner, 1991, Managing irrigation: Analyzing and improving the performance of bureaucracies, Sage Publications, New Delhi/Newbury Park/London.

Uphoff, N., and Ruth Meinzen-Dick and N. St. Julien, 1985, Improving policies and programs for farmer organization and participation in irrigation water management, Cornell University Press, Ithaca.

Usman, Syaikhu, 2002, "Regional autonomy in Indonesia: Field experiences and emerging challenges", paper prepared for the 7th PRSCO summer institute/4th IRSA international conference: Decentralization, Natural Resources and Regional Development in the Pacific Rim, Bali, 20-21 June, 2002, SMERU working paper, SMERU Research Institute, Jakarta.

van der Ploeg, J. D., 1991, Landbouw als mensenwerk: Arbeid en technologie in de agrarische ontwikkeling, Coutinho, Muiderberg.

Vatikiotis, Michael R. J, 1998, Indonesian politics under Suharto: The rise and fall of the New Order, Routledge, London and New York.

Vermillion, D. L., 2000, "Old and new paradigms for water and development", paper presented at the Workshop on Water Resources and Irrigation Sector Reform: Principles and Framework of Program Implementation, Jakarta, 3-4 October 2000.

Vermillion, D. L., 1997, "Impacts of irrigation management transfer: A review of the evidence", IWMI Research Report No. 11, IWMI, Colombo.

Vermillion, Douglas L., 1997, "Management devolution and the sustainability of irrigation: Results of comprehensive versus partial strategies", draft paper presented at the International Workshop on Participatory Irrigation Management (PIM): Benefits and second generation problems, Cali, Colombia, 9-15 February 1997.

Vermillion, Douglas L., 1994, "Irrigation management transfer: Towards an integrated management revolution", address made to the international conference on irrigation management transfer, Wuhan, PR China, 20-24 September 1994.

Vermillion, D. L., Madar Samad, Soeprodjo Pusposutardjo, Sigit Supadmo Arif and Saiful Rochdyanto, 2000, "An assessment of the small scale irrigation management turnover program in Indonesia", IWMI Research Report 38, IWMI Colombo.

Vermillion, Douglas L. and J. A. Sagardoy, 1999, "Transfer of irrigation management services: Guidelines", FAO Irrigation and Drainage Paper No. 58, FAO, Rome.

Vermillion, D. L. and Carlos Garces-Restrepo, 1996, "Results of management turnover in two irrigation districts in Colombia", IWMI Research Report No. 4, Colombo.

Vincent, L. F., 2001, "Struggles at the social interface: Developing sociotechnical research in irrigation and water management", in: P. Hebinck and G. Verschoor (eds.), Resonances and dissonances in development: Actors, networks, and cultural reportoires, Royal van Gorcum, The Netherlands, pp. 65-82.

Vincent, L. F., 1997, Irrigation as a technology, irrigation as a resource: A socio-technical approach to irrigation, Inaugural lecture, Wageningen University, The Netherlands.

Wade, Robert, 1985, "The market for public office: Why the Indian state is not better at development", in: World Development, Vol. 13, No. 4, pp. 467-497.

Wade, Robert, 1982, "The system of administrative and political corruption: Canal irrigation in south India", in: *Journal of Development Studies*, Vol.18, No. 3, pp. 287-328.

Wade, Robert and Robert Chambers, 1980, "Managing the main system: Canal's irrigation blind spot", in: *Economic and Political Weekly*, Vol.15, No. 39, pp. 107-112.

Walker, Millidge, 1991, "Decentralized planning for sustainable development: The case of Indonesia", in: Review of Urban and Regional Development Studies, Vol. 3 (1991).

Wantchenkon, Leonard, 2002, "Why do resource dependent countries have authoritarian government?", in: *Journal of African Finance and Economic Development*, Vol. 5, No. 2, pp. 52-77.

WATSAL report, 2003, "Systematic framework for IMT implementation", paper presented during the training on IMT on Bali, 5-10 October 2003

WATSAL mission report, 1999, Concept for operationalizing the WATSAL IMT programme at the Regional Level.

Weber, Max, 1921, Max Weber on law in economy and society, ed. Translated by Edward Shils and Max Rheinstein, New York, Simon and Schuster.

Webber, David J., 1991-1992, "The distribution and use of policy knowledge in the policy process: Knowledge and policy", in: *International Journal of Knowledge Transfer and Utilization*, Vol. 4, No. 4, pp. 6-35.

Weijs, C.W., 1913, Schets van de ontwikkeling van technische bemoeienis met irrigatie in Indie, Rede bij de aanvaarding van het ambt van Buitengewoon Hoogleeraar in de Waterbouwkunde aan de Technische Hoogeschool te Delft, den 20 September 1913.

Weijs, C. W., 1899/1900, "Aanleg en exploitatie der Pategoewanwerken", in: Tijdschrijft van het Koninklijk Instituut van Ingenieurs, afl. 1899/1900, pp. 41-57.

Weijs, C. W., 1898, Grondslagen eener regeling van het gebruik van bevloeiingswater, Handelingen van het Tweede Congress van het Algemeen Syndicaat van Suikerfabrikanten op Java, Yogyakarta.

Wertheim, C. W., 1979, Indonesia van vorstenrijk tot neo-kolonie, Boom, Meppel.

Wertheim, W.F., 1970, "Sociological Aspects of Corruption in Southeast Asia", in: A.J. Heidenheimer (ed.), *Political corruption, readings in comparative analysis*, Holt, Rinehart and Winston, Inc., USA.

Widjaja, H.A.W (2002). Otonomi daerah dan daerah otonom, PT Raja Grafindo Persada, Jakarta.

Wildavsky, A., 1979, The art and craft of policy analysis, MacMillan Press, London.

Wittfogel, Karl A., 1957, Oriental despotism: A comparative study of total power, Yale University Press, New Haven.

Wiyono, Joko, 2000, Analisis kesiapan penyerahan pengelolaan irigasi kepada Perkumpulan Petani Pemakai Air (P3A). Universitas Gadiah Mada, Yogyakarta.

Wood, G. (ed.), 1985, *Labelling in development policy*, essays in Honour of Bernard Schaffer, Sage Publications and the ISS, London and the Hague.

World Bank, 2003, Combating corruption in Indonesia: Enchancing accountability for development, East Asia Poverty Reduction and Management Unit, The World Bank, Washington D.C.

World Bank, 2003, "Decentralizing Indonesia: A regional expenditure review overview report", Report 26191-IND, World Bank Jakarta, Indonesia.

World Bank, 2002, Empowerment and poverty reduction: A source book, The World Bank, Washington D.C.

World Bank, 1986, World Bank lending conditionality: A review of cost recovery in Irrigation projects, Report No. 6283, Operations Evaluation Department of the World Bank, Washington D.C.

World Bank, 1985, Sustainability of projects: First review of experience, Report No. 5718, Operations Evaluation Department of the World Bank, Washington D.C.

World Bank, 2003, Letter to the National Development Planning Agency on WATSAL (Ln 4469-IND), 19 November 2003.

World Bank, 2003, Letter to the Director General of Water Resources, Ministry of Settlements and Regional Development and to the Director General of Regional Development, Ministry of Home

Affairs on Indonesia Water Resources and Irrigation Reform Project (IWIRIP) (GoN Grant TF 027755) October 2003 Supervision Mission Aide Memoire), 27 November 2003.

World Bank, 2003, Letter to the National Development Planning Agency on WATSAL (Ln 4469-IND), 3 June, 2003.

World Bank document, 2003, Implementation completion report on a loan in the amount of US\$ 165.7 million to the Republic of Indonesia for the Java Irrigation Improvement and Water Resources Management Project, 30 June 2003.

World Bank document, 2003, Supervision Mission Aide Memoire, October 2003.

World Bank document, 2000, Indonesia public spending in a time of change, Poverty reduction and Economic Management Sector Unit, East Asia and Pacific Region, 30 March 2000.

World Bank document, 1999, Report and recommendation of the president of the international bank for reconstruction and development to the executive directors on a proposed Water Resources Sector Adjustment Loan, Rural Development and Natural Resources Sector Unit, East Asia and Pacific Region, April 1999.

World Bank document, 1998, Aide Memoire JIWMP mission.

World Bank document, 1993, Water Resources Management, A World Bank Policy Paper, Washington D.C.

WUAs declaration in Surabaya, 4 December 2003.

Yates, Douglas, 1996, The rentier state in Africa, Africa World Press, Trenton, New Jersey.

Yin, R. K., 1994, "Case study research: Designs and methods", Applied Social Research Methods Series No. 5, Sage Publications, Thousand Oaks, London, New Delhi.

Young, Robert A., 1996, "Measuring economic benefits for water investments and policies", World Bank Technical Paper No. 338, The World Bank, Washington D.C.

Zaag, Pieter van der, 1992, Chicanery at the canal: Changing practice in irrigation management in Mexico, PhD thesis, Centre for Latin American Research and Documentation, Amsterdam.

Zawe, Conrade, 2006, Reforms in turbulent times: A study on the theory and practice of three irrigation management policy reform models in Mashonaland, Zimbabwe, PhD thesis, Wageningen University, The Netherlands.

Zwarteveen, Margreet, 1999, Trends in participatory water management: A review of the literature, prepared for IWACO.

www.bappenas.go.id/&view=418/Bab-07-P-J-1973%20ok.dok.

web.worldbank.org/WBSITE/EXTERNAL/PROJECTS

Summary

Irrigation Management Transfer (IMT) policy has been formulated and implemented worldwide, relying on three basic assumptions: that the irrigation agency are motivated to adapt their role in the sector's development; that farmers are willing to take over the system management; and that the process of management transfer is a neutral process, involving primarily managerial and technical aspects.

This thesis illuminates the political dimensions of IMT policy. IMT policy formulation and implementation in Indonesia was shaped by continuous power struggles at the different administrative levels. The way the IMT policy agenda was defined and redefined in respectively Irrigation Operation and Maintenance Project (IOMP) 1987 and the 1999 Water Sector Adjustment Loan (WATSAL) shows that the idea of management transfer did not always coincide with either the irrigation agency's perception or farmers' actual needs in the sector's development. Under IOMP 1987 the irrigation agency transformed IMT into a construction program. Similarly, under WATSAL, IMT was reduced as a policy instrument to eradicate bureaucratic rent-seeking within the irrigation agency. Farmers' perceptions of their position prior and after management transfer remained obscured in both IMT programs.

This study investigates the IMT policy channeling from the national down to the field level, using the seven technical irrigation systems in Kulon Progo district, Yogyakarta province, as the research context for IMT implementation. It started at the national level, looking at the way IMT policy characteristics under WATSAL were shaped by the policy elites' perceptions and interests under the WATSAL Task Force (WTF). Later, when the struggle over the principles of IMT occurred in September 2003, this thesis focuses on studying strategies and manouvres used by the policy actors from the different central government ministries to influence the decision making process at the parliament. These central government ministries are the National Development Planning Agency (NDPA), the Ministry of Settlement and Regional Infrastructure (Kimpraswil), and the Ministry of Home Affairs (MoHA). From the national level, this study moves further down to regional level, before it analyzes the actual implementation of IMT in the seven irrigation systems in Kulon Progo district, from inter-system level down to farmers' fields.

This thesis consists of nine chapters. After the introduction, chapter 2 started with the discussion of the changing characteristics of the Indonesian state. Following the fall of Suharto's government and the political reform in 1998, the concept of regional autonomy was introduced and widely applied. In practice, regional autonomy was handicapped by

inoperative fiscal decentralization. Despite their decision making authority to direct the regional development, regional governments remained dependent on fund disbursement from the central government. The central government's domination in the country's development was evident from the preservation of 'project approach' as the only structure to channel policy program from the national down to the field level. Adopted in the late 1960s, the project approach continued to serve as the country's development engine in the post Suharto Indonesia. The way IMT policy was implemented relying on project structure and mechanisms linked the organizational functioning of the Federations of Water Users Associations (FWUAs) to the bureaucratic mechanisms and procedures within the government agency.

Chapter 3 discusses how the irrigation agency's bureaucratic identity contradicts with the idea of management transfer and thus how the first assumption in IMT flaws. As IMT policy embodied the shift from infrastructure-oriented to farmer-focused irrigation development, this contradicts with the irrigation agency's interests and organizational foundation in construction and rehabilitation activities. Unlike what is assumed by the international policy makers, the irrigation agency perceived IMT as a threat that could endanger their bureaucratic position and decision making authority in the sector's development. Despite the abolition of the Ministry of Public Works (MPW) in 1999, the bureaucratic identity of the irrigation agency remained unchanged. This was evident from the way the core policy actors in the agency continued to direct the agency's organizational development following the construction-based approach. Following the abolition of the MPW, the core policy actors defended their bureaucratic position with the formation of the State Ministry of Public Works (Meneg PU) next to the newly formed Ministry of Settlement and Regional Development (Kimbangwil). Later, the core policy actors in the irrigation agency resumed their bureaucratic power with the unification of the Meneg PU and Kimbangwil into the Ministry of Settlement and Regional Infrastructure (Kimpraswil) in 2001.

Chapter 4 shows how the decision to transfer the management of government irrigation systems from the irrigation agency to farmers was neither rooted in farmers' opinion nor their capability in system management. Similarly, the idea of management transfer was not based on organizational performance and functioning of these farmer organizations. Rather, the shift from organizational to institutional approach in irrigation development was triggered by the overall dominance of the neo-liberal development approach and the extrapolation of farmers' capability as this was observed in the farmer managed irrigation system (FMIS) as the means to solve the persistent poor performance of government irrigation system. Using the evolution of IMT policy in Indonesia, this thesis illustrates how the manifestation of IMT policy as the new international policy trend in irrigation management was rooted primarily in the international donors' concern of their earlier investments in the sector's development, and thus failed to focus on the actual management problems encountered by the irrigation agency and farmers. Despite the strong focus on farmers in IMT policy, the policy formulation was based primarily on the international policy makers' perception on how farmers' role in system management

could contribute to a better system performance. The way farmers perceived their own role in the overall system management remained obscured.

The way the process of management transfer is shaped by continuous power struggles is illustrated in respectively chapter 5, 6, 7 and 8. In chapter 5, the way IMT policy formulation was shaped by hidden policy agenda illuminates the policy political dimension. Using the evolution of IMT from the IOMP 1987 to the 1999 WATSAL, this thesis illustrates how the idea of management transfer has always been tempered by policy elites' interests and perceptions. In both IOMP 1987 and WATSAL, IMT policy agenda was defined as the result of power struggles between the different segments within the government bureaucracy. Under IOMP 1987, the irrigation agency manoeuvred their construction-based interests by redefining and extending the scope and degree of system rehabilitation as one of the requirement for management transfer, Under WATSAL, the WATSAL Task Force hid the real implications of the Kabupaten Irrigation Improvement Fund (KIIF) concept from the irrigation agency so that they could proceed with the application of 'stimulant fund'. By shifting the access to the sectoral development funds from the agency to FWUAs, the WATSAL policy makers attempted to use the FWUAs as their grass roots weapon to counteract the irrigation agency's bureaucratic power in the sector's development.

The political aspect of management transfer became more apparent from the policy struggle over the principles of IMT which occurred in 2003. Chapter 6 illustrates how the struggle began when Kimpraswil realized the real implications of IMT under WATSAL for their bureaucratic existence. Kimpraswil strategically used the to-be promulgated Water Act at that time as its legal shield to redirect the development path in the irrigation sector, towards recentralization. Despite strong attempts made by both the National Development Planning Agency (NDPA) and the Ministry of Home Affairs (MoHA) to counteract Kimpraswil's position on IMT, the WATSAL IMT program was halted following the promulgation of the new Water Act in February 2004. With the promulgation of the new Water Act in February 2004, Kimpraswil center staged its bureaucratic power and its decision making authority in directing the irrigation sector development. Kimpraswil's successful attempt to limit farmers' involvement at the tertiary level was linked to their ability to steer and direct parliament members' decision on the scope and degree of management transfer as this was incorporated in the Water Act Number 7 of 2004. As the government agency responsible for the sector's development, Kimpraswil had better access and resources to influence the parliamentary decision making process than any other government agencies.

In chapter 7 and 8, the way the district irrigation agency directed the FWUAs organizational development towards their bureaucratic replica once again illuminates the irrigation agency's position on the idea of management transfer. Contradicting with the assumption that the irrigation agency was willing or could be forced to hand over the management responsibility to the FWUAs, in practice, the district irrigation agency remains pretty much interested to preserve their bureaucratic power by sustaining their role in irrigation system management. In the aftermath of the IMT policy struggle, the

district irrigation agency in Kulon Progo decided to continue with the WATSAL IMT program. However, this decision was rooted in the agency's ability to steer the program implementation, in such a way that IMT sustained the agency's bureaucratic power in directing the sector's development. At district level, the way the district irrigation agency contested IMT policy was evident from the way they had directed the organizational development of the FWUAs towards bureaucratization. Like the irrigation agency, FWUA staff were more concerned with the management of the stimulant fund, and the necessary administrative and technical requirements related to the fund allocation, than ensuring farmers' actual water needs. FWUA functioning was focused on FWUA staff's ability to 'pull in' as many as possible development funds under the FWUA management. Like the irrigation agency, FWUA managed the stimulant fund in accordance to their financial interests, rather than to respond to farmers' actual needs for system repairs. IMT has extended the practice of rent-seeking to FWUAs, as FWUAs' access to the stimulant fund linked them with the cycle of bureaucratic rent-seeking in the irrigation agency.

In water distribution context, IMT did not result in transferred decision making authority from the irrigation agency to the FWUAs. Even after IMT, the irrigation agency remained in charge for the inter-system level water distribution and the operation of the major irrigation infrastructure. FWUAs' role in system water distribution was limited to their ability to negotiate their water needs. FWUAs lacked any formal decision making authority to direct the system water distribution. Nevertheless, IMT reshaped the existing pattern of alliances between farmers and the irrigation agency. Unlike before, the establishment of 'spatial authority' as the result of alliances between FWUA staff and some staff in the district irrigation agency seems to diminish the centralized decision making in system management. Reacting to these new patterns of alliances, the district irrigation agency created a decision making platform to include FWUA staff in the overall water distribution arrangement at the inter-system level. The emerging patterns of alliances in water distribution formed the foundation for the establishment of polycentric decision making process in irrigation system management.

The last chapter gives concluding answers on the research questions and discusses the IMT policy paradoxes. It argues that the main reasons behind the national government's partial initiative in IMT policy formulation and implementation, as well as farmers' lack of awareness of the idea of management transfer and thus their marginal involvement in the WATSAL IMT program are rooted in the IMT policy paradoxes. The first paradox concerned the way the international donors treated the irrigation agency as government agent incapable to conduct the sector's development, and at the same time as the reform agent responsible for the sectoral reform. The second paradox in IMT policy formulation concerned how international policy makers took for granted farmers' willingness to take over the irrigation system management, as proposed in the IMT policy.

With reference to the above paradoxes, this thesis brings to light the multiple identities of international donor agencies in relation to their role as the trend setter in irrigation development as the area for further research. Similarly, future research on IMT policy

should focus on farmers' actual role and capability in irrigation system management, and how farmers perceived their position in relation to the idea of management transfer.

Finally, this thesis emphasizes the need to address the issue of bureaucratic reform within the IMT policy discourse. Apart from the irrigation agency's resistance to change, in Indonesia, the need for bureaucratic reform was recognized at both national and regional levels. The question remains on how to persuade the core policy actors in the agency that they could only sustain their bureaucratic power in the sector's development in the long term, only by allowing themselves to change and adapt to the present development needs.

Samenvatting

Bureaucratische ontwerpen De paradox in overdracht van irrigatiebeheer in Indonesië

Wereldwijd is het beleid in de overdracht van irrigatiebeheer (Irrigation Management Transfer, of IMT) geformuleerd en uitgevoerd naar aanleiding van drie aannames: dat de irrigatiedienst de werkelijke intentie heeft om haar rol binnen de ontwikkeling van de irrigatiesektor aan te passen; dat de boeren bereid zijn om irrigatiebeheer over te nemen; en dat de overdracht een neutraal proces is, waarbij slechts management- en technische aspekten aan te pas komen.

Dit proefschrift belicht de politieke dimensie van IMT-beleid. In Indonesië is de formulering en uitvoering van het IMT-beleid constant onderdeel geweest van machtsstrijd binnen de verschillende administratieve niveaus. Uit de manier waarop de IMT-beleidsagenda werd bepaald en herzien, respectievelijk tijdens het Irrigation Operation and Maintenance Project (IOMP) uit 1987 en de Water Sector Adjustment Loan (WATSAL) uit 1999, blijkt dat de overdracht van het beheer niet altijd volgens de belangen van de irrigatiedienst of van de boeren werd uitgevoerd. Tijdens het IOMP werd IMT door de irrigatiedienst omgebouwd tot een puur constructie-gericht programma. Onder WATSAL werd IMT gereduceerd tot een beleidsinstrument om bureaucratische belangen van de irrigatiedienst te beperken. In beide IMT-programma's bleven de opvattingen van de boeren over hun positie voor- en na de overdracht onderbelicht.

Dit onderzoek bestudeert de beleidslijnen binnen IMT vanaf het nationale tot op het veld niveau en gebruikt de irrigatiesystemen van Kulon Progo, in de provincie Yogyakarta, als gevalstudie om de werkelijke overdracht van irrigatiebeheer te bekijken. Op het nationale niveau bekijkt het onderzoek hoe de inzichten en belangen van de hoge beleidsmakers binnen de WATSAL Task Force het IMT-beleid vormden. Daarnaast beschrijft het onderzoek hoe, in september 2003, verschillende ministeries betrokken raakten bij een beleidstwist over de grondbeginselen van het IMT-beleid. Het belicht in detail hoe beleidsmakers van de ministeries de besluitvorming binnen het parlement planden en trachtten te beïnvloeden. Dit betrof met name het Nationaal Planbureau voor Ontwikkeling (National Development Planning Agency of NDPA), het Ministerie van Volkshuisvesting en Regionale Infrastructuur (Kimpraswil), en het Ministerie van Binnenlandse Zaken (MoHA). Vanaf het nationale niveau, richt dit onderzoek zich stapsgewijs op het regionale niveau, provinciale niveau, districts niveau, en op de uitvoering van IMT-beleid in de irrigatiesystemen van Kulon Progo, tot op de velden van de boeren.

Het proefschrift bevat negen hoofdstukken. Na de indroduktie wordt de dynamische karakter van de Indonesische staat in hoofdstuk 2 beschreven. Na de val van Suharto en de politieke hervormingen van 1998 werd het concept van regionale autonomie geïntroduceerd en breed toegepast. Maar in de praktijk werd de regionale autonomie beperkt door een gebrekkige fiscale decentralisatie. Ondanks de toegenomen mate van gedecentraliseerde besluitsvorming, bleven lokale overheden afhankelijk van het budget van de centrale overheid. Dit was onder andere duidelijk doordat de enige manier om beleid voort te zetten op het lokale niveau bestond in het volgen van de zogenaamde "project approach". Deze aanpak dateert van eind jaren 60, was sindsdien de motor achter Indonesische ontwikkeling, en was dat, post-Suharto, nog steeds. Ook het 'nieuwe' IMTbeleid volgde dezelfde aanpak. Hierdoor reflecteerden de federaties van watergebruikersorganisaties (FWUAs), die werden opgezet onder IMT, de specifieke bureaucratische kenmerken van de overheid.

Hoofdstuk 3 bespreekt de bureaucratische identiteit van de irrigatiedienst, hoe deze in tegensprak was met de beoogde overdracht van beheer, en dat daarom de eerste beleidsaanname in IMT onjuist is. IMT beleid was erop gericht om de focus in irrigatieontwikkeling te verschuiven van infrastructuur naar de boeren, maar deze verschuiving hield geen rekening met de heersende belangen van de irrigatiedienst in de constructie en rehabilitatie van irrigatiesystemen. In tegensteling tot deze aanname door internationale beleidmakers, ziet de irrigatiedienst de IMT als een bedreiging voor hun bureaucratische positie en hun gevestigde belangen in irrigatieontwikkeling. Hoewel het Ministerie van Burgerlijke Openbare Werken (PU) in 1999 werd afgeschaft, overleefde de bureaucratische identiteit van de irrigatiedienst. Dit was duidelijk doordat dezelfde kern van beleidsmakers verantwoordelijk bleef voor de reorganisatie, en de focus op constructie bleef bestaan. Nadat het Ministerie was afgeschaft, behield deze kern hun bureaucratische positie door de vorming van hun eigen zogenaamde Staats-Ministerie van Burgerlijke Openbare Werken (Meneg PU), tegelijkertijd met de vorming van het nieuwe Ministerie van Volshuisvesting en Regionale Ontwikkeling (Kimbangwil). In 2001 nam dezelfde kern weer de volledige controle van beide Ministeries over, door deze met elkaar te fuseren in het nieuwe Ministerie van Volkshuisvesting en Regionale Infrastruktuur (Kimpraswil).

Hoofdstuk 4 laat zien dat het besluit tot overdracht van irrigatiebeheer in de systemen die werden beheerd door de overheid, noch naar de keuze van de boeren werd bepaald, noch rekening hield met hun ervaring in irrigatiebeheer. In dezelfde lijn was het concept van IMT nooit ontwikkeld op basis van het werkelijk functioneren van deze boerenorganisaties. De verschuiving van de organisationele- naar de institutionele benadering in irrigatieontwikkeling werd vooral geleid door een neo-liberale ontwikkelingsvisie. Deze visie idealiseerde de capaciteit van de boeren in irrigatiebeheer, zoals deze werd waargenomen in de systemen die altijd al onder beheer waren van de boeren. Zij zagen deze vorm van irrigatiebeheer als de oplossing voor het slechte functioneren van irrigatiesystemen beheerd door de overheid. Door het IMT-beleid te beschouwen als een evolutionair process, wordt aangetoond dat het beleid van oorsprong werd aangewend door de internationale donoren om hun eerdere investeringen in

ontwikkeling van die irrigatiesystemen onder beheer van de overheid te beschermen. Het beleid miste daardoor de kans om problemen aan te pakken zoals deze zowel door de overheid als de boeren ondervonden werden. En hoewel IMT pretendeerde de boereninspraak in irrigatie te vergroten, was in het Indonesische beleid vooral gebruik gemaakt van internationale beleidsmodellen die beschreven hoe het betrekken van boeren in irrigatiebeheer zou leiden tot een verbeterd functioneren van irrigatiesystemen. Het bleef daardoor onduidelijk hoe de boeren zelf hun betrokkenheid in irrigatiebeheer zagen.

In de hoofdstukken 5, 6, 7, en 8 wordt beschreven hoe het proces van beheersoverdracht constant onderdeel was van verschillende machtsstrijden. Hoofdstuk 5 belicht de politieke dimensie van het beleid door te beschrijven hoe de formulering van het beleid werd beinvloed door een verborgen agenda. Door te bekijken hoe het IMT beleid geëvolueerd is van IOMP 1987 tot WATSAL 1999 laat dit hoofdstuk zien dat het concept van beheersoverdracht altijd onderhevig was aan de opvattingen en belangen van de beleidselite. De IMT-beleidsagenda kwam onder zowel IOMP als WATSAL voort uit machtsstrijd tussen verschillende segmenten van de overheidsbureaucratie. Onder IOMP gebruikte de irrigatiedienst haar belang in constructie door de omvang en belang van de herstelwerkzaamheden aan irrigatiesystemen te overdrijven en die vervolgens verplicht te stellen bij de overdracht van het irrigatiebeheer. Onder WATSAL verborg de Task Force de werkelijke implicaties voor de irrigatiedienst van het zogenaamde 'Distrikt Irrigatieontwikkeling Fonds', zodat dit type stimuleringsfonds snel ingevoerd kon worden. Door de toegang tot dit type fonds te verschuiven van irrigatiedienst naar FWUAS, probeerden de WATSAL beleidsmakers de FWUAS in te zetten als hun locale wapen tegen de bureacratische macht van de irrigatiedienst in de sector.

Het politieke aspect van de beheersoverdracht kwam in 2003 nog duidelijker naar voren tijdens de beleidstwist die plaatsvond over de principes van het IMT-beleid. Hoofdstuk 6 illustreert hoe deze twist begon toen Kimpraswil zich realiseerde wat de werkelijke implicaties van IMT onder WATSAL voor hun bureaucratische bestaan zouden zijn. Kimpraswil gebruikte de nieuwe Water Nota, dat op het punt stond om afgekondigd te worden, als strategie om het irrigatiebeleid terug te buigen richting centralisatie. Zowel het Nationaal Planbureau voor Ontwikkeling als het Ministerie van Binnenlandse Zaken probeerden tegenwicht te geven aan Kimpraswil's opstelling. Desondanks werd het WATSAL IMT-programma stopgezet door de afkondiging van de nieuwe Water Nota in februari 2004. Door deze afkondiging bewees Kimpraswil haar bureaucratische gezag en haar capaciteit om besluitvorming betreffende de ontwikkeling van de irrigatiesektor te overheersen. Kimpraswil's succesvolle ingreep om de boereninspraak te beperken tot het tertiaire niveau was gerelateerd aan de handigheid waarmee zij de besluiten van parlementsleden dirigeerde, zodat deze beperkte inspraak werd meegenomen in de nieuwe Water Nota. Omdat Kimpraswil het heersende gezag was binnen de irrigatiesektor, had zij, in vergelijking met andere ministeries, de betere toegang en middelen om besluitvorming in het parlement te beïnvloeden.

In hoofdstuk 7 en 8 wordt besproken hoe de district irrigatiedienst de ontwikkeling van de FWUAs zo dirigeerde dat ze een bureaucratische replica van de dienst werden; dit liet wederom zien hoe de dienst tegenover IMT stond. Bovendien spreekt dit de aanname

tegen dat de irrigatiedienst bereid was, of gedwongen kon worden, om irrgatiebeheer over te dragen aan de FWUAs. In de praktijk was de irrigatiedienst vooral geïnteresseerd om haar bureaucratische gezag in het irrigatiebeheer van de systemen te behouden. In de nasleep van de IMT beleidstwist besloot de irrigatiedienst in Kulon Progo om door te gaan met IMT als onder WATSAL. Doordat de ontwikkeling van de FWUAs op districtsniveau richting bureaucratisering neigde, liet het zien dat werkelijke overdracht ook op dat niveau werd tegengewerkt door de irrigatiedienst. Net als de irrigatiedienst, was de FWUA-staf meer begaan met het beheren van het "Distrikt Irrigatieontwikkeling Fonds" en met de adminstratieve en technische vereisten van dat fonds, dan met het voorzien in de waterbehoefte van de boeren. Het functioneren van de FWUA was erop gericht om zoveel mogelijk geld binnen te slepen uit het ontwikkelingsfonds. Net als de irrigatjedienst, lag de nadruk bij de FWUA meer op het beheer van het fonds volgens hun eigen financiële belangen, dan op het beantwoorden aan de noodzaak van de boeren om het systeem te repareren. IMT heeft ervoor gezorgd dat de financiele belangen die de irrigatiedienst had binnen de sector, nu werden overgedragen en vertegenwoordigd door de FWUAs, met name doordat het voor de toegang tot ontwikkelingsfondsen de FWUAS verbond met de praktijk van bureaucratische korruptie.

In de context van waterverdeling leidde IMT niet tot de overdracht van besluitvorming van de irrigatiedienst naar de FWUAs. De irrigatiedienst behield haar gezag in waterverdeling over de irrigatiesystemen en in de bediening van de hoofdverdelingswerken. De rol van de FWUAs binnen waterverdeling was beperkt tot het onderhandelen over waterbehoeftes, zij hadden geen enkele rol binnen de officiële besluitvorming over de waterverdeling. Desondanks zorgde IMT voor een herleving van de bestaande allianties tussen de irrigatiedienst en boeren. In de nieuwe situatie zorgde het 'ruimtelijk gezag' (of 'spatial authority'), dat was ontstaan door nieuwe allianties tussen FWUA –staf en verscheidene mensen van de district irrigatiedienst, er toch voor dat besluitvorming binnen irrigatiedienst om een platvorm op te richten waarin FWUA-staf werd betrokken bij besluitvorming in de waterverdeling tussen de verschillende systemen. Deze nieuwe allianties vormden daardoor de basis voor het ontstaan van polycentrische besluitvorming in irrigatiebeheer.

In het laatste hoofdstuk worden de onderzoeksvragen beantwoord en worden de parodox van het IMT-beleid besproken. Hier wordt beargumenteerd dat deze paradoxen de belangrijkste redenen vormen voor de onvolledige betrokkenheid van de Indonesische overheid bij de formulering en uitvoering van het IMT-beleid, en dat ook de boeren niet op de hoogte waren van de overdracht en daardoor nooit echt betrokken zijn bij het WATSAL IMT programma. De eerste paradox betreft de manier waarop de international donors de irrigatiedienst behandelden als een overheids instantie die gebrekkig is in het uitvoeren van irrigatieontwikkeling, terwijl diezelfde dienst wel als facilitor diende op te treden voor de hervormingen. De tweede paradox in het IMT-beleid betreft dat international beleidsmakers aannamen dat boeren bereid zouden zijn om irrigatiebeheer over te nemen.

Naar aanleiding van beide paradoxen, beschrijft dit proefschrift hoe de internationale beleidsmakers verschillende gezichten laten zien in hun rol als trendsetters voor irrigatieontwikkeling; dit zou iets zijn wat verder onderzocht dient te worden. Bovendien zou toekomstig onderzoek zich moeten richten op hoe IMT-beleid de werkelijke rol en capaciteiten van de boeren binnen irrigatiebeheer mee zou moeten nemen, en wat de boeren zelf zouden vinden over hun positie binnen het irrigatiebeheer. Ik hoop dat dit onderzoek aantoont dat de boeren geen kennis hadden over het IMT programma en nooit verder betrokken zijn geweest bij IMT. Dit onderzoek bijdraagt aan een verscherping van het IMT-beleid zodat het meer in lijn is met de belangen van de boeren als een heterogene klasse.

Tenslotte benadrukt dit onderzoek dat er aandacht moet komen voor bureaucratische hervorming binnen het IMT-beleid. Naast het verzet van de irrigatiedienst tegen de veranderingen, duiden ook de nationale en regionale niveaus op het belang van bureaucratische hervorming. In deze context blijft er de vraag hoe de kern-beleidsmakers binnen de irrigatiedienst er van te overtuigen dat ze hun bureaucratische gezag binnen de sector slechts kunnen behouden door tegemoet te komen aan de heersende behoefte naar ontwikkeling.

Curriculum Vitae

Diana Suhardiman was born on 4 August 1973 in Jakarta, Indonesia. She completed her secondary education in 1992, before she went to the Netherlands to continue her university study. In 1993, after successfully completing the state examination for the Dutch language she was admitted to Wageningen University, where she studied irrigation under the Tropical Land Use program (O-10). In 1996 she conducted her practical period in Khon Kaen, Thailand, looking at the actual functioning of at then-recently formed Water Users Associations (WUAs) in the North East Water Management and System Improvement Project (NEWMASIP). She continued with her M.Sc. thesis in Indonesia. There she focused on the implementation of the Irrigation Management Transfer (IMT) policy in two irrigation systems in West Java under the Java Irrigation and Water Resources Management Project (JIWMP). She graduated in September 1998 with a specialization in irrigation and additional topics in sociology, communication science and agrarian law. After graduation she accompanied her husband to Egypt. In Egypt she wrote the early version of her Ph.D. research proposal. She also conducted a short-term research study for the Fayoum Water Management Project (FWMP) on institutional strengthening of the Federation of WUAs in Abu Genshu. In 2003 she started her Ph.D. research on IMT in Indonesia, funded by Wageningen University, the Netherlands and the International Water Management Institute, Colombo, Sri Lanka, Presently she is based in Washington D.C.

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Picture taken by Diana Suhardiman

Picture of an office of a Federation of Water Users Association in Kulon Progo district

Title on the whiteboard:

"Daftar rencana dan realisasi setoran iuran dari unit unit P3A", translates into:

"List of planned and realized collection of fees from Water User Associations"

Email: suhardiman@gmail.com

Completed Training and Supervision Plan Diana Suhardiman

Description	Department/Institute	Month/year	Credits
I. Orientation			
CERES introductory course	CERES Utrecht University	March-April	6
CERES presentation tutorials	CERES	May 2003	6
II. Scientific and Profession	al Skills		
Pathways to development (summer school)	CERES	June 2003	1
III Seminar Presentations			
Conflicting demands towards centralization and decentralization in the management of government irrigation system in Java, Indonesia.	Irrigation and Water Engineering Group, Wageningen University, The Netherlands	September 2003	4
Irrigation management transfer in the seven technical irrigation systems in Kulon Progo district, Indonesia.	International Water Management Institute, Hyderabad, India	December 2005	4
The paradox of irrigation management transfer in Indonesia.	International Water Management Institute, Colombo, Sri Lanka	January 2005	4
Total			25

Done at Wageningen, 10 January 2008

Prof. Dr. L. Vincent

Dr.ir. P.P. Mollinga

Diana Suhardiman