Water Rights and Politics in Andean Water Policy Reforms

Research, Training and Seminar Results of the Program:

WATER LAW AND INDIGENOUS RIGHTS – WALIR
Towards recognition of indigenous and customary water rights and management rules in national legislation

http://www.eclac.cl/drni/proyectos/walir/whatis.asp

ISBN 90-8585-064-9

WALIR Studies Volume 11

Wageningen University / IWE and United Nations / CEPAL

Author: **Rutgerd Boelens**
With contributions from Paul H. Gelles and Margreet Zwarteveen

Wageningen, 2006

Photo by Rutgerd Boelens (Cusco, Peru)

WALIR – Water Law and Indigenous Rights

The program Water law and Indigenous Rights is an international, inter-institutional endeavor based on action-research, exchange, capacity-building, empowerment and advocacy. This comparative research program builds upon academic research and action-researchers in local networks – both indigenous and non-indigenous. It attempts to be a kind of think-tank to critically inform debates on indigenous and customary rights in water legislation and water policy, both to facilitate local action platforms and to influence the circles of law- and policy-makers. Equitable rights distribution and democratic decision-making and therefore, support for empowerment of discriminated and oppressed sectors, are major concerns.

In co-ordination and collaboration with existing networks and counterpart-initiatives, WALIR sets out to analyze water rights and customary management modes of indigenous and peasant communities, comparing them with the contents of current national legislation and policy. Thereby, it sheds light on how the first are legally and materially discriminated against and destructed. The aim is to contribute to a process of change that structurally recognizes indigenous and customary water management rules and rights in national legislation. It also aims to make a concrete contribution to the implementation of better water management policies. As part of its strategy WALIR plans to contribute to and present concepts, methodologies and contextual proposals and to sensitize decision makers regarding the changes needed for appropriate legislation and water policies.

In its initial phase, WALIR has set up an inter-institutional network of institutions, scholars and practitioners of various disciplines and backgrounds, involved in and committed to the above objectives. Preparatory studies conducted so far have focused on current legislation and legal attention to, or neglect and discrimination of, indigenous and customary water rights. The project aims to have an effect beyond this Andean focus, by providing an example and tool for similar action research to be pursued in other regions. Second phase studies of WALIR focus on indigenous water rights in international law and treaties, indigenous identity and water rights, current indigenous water management systems, field case studies, and thematic, complementary research projects (on the relation between "WALIR" and gender, food security, land rights, water policy dialogue methods, among others). Short comparative studies in other countries will further complement and strengthen the project and its thematic networks, and lay the foundation for a broader international framework. Next a number of exchange, dissemination, capacity-building and advocacy activities will be implemented, in close collaboration with local, national and international platforms and networks.

The program, therefore, is not just academic but also action-based. While especially the indigenous populations are being confronted with increasing water scarcity and a traditionally strong neglect of their water management rules and rights, the current political climate seems to be changing. However, actual legal changes are still empty of contents, and there is a lack of clear research results and proposals in this area. The program aims to help bridge these gaps, facing the challenge to take into account the dynamics of customary and indigenous rules, without falling into the trap of decontextualizing and 'freezing' such local normative systems. Fundamentally, WALIR program is directed towards activities and conclusions that facilitate local, national and international platforms and networks of grassroots organizations and policymakers. But the practical and conceptual pitfalls rights analysis and recognition initiatives are manifold.

WALIR is coordinated by Wageningen University and the United Nations Economic Commission for Latin America and the Caribbean (UN/ECLAC) and is implemented in cooperation with counterpart organizations in Bolivia, Chili, Ecuador, Peru, Mexico, France, The Netherlands and the USA. The counterparts, with whom they work together, form a much broader group of participants: institutions at international, national and local level. The water Unit of the Netherlands Ministry of Foreign affairs funds the program.

WALIR – Legislación de Recursos Hídricos y Derechos Locales e Indígenas (Spanish Summary)

WALIR es un programa colaborativo coordinado por la Universidad de Wageningen y la Comisión Económico de las Naciones Unidas para América Latina y el Caribe (UN/CEPAL), y es implementada en cooperación con instituciones de contraparte en Bolivia, Chile, Ecuador, Perú, México, Francia, Países Bajos y Estados Unidos. Las contrapartes con las que éstas trabajan forman un grupo de participantes mucho más amplio: instituciones a escalas local, nacional e internacional. WALIR se formuló como una red interinstitucional basada en investigación-acción, intercambio, capacitación, empoderamiento y defensa legal. Se asienta sobre investigaciones académicas e investigación-acción en redes locales, nacionales e internacionales – indígenas y no indígenas. Pretende ser un "centro de ideas" (think tank) para informar críticamente a los debates sobre los derechos consuetudinarios e indígenas relacionadas con la legislación y políticas hídricas, tanto para facilitar las plataformas locales de acción como para influir en los círculos donde se hacen las leyes y políticas. La distribución equitativa de los derechos y la toma democrática de decisiones y, por lo tanto, el apoyo para el empoderamiento de los sectores marginados y discriminados, son las principales preocupaciones del WALIR.

Sobre el autor

Rutgerd Boelens is a lecturer and researcher with the Irrigation and Water Engineering Group at Wageningen University, The Netherlands. His academic and action research focuses on water rights, peasant and indigenous water control, legal pluralism and interactive irrigation development, in the Andean countries and Spain. Currently he coordinates the program Water Law and Indigenous Rights (WALIR) on official and local water rights frameworks in Peru, Bolivia, Chile, Ecuador (comparative cases Mexico and U.S.A.), as well as the interAndean Concertación program on water policy research and interdisciplinary water training. His books include *Searching for Equity. Conceptions of Justice and Equity in Peasant Irrigation* (Spanish: *Buscando la Equidad*, with Dávila, 1998); *Water Rights and Empowerment* (with Hoogendam, 2002); *Derechos de Agua y Acción Colectiva* (with Hoogendam, 2001); *Mujer campesina e Intervención en el Riego Andino* (with Arroyo, 1997); *Derecho Consuetudinario Campesino e Intervención en el Riego* (with Doornbos, 1996); *Liquid Relations. Contested Water Rights and Legal Complexity* (with Roth and Zwarteveen, 2005); *Water and Indigenous Peoples* (with Chiba and Nakashima, 2006). In his articles and book chapters he has also published on the linkages between water rights, water cultures, water policies and power relations. E-mail: Rutgerd.Boelens@wur.nl

Table of contents / Índice

1 Local Law and the Politics of Participation. The pitfalls and challenges of local water rights recognition in the Andes[1]

1.1 *Introduction*

Water, being a fundamental resource for human life and agrarian production, is a source of great power in many regions of the world, as is the case in the Andean highlands. The fact that water represents power and potential leads, paradoxically, to intense confrontations as well as to solid collaboration among societal groups. The importance and worsening scarcity of water act to intensify conflicts over access to water and control over water management. At the same time, water is also a means of empowering and mobilizing people, often the pivot for community or inter-community action; water can be the driving force behind the formation of strong common-property institutions, grounded in shared rules and collective rights.

Obviously, these normative systems do not and have never come into being within a social vacuum, nor are they limited to autarkic development: alongside physical and ecological conditions, their development is interwoven with the past and present history of the cultural, political, economic, technological and institutional foundations of Andean society. They comprise normative frameworks that are locality-specific, displaying enormous variety from one community to the next and from one region to another. In general, these water rights and management norms are the backbone of community systems in the Andes – local frameworks of rights, obligations and working rules for water distribution, system operation and maintenance, including the basic agreements that define the organizational structure and application of sanctions for infractions. They sustain local production and livelihood systems which, apart from being important sources of food, economic development, security, and culture for local communities, also constitute the fundamental providers of food and security to the region as a whole. Therefore, security of water access and the means to manage their water systems is of crucial importance to Andean communities.

Nevertheless, on top of the historically grown, extremely unequal distribution of access to water, indigenous and customary water rights in the Andean countries, as elsewhere in the world, are increasingly under pressure. Consequently, the millions of indigenous water users find themselves structurally among the poorest groups of society. Moreover, they are usually not represented in national and international decision-making water organs. This contributes to a situation of increasing inequality, poverty, conflict and ecological destruction. Even when indigenous rights and water management practices are *not* simply obstructed by national legislation and intervention policies, attention to the subject is negligible. Governments have paid it mere lip service. Most policies and legislation do not take into account the day-to-day realities and specific contexts of indigenous groups.

In this document, the challenges of a recently set up action-research, exchange and advocacy program are outlined. The program – "Water Law and Indigenous Rights. Towards recognition of local and indigenous rights and management rules in national legislation" (WALIR) – aims to contribute to countering the above-mentioned discrimination and injustice. Although the investigations also cover the cases of Mexico and the United States, its main focus of *action* is in the Andean countries: Peru, Bolivia, Chile and Ecuador. Therefore, the article will first address some basic features of the Andean water law, water policy and local rights background. Next, it will present the action-research program and elaborate some of its key conceptual challenges: the concept of *indigenous* water rights and management rules, the concept of official *recognition* of local sociolegal repertoires, and the question of the effectiveness of *legal* (law-oriented) strategies for solving water conflicts and rights issues. The intention is not to give definite answers but to clarify important questions and dilemmas. Subsequently, the article will focus on the problem of inclusion-oriented water law and policy strategies: the tyranny of modern equality and participation discourses, which deny local and indigenous livelihoods, water rights and management rules.

[1] Paper presented on behalf of the inter-institutional research and action program WALIR – Water Law and Indigenous Rights - at the Symposium "The UN Year of Freshwater 03: The Millennium Goals, Cultural Diversity and International Solidarity" held 6 and 7 November 2003, Geneva, Switzerland.

1.2 *The context of local water rights and production systems in the Andes: some illustrations*

Peasant and indigenous water management systems constitute the fundament sustaining local livelihoods and national food security in the Andes. Generally, the important role they play in water management and food security, being the main providers of food for the national populations, is not thanks to, but in spite of government policies

Illustration 1. In Ecuador, smallholder and medium-scale farmers, mostly peasant and indigenous families living in highland communities, are responsible for the major part of national food production: their production covers more or less 70 % of national food consumption (WALIR 2003). Access to irrigation water is essential for most of their production systems. Nevertheless, national water rights distribution is enormously skewed towards benefiting a small minority of powerful enterprises and landlords. Today, 88 % of the small-farmers (minifundistas) have access rights to only in between 6 and 20 % of the available water, while hacendados (who conform 1 to 4 % of the irrigators population) have rights to 50 to 60 % of the water (Galárraga-Sánchez 2000). This unequal distribution is not just because of historical reasons of colonial occupation and the encroachment of peasant and indigenous communities' water rights by conquistadores and haciendas. Contemporary State policies have largely contributed to this. According to Whitaker's national evaluation study (1992), peasant and indigenous farmers with less than 1 hectare represent 60 % of all farmers, but they received only 13 % of the benefits of State spending in irrigation. At the same time, large landowners represent only 6 % of farmers, and they received 41 % of the benefits of State spending in irrigation. According to Whitaker (1992) and the recent WALIR-study (2003), it was the public who financed all this: State irrigation investment in Ecuador at that moment represented 12 % of the total foreign debt.

Currently, the context for water rights and management rules is changing rapidly in the Andean countries. Increasing demographic pressure, and the processes of migration, transnationalization and urbanization of rural areas, among others, are leading to profound changes in the agrarian structure, local cultures and forms of natural resource management. Newcomers enter the territories of local peasant and indigenous communities, generally claiming a substantive share of existing water rights and often neglecting local rules and agreements.

Illustration 2. The famous Majes Project in southern Peru is one of the many cases in which the Andean peasant and indigenous communities were excluded from the water development process – or should we rather say: a typical example of how they, and especially their resources, were included in the development process. Major investments were made, some US$ 1,300,000,000 dollars, to capture and conduct the water from the Colca Valley and irrigate the desert lowlands and generate power for the cities. According to Hendriks (2002:62) only 15,000 hectares have been irrigated,[2] for a total of 3000 families, who each obtained a 5-hectare parcel. This is an investment in the order of US $ 80,000 dollars per hectare, or, what is even more appalling: US$ 400,000 dollars per family.

The original design excluded outright any provision of water for the upper basin where the peasant and indigenous communities live, and where the water comes from. Furthermore, to 'recover' investments, those families who did acquire land and water rights in the lower basin, had to pay 25,000 dollars per parcel – by no means affordable for an indigenous small-holder family. Communities in the Andean catchment zone were completely ignored and left without benefits. They were 'included', however. To undo their 'backwardness', they did get the largest share of the burdens, for example, the expropriation of land, strong price inflation, depredation of natural resources, destruction of terraces, and debilitation of existing patterns of organization and culture (Tipton 1988; Gelles & Boelens 2003).

"The waters of Colca will then create new wealth by irrigating dry land and driving the project's two power plants. But the Colca villagers will once again, as always, be left by the wayside, to demand the justice that will evidently not be achieved by any granting of a concession, but by fighting for and seizing the rights that they have historically been denied" (Manrique 1985). The United

[2] Although the original project plan foresaw an irrigation command area of 23.000 hectares, the actual irrigated area proved to be far more limited, and there are indications that the availability of water has reached its limit. This is, among others, because the farmers applied an irrigation dotation that is twice the one that was planned by the project engineers (Hendriks 2002: 62) - a classical example of 'structural deceit' in irrigation project planning (see Chapter 4).

Nations/ CEPAL estimated that barely 0.2 % of total project investment was allocated to the upper basin, were the poorest sectors were in great need for irrigation water. Moreover, comparing this budget with other options at that time, 750,000 hectares of abandoned terraces could have been recovered and brought back into production in peasant and indigenous communities (CEPAL 1988. See also Manrique 1985).

The Andes is undergoing an era of aggressive neo-liberal water reform. In this context, it is common to see that powerful stakeholders manage to influence new regulations and policies or monopolize water access and control rights. National and international elites or enterprises use both State intervention and new privatization policies to nullify and appropriate indigenous water rights.

Illustration 3: In the last decade, the neo-liberal Chilean model, based on private water property rights and the creation of a water market, has been forcefully promoted to all Andean countries. However, making water rights transferable does not necessarily stimulate it being allocated to its highest economic value, as the example of Chile shows. Nor does it promote any social policy, such as attending the poorest sectors, prioritizing water for human consumption, or taking care of the environment. In Chile, companies that try to get hold of water rights do not necessarily get their profits from using or selling water. Speculation by holding surplus usage rights is currently much more profitable, leading to the emergence of private water monopolies. The Chilean Water Code does not prevent the emergence of such monopolies, or the hoarding and speculation by powerful enterprises. It is, first of all, not necessary to pay taxes or fees to own water. And second, the right-holder has no obligation to effectively or beneficially use the water to which he/she owns the rights, or to build the works needed to utilize it (Solanes & Getches 1998, Dourojeanni & Jouravlev 1999). Hendriks provides some striking examples of water speculation by the hydro-power sector. The three major generating companies accumulate 78% (1324 m3/s) of the water used for this purpose; they have rights to 73% (8162 m3/s) of the currently unused water; and they have applied for 69% (26,753 m3/s) of the total volume pending grants. It is estimated that at the total, nation-wide level a flow exists of 30,000 m3/s usable for electric generation. The same tendency of concentrating water rights is repeated in mining activity in the dry northern region (Hendriks, 1998). Peasant and indigenous movements actively protest against such water monopolies, and also the government attempts to modify the current water legislation to avoid unproductive uses. Such attempts meet with the resistance of the existing right-holders, who are reluctant to give up their privileges and actively oppose any changes in the Water Code (Dourojeanni & Jouravlev 1999).

But at the same time there appear to be opportunities for customary and indigenous cultures and rights systems. It can be observed that most Andean countries have accepted international agreements and work towards constitutional recognition of ethnic plurality and multiculturalism (or '*interculturalidad*'). At a general level 'indigenous rights' are associated with or considered to be 'human rights'. However, when it comes to materializing such general agreements in practice or in concrete legislative fields, such as water laws and policies, particular local and indigenous forms of water management (especially water *control* rights) tend to be denied, forbidden or undermined (Bustamante 2002; CONAIE 1996; Gentes 2002, 2003; Getches 2002; Guevara et al. 2002, 2003; Pacari 1998; Palacios 2002, 2003).

Illustration 4. The main water users of the Central Valley of Cochabamba, Bolivia, are peasant and indigenous irrigator communities, who for decades have organized access to and distribution of water according to their 'uses and customs'. They engaged in a major conflict when in 1997 the Cochabamba drinking water company started to drill wells in the Central Valley, affecting their already over-extracted ground water resources. In 2000, the Valley again became a violent battlefield when indigenous and peasant communities together with urban water users protested against the state's plans to privatize the drinking water sector. The government signed a contract with a large foreign consortium, and enacted a privatization support law that allowed the international company to have exclusive water rights of all waters in the district – including those of smaller systems in the metropolitan area and rights to exploit the aquifers. Another law was rushed through the parliament so that the company could capture new water resources, and even charge water fees for cooperative wells that were to be expropriated. Directly after privatization, the international company considerably raised water fees, without any system improvement. In a strong alliance urban and rural water users protested: the citizens protested against rising water rates, while the rural municipalities and indigenous communities protested against the new law, because it affected their rights and could expose them to new encroachments of their water

sources. Violent confrontations with the army were the result. At the end of this 'water war', the government had to retract its decision and also commit to amending all the proposed law's articles that the popular alliance objected to (See: Assies 2000, Boelens et al. 2002, Bustamante 2002, Laurie et al. 2002).

In the Andes – and elsewhere -, the denial of contemporary forms of indigenous water management is often combined with a glorification of the past: "Incas yes, Indians no!" (Méndez 2000. Cf. Almeida 1998, Baud 1997, Gelles 2000, Flores Galindo 1988, Hale 2002). We find a folkloristic attitude towards contemporary indigenous communities. Very common is the use of either romanticized, paternalistic or racist approaches. Policies are oriented towards a non-existing image of 'Indianity', a stereotype; or towards the assimilation and destruction of indigenous water rights systems.

As a result of the above, the Andean countries are full with examples of the negative organizational and infrastructural impacts of many top-down water programs. They usually fail to understand the dynamic and plural nature of indigenous rights and management rules (Gerbrandy and Hoogendam 1998, Boelens and Dávila 1998, Guillet 1992, Mitchell and Guillet 1994).

In the last decade, as a reaction, we see a certain shift from a class-based to a class- and ethnicity-based *('indigenous')* struggle for water access and control rights, especially in countries such as Ecuador and Bolivia. In many regions the traditional struggle for more equal land distribution has been accompanied or replaced by collective claims for more equal water distribution, and for the legitimization of local authorities and normative frameworks for water management. But why, particularly, the theme of *water rights?*

1.3 Water rights and WALIR

In these times of growing scarcity and competition regarding access to water resources, water rights become a pivotal issue in the struggle of local indigenous and peasant organizations to defend their livelihoods and secure their future (see Hazeleger & Boelens 2003, Vincent 2002). Water in Andean communities is often an extremely powerful resource. Apart from being a foundation for productive, social and religious practice and local identity, the particular, collective nature of 'water' almost by definition forces people to build strong organizations: in most cases, the resource can be managed only by means of day-to-day collective action. Collaboration instead of competition is the only way to survive and secure water rights in this extremely adverse environment.

This 'forced' collective action to manage the resource cannot be romanticized and is not embedded in a presumed 'Andean solidarity'. It is a form of local, 'contractual reciprocity' to sustain and reproduce local water management systems and the households and communities that depend on them (Cf. Boelens & Doornbos 2001; Mayer 2002). And apart from the local orientation of this collective reciprocal action, it may also create a strong basis for broader political alliances, for example, in order to claim particular water policies and oppose forms of legislation and policies that deny indigenous or customary rights.

Consequently, as field evidence shows, water rights privatization policies create an enormous danger for indigenous and peasant communities in the Andes. This is also the main cause of the recent, very intensive, Water Wars in Bolivia (Assies 2000, Bustamante 2002, Laurie et al. 2002).

Again, why water rights? In order to deeper penetrate the power of water, it is necessary to understand the multi-layered concept of water rights in most indigenous and peasant communities. Typically, water rights do not refer to rights of access and withdrawal only, but are considered to be authorized claims to use water *and* control decision-making about water management (Beccar et al. 2002, Vincent 2002, Zwarteveen 1997). Therefore, it is a struggle over the following key issues: access to water and infrastructure; rules and obligations regarding resource management; the legitimacy of authority to establish and enforce rules and rights; and the discourses and policies to regulate the resource. And it is precisely the *authority* of indigenous and peasant organizations that is increasingly being denied, their water *usage rights* that are being cut off, and their control over *decision-making* processes that is being undermined.

Fundamentally, a *water right,* more than just a relationship of access and usage between 'subject' (the user) and 'object' (the water), is a social relationship and an expression of power among humans. It is a relationship of inclusion and exclusion, and involves control over decision-making. Therefore it is crucial to consider the two-sided relationship between water rights and power: power relations determine key properties of the distribution, contents and legitimacy of water rights and, in turn, water rights reproduce or restructure power relations (see Boelens & Hoogendam 2002).

Based on the above mentioned considerations, the program Water Law and Indigenous Rights was formulated - an international, interinstitutional endeavor based on action-research, exchange, capacity-building, empowerment and advocacy.[3] This comparative research program builds upon academic research and action-researchers in local networks – both indigenous and non-indigenous. It attempts to be a kind of think-tank to critically inform debates on indigenous and customary rights in water legislation and water policy, both to facilitate local action platforms and to influence the circles of law- and policy-makers. Equitable rights distribution and democratic decision-making and therefore, support for empowerment of discriminated and oppressed sectors, are major concerns.

In co-ordination and collaboration with existing networks and counterpart-initiatives, WALIR sets out to analyze water rights and customary management modes of indigenous and peasant communities, comparing them with the contents of current national legislation and policy. Thereby, it sheds light on how the first are legally and materially discriminated against and destructed. The aim is to contribute to a process of change that structurally recognizes indigenous and customary water management rules and rights in national legislation. It also aims to make a concrete contribution to the implementation of better water management policies.[4] As part of its strategy WALIR plans to contribute to and present concepts, methodologies and contextual proposals and to sensitize decision-makers regarding the changes needed for appropriate legislation and water policies.

The program, therefore, is not just academic but also action-based. While especially the indigenous populations are being confronted with increasing water scarcity and a traditionally strong neglect of their water management rules and rights, the current political climate seems to be changing. However, actual legal changes are still empty of contents, and there is a lack of clear research results and proposals in this area. The program aims to help bridge these gaps, facing the challenge to take into account the dynamics of customary and indigenous rules, without falling into the trap of decontextualizing and 'freezing' such local normative systems. Fundamentally, the WALIR program is directed towards activities and conclusions that facilitate local, national and international platforms and networks of grassroots organizations and policymakers.

[3] WALIR is a collaborative program coordinated by Wageningen University and the United Nations Economic Commission for Latin America and the Caribbean (UN/ECLAC) and is implemented in co-operation with counterpart institutions in Bolivia, Chile, Ecuador, Peru, Mexico, France, The Netherlands and the USA. The counterparts, with whom they work together, form a much broader group of participants: institutions at international, national and local level. The Water Unit of the Netherlands Ministry of Foreign Affairs funds the program.

[4] In its initial phase, WALIR has set up an inter-institutional network of institutions, scholars and practitioners of various disciplines and backgrounds, involved in and committed to the above objectives. Preparatory studies conducted so far have focused on current legislation and legal attention to, or neglect and discrimination of, indigenous and customary water rights. The project aims to have an effect beyond this Andean focus, by providing an example and tool for similar action research to be pursued in other regions. Second phase studies of WALIR focus on indigenous water rights in international law and treaties, indigenous identity and water rights, current indigenous water management systems, field case studies, and thematic, complementary research projects (on the relation between "WALIR" and gender, food security, land rights, water policy dialogue methods, among others). Short comparative studies in other countries will further complement and strengthen the project and its thematic networks, and lay the foundation for a broader international framework. Next, a number of exchange, dissemination, capacity-building and advocacy activities will be implemented, in close collaboration with local, national and international platforms and networks.

1.4 Conceptual problems and strategic challenges

WALIR itself is based on diversity. It has an interdisciplinary composition with lawyers, anthropologists, water professionals, sociologists and agro-economists. Their social background also differs strongly: from scholars and policy-advisors to action-researchers and legal advisors of indigenous organizations. And obviously, the countries studied and their respective legal structures differ strongly, as do the national debates on indigenous and customary rights, and the languages and concepts that are used. Therefore the challenges are manifold, and they are both practical and conceptual. For example:

The social and political construction of 'indigenous'

Half a century ago Frantz Fanon made the following observation, which is useful to recall in the context of the program: "Colonial specialists do not want to recognize that the culture has changed, and they hasten to support the traditions of native society. It is precisely the colonialists who have become the defenders and advocates of a native lifestyle" (Fanon 1967 (1954)).

It gives a powerful warning to scholars, action-researchers and NGOs, to refrain from naïve participationism or philanthropical imperialism and critically rethink every intent to support so-called 'indigenous' knowledge, culture, rights, livelihoods and natural resource management. It also provides a background for the discussions that the program intends to stimulate, and shows partly how complex its objectives are. For example, what is, or who is, 'indigenous' ?

In the Andean region, so-called 'Indians' were invented and the concept of 'indigenous' was constructed by various racist currents, developmentalist paradigms and romanticized narratives, and by the indigenous peoples themselves. Divergent regimes of representation constructed images or projections of 'Andean identity' or 'indigenous cultures', even long before the year 1492. These projections refer either to the backwardness of the 'Indians', populations who therefore should be assimilated into mainstream culture, or to neo-positive, idealized images of 'real and pure Indians', isolated from cultural interaction and defenders of original positive human values. Indigenous groups have often adopted or contributed to the creation of these stereotypes, sometimes unreflectively, sometimes with clear ideological and political purposes.[5]

Is it possible to speak of specific 'indigenous' or 'Andean' cultures, communities, water management forms or socio-legal systems? On the one hand, indigenous peoples dynamically shop around in other normative systems and discourses, selecting and appropriating those elements, tools, and meanings that can strengthen their positions and legitimize their claims. New, diverse indigenous identities are being constructed and strategically strive to represent the indigenous collectivities in their struggle against subordination and discrimination. On the other hand, Andean communities show specific historical and cultural forms of collective action and resource management, embedded in specific Andean cultures with their particular normative repertoires, symbols and meanings, livelihoods and local economies.

Together, both aspects show the importance of analyzing Andean cultures and management forms as dynamic and adaptable to new challenges and contexts. As mentioned by Gelles (2000:12), Andean culture and identity, therefore, is "a plural and hybrid mix of local mores with the political forms and ideological forces of hegemonic states, both indigenous, Iberian and others. Some native institutions are with us today because they were appropriated and used as a means of extracting goods and labor by Spanish colonial authorities and republican states after Independence; others were used to resist colonial and postcolonial regimes".

[5] It was therefore not just the dominant, racist class and social Darwinists, but also many 'indigenist' (and later 'indianist') scholars – e.g. Marxist thinkers and activists, who fought against racial discrimination and racial oppression – who contributed to the great *mestizaje* project, intending to paternalistically 'include the poor indigenous peoples in modern society'. This was done, among other means, by 'modern' irrigation technology, legislation and capitalization of Andean communities, or by defining 'indigenous' as synonymous with 'revolutionary', in Western schools of thought. Furthermore, some indigenous and Indian scholars and movements tried to create the 'modern Indian', rooted in ancient indigenous myths and symbols and pan-Andean discourses, in order to foster regional pride and nationalism or legitimize their political and ethnic (often *mestizo*) positions. The 'indigenous' was –and often still is- essentialized by projecting stereotyped images (see, for example, Almeida 1998; Baud 1997; Baud et al. 1996; Gelles and Boelens 2003; Gelles 1998, 2002; Degregori 2000; Iturralde 1993; Stavenhagen 1994; Stavenhagen & Iturralde 1990).

Nowadays, we find a mixture of diverging positions with respect to the notion of 'indigenous' and its implications in practice, for example, racist constructions of the concept (oriented toward either 'exclusion' or 'bio-political inclusion'), constructs related to developmentalist integration ('backwardness'), to Maoist-Leninist missions ('revolutionary nature'), to indigenous-advocates' or romanticized ways of life ('cosmovisionist') or based on postmodern analysis ('deconstruction'). It is interesting, therefore, to see in this current complex situation a strategic struggle of indigenous water user groups to re-appropriate not just the above mentioned water access rights, water management rules, water organizational forms, and legitimate water authority: they also aim to actively construct their own counter-discourses on 'Andeanity' and 'Indianity' and the policies to regulate water accordingly. Obviously, this dynamic, strategic-political struggle for counter-identification (self-definition), is not necessarily based on solely 'local' truths, rules, rights and traditions.

The plural and contradictory concept of 'recognition'

A next main challenge of the program is related to the notion of 'legal recognition'. In order to confront the processes of discrimination, subordination and exclusion, indigenous and advocacy groups often aim for political action with clear, collective, unified objectives and answers. However, the struggle for formal and legal recognition poses enormous conceptual problems and challenges with important social and strategic consequences.

In another paper we have discussed the dilemma regarding 'recognition of legal hierarchies' arguing that a distinction must be made between analytical-academic and political-strategic recognition[6]. "In an analytical sense, legal pluralistic thinking does not establish a hierarchy (based on the supposedly higher moral values or degrees of legitimacy, effectiveness or appropriateness of a legal framework) among the multiple existing legal frameworks or repertoires. In political terms, however, it is important to recognize that in most countries the existing, official legal structure is fundamentally hierarchical and consequently, in many fields state law may constitute a source of great social power – a fact that does not deny the political power that local socio-legal repertoires may have. Recognizing the existence of this political hierarchy and the emerging properties of state law in particular contexts offers the possibility to devise tools and strategies for social struggle and progressive change. In the discussion about 'recognition' as a way of giving legal pluralism a place in policy-related issues, both the political-strategic and analytical-academic aspects of recognition combine" (Boelens, Roth and Zwarteveen 2002).

Thus, instead of collective and unified claims, many questions arise in the debates and struggles for 'recognition', for example:

- Do indigenous peoples and their advocates claim recognition of just 'indigenous rights' (with all the conceptual and political-strategic dilemmas of the 'indigenous' concept), or do they also struggle for recognition of the broader repertoires of 'customary', and 'peasant' rights prevailing in the Andes? And what precisely is the difference in concrete empirical cases?
- There are no clear-cut, indigenous socio-legal frameworks, but many dynamic, interacting and overlapping socio-legal repertoires: should indigenous peoples try to present and legalize *delimited frameworks* of own water rights, rules and regulations? Or should they rather claim the recognition of their water control rights and thereby the *autonomy to develop* those rules, without the need to detail and specify these rules, rights and principles within the official legal framework?
- Or would it be a more appropriate and effective strategy to claim and defend legalization of their water *access rights* – since these are increasingly being taken away from them - and

[6] "Taking 'recognition' as a point of departure implies that there is a 'recognizing party' and a 'party being recognized'. This would put us in the kind of state-biased position in which matters are decided upon according to a state-determined hierarchy of legal systems' validity and capacities of validation. Such a position, needless to say, would invalidate the insights derived from attention to legal pluralism. On the other hand, it is important to be aware of the possible opportunities involved in (state) recognition, taking into account and taking seriously the fact that many local groups of resource users, ethnic and other minorities actively aspire and strive for this form of recognition. As we have mentioned before, water users (and especially marginalized actors) are often constrained by state law, but at the same time they can (try to) approach it as a powerful resource for claiming or defending their interests and rights" (Boelens, Roth and Zwarteveen 2002. See also Benda-Beckmann 1996, Moore 2001).

assume that water management and control rights will follow once the material resource basis has been secured?

- Do recognition efforts only focus on the legal recognition of explicit and/or locally formalized indigenous property structures and water rights ('reference rights', often, but not always, written down), or do and should they also consider the complex, dynamic functioning of local laws and rights in day-to-day practice? These 'rights in action' and 'materialized rights' emerge in actual social relationships and inform actual human behavior, but are less 'tangible'.
- How to define and delimit the domain of validity of so-called indigenous rights systems, considering the multi-ethnic compositions of most Andean regions and the dynamic properties of local normative frameworks? In terms of exclusive geographical areas, traditional territories, or flexible culture and livelihood domains?
- How to avoid assimilation and subsequent marginalization of local rights frameworks when these are legally recognized? And how to avoid a situation in which only those 'customary' or 'indigenous' principles that fit into State legislation are recognized by the law, and the complex variety of 'disobedient rules' are silenced after legal recognition?
- Indigenous socio-legal repertoires only make sense in their own, dynamic and particular context, while national laws demand stability and continuity: how to avoid 'freezing' of customary and indigenous rights systems in static and universalistic national legislation in which local principles lose their identity and capacity for renewal, making them useless?
- 'Enabling' and 'flexible' legislation might solve the above problem. However, enabling legislation and flexible rights and rules often lack the power to actually defend local and indigenous rights in conflicts with third parties. How to give room and flexibility to diverse local water rights and management systems, while not weakening their position in conflicts with powerful exogenous interest groups?
- And what does such legal flexibility mean for 'internal' inequalities or abuses of power? If, according to the above dilemmas, autonomy of local rule development and enforcement is claimed for (instead of strategies that aim to legalize concrete, delimited sets of indigenous rights and regulations), how to face the existing gender, class and ethnic injustices which also form part of customary and indigenous socio-legal frameworks and practices?

The pitfalls and challenges of 'Law-oriented strategies'

Following from the above mentioned dilemma's or problems, a major conceptual and strategic-practical challenge stems from the fact that national (positivist) legislation by definition claims that law must focus on uniform enforcement, general applicability and equal treatment of all citizens, where local and indigenous rights systems, on the contrary, by definition address particular cases and diversity. How to deal with the conflict and fundamental difference between legal Justice (oriented at 'right'-ness / generality) and diverse, local Equity ('fair'-ness / particularity)? Various forms of State legislation have recognized this fact when faced with the problem of law losing its legitimacy in practice: official Justice was perceived of as being 'unfair' in many specific cases. Legal rules are general and individual cases are particular, hence common laws were called upon. In many cases this second set of principles (fairness) has been institutionalized. This was not to replace the set of positivist rightness rules, but to 'complement and adapt it'. In fact, it appeared that official legislation, Justice, often could survive thanks to the 'fairness' and acceptability of common laws that were incorporated. More often than not this was done by formulating 'special laws'. However, this institutionalized equity is a contradictio in terminis. It leads almost automatically to the ironical situation in which the set of common or customary rules, 'equity', itself becomes a *general*, formalized system and loses its pretensions of 'appropriateness', 'being acceptable' and 'doing justice' in particular cases (Schaffer and Lamb 1981. Cf. Boelens 1998, Benda-Beckmann et al. 1998, Correas 1994, Lauderdale 1998, Vidal 1990).

A closely related dilemma involves the effectiveness of legal recognition strategies. Considering peasant and indigenous communities' lack of access to State law and administration, this question comes prominently to the fore: is *legal* recognition indeed the most effective strategy, or would it be better and more effective for peasant and indigenous communities to defend their own water laws and rights 'in the field' ? Moreover, it often is not the State law as such that sets the rules of the game in peasant and indigenous communities, but hybrid complexes of various socio-legal

systems. Formal rights and rules cannot act by themselves, and it is only the forces and relationships of society that can turn legal instruments into societal practice. Especially social and technical water engineers, lawyers and other legal advocates have often overestimated the actual functionality or instrumentality of formal law and policies in local contexts. On the contrary, their legal anthropological colleagues sometimes tended to underestimate the power of formal law, assuming that all conflicts are settled by means of local normative arrangements, without any influence from official regulations. However, the neo-liberal Water Laws (e.g. Chile) or top-down instrumental water policies (e.g. in Ecuador and Peru) have not only neglected customary and indigenous water management forms, they also have had concrete, often devastating consequences for the poorest people in society.

It is because of this that indigenous and grassroots organizations have fiercely engaged in the legal battle. Moreover, in this regard it is important to consider here that efforts to gain legal recognition do not *replace* but rather *complement* local struggles 'in-the-field'. On both levels there is political-strategic action to defend water access rights, define water control rights, legitimize local authority and confront powerful discourses.

In the next section I will elaborate how these four key issues, at the local and national level, shape the complex arena in which local water rights and customary laws confront uniform policies and politics of participation.

1.5 *Inclusion and exclusion*

National water policies in the Andean countries, and especially their translation in field practice, reflect and deploy the political power and cultural hegemony of a dominant stakeholder group. [7] This group has historically imposed rules, rights and regulations, and has controlled nation-building processes in the last centuries. As shown by Gelles (1998, 2000), State bureaucracies usually ignore indigenous models of resource management not only because of the alleged superiority of 'modern' Western cultural forms and organization, but because the power holders and dominant cultures of these nations regard indigenous peoples as racially and culturally inferior (Gelles 2000:9-10).[8]

Here we need to examine an important change that clearly differentiates power relations in the Republican states from their Inka and Spanish colonial predecessors: there is a move from real political exclusion to an imagined political 'inclusion' of indigenous peoples, from a discourse of racial (and thus 'natural' social) differentiation to a discourse of equality (Boelens 1998).

In former days, indigenous property rights were taken away through violence, conquest, colonization and oppression, and they were excluded from the benefits of society. In addition to appropriating local cultural norms for their own extractive purposes, the Inka emperors and other indigenous leaders, as well as the kings, *conquistadores* and *hacendados* during the Spanish colonial period, differentiated and elevated themselves by *excluding* the subordinated classes from resources, services, and social life (see e.g. Arguedas 1987, Bolin 1990; Flores Galindo 1988; Patterson 1991; Van der Ploeg 1998). Many different means, including public displays that glorified and reified the might of the groups in power, reinforced this differentiation and social exclusion.

In the post-colonial area the opposite occurs: not the powerful authorities and landlords, but the peasant and indigenous communities and the common people are made visible and brought to the fore, by means of a Foucauldian 'disciplining', 'participatory' power of 'equalizing normalization', which is present in everyday interactions; "it actually manifests and reproduces or transforms itself in the workplaces, families and other organizational settings of everyday life" (Foucault, 1980). Yet the powerful groups that benefit from this 'inclusive' power, as well as the new mechanisms and rules of subordination, in fact remain invisible (cf. Achterhuis, 1988).

New irrigation legislation and state policies are thus often an expression of post-colonial equality discourses; as De la Cruz (1993) observed, "the principle of equality before the law is valid for the identical and profoundly unjust for the diverse" (cf. IUAES-CFLLP, 2000; Stavenhagen and

[7] This section is based on Gelles and Boelens (2003).

[8] This bureaucratic irrigation tradition (Lynch 1988) has been especially powerful in countries such as Peru and Ecuador. As Lynch (1993) and Boelens and Zwarteveen (2002) have shown, its devaluation of particular water use actors extends to women, as the gender discrimination found in the field and in irrigation offices is part and parcel of the bureaucratic tradition.

Iturralde, 1990). This horizontal, disciplining power functions because it penetrates people and society as a whole. "This power is exercised rather than possessed; it is not a 'privilege', acquired or preserved, of the dominant class, but the overall effect of its strategic positions - an effect that is manifested and sometimes extended by the position of those who are dominated" (Foucault 1978).

Thus we see, for example, that in the Andes and many other world regions, irrigation technicians and development professionals introduce virtually the same irrigation techniques, knowledge, and norms (developed in western research centers, universities, and development enterprises). But they are not just 'imposed' in a top-down way: in many instances, it is the indigenous peasants *themselves*, in the Andes and elsewhere, who ask for this same technology, in order to 'progress' and leave behind their traditional 'backward' technology; in order to become like the western-oriented, '*modern* farmers, in order to gain economic parity' (cf. Boelens 1998; Escobar 1995; Van der Ploeg 2001).

In this way power in modern nation-states seeks for the *inclusion*, rather than the *exclusion,* of Andean communities, indigenous peasants and other oppressed classes (Achterhuis, 1988; Boelens and Dávila, 1998). At the same time this 'uniformity' and 'equality' supposedly makes it easy to measure these social groups: they are individualized, classified, and made 'cases' according to the ways that they do or do not fit the model. Yet, their participation often results in disappointment, in social and cultural disintegration, and in their being defined as 'permanently backward people', due to the impossibility of meeting the norms for being equal. In the words of Fanon (1967): "The western ideology, which is a proclamation of the fundamental equality of men... invites inferior men to become human beings, according to the western example of the humanity that it represents. In spite of being fundamentally racist, it generally succeeds in hiding this racism through ever more subtle modifications; thus, maintaining its proclamation of men's extraordinary dignity".

Another clear example of this is found in the normalizing, 'equalizing' and categorizing properties of neo-liberal market ideologies penetrating the Andean nations, including the legal and policy frameworks regarding water management. The neo-liberal economic principles are, on the one hand, imposed on Andean states by international institutions and national power groups, but, on the other hand, many of its basic concepts and dynamics have been adopted and internalized by Andean communities, penetrating and subtly transforming local management forms and often disarticulating indigenous water control. Thus, the deployment of secular, rational, universally applicable irrigation models, supported nowadays by water management privatization ideologies, is a powerful means by which contemporary nation-states and private interest sectors extend their control.

In sum, it is clear that contemporary nation-states employ a new and different symbology of power - espoused in modernization and development discourses as well as in neo-liberal economic policies - which aims to 'include', not to 'exclude'; it pretends to provide universal benefits, while in fact extending state control and the cultural orientations of national and international power holders. Within this context, the recognition and balanced valuation of local beliefs and practices is necessarily precluded because any legitimization of these local norms calls into question the state's and market ideology's supposed monopoly on rationality and legitimate culture.

The politics of participation

Although violent take-overs have not disappeared, as outlined above, the keywords are not anymore exclusion and outright oppression, but so-called 'inclusion', 'integration' and 'participation', in the name of 'equality'.[9] But then, with these modern concepts, fundamental questions come up: First, if Equality is strived for, the question is: equal to *what*, equal to *whom*, equal to *which model*? The basic assumption in current Latin American water policies is, that 'progress' means: equality to the occidental, technocentric and male-biased water management model. The concept of rational water management is interspersed with non-indigenous norms about efficiency, social security, effective organization, private ownership and economic functionality. In practice, indigenous peoples are forced to "equalize": In other words, to adopt the norms and practices of white or mestizo water users, which most often run counter to local social relations and environment, and disintegrate local communities and identity.

[9] For an analysis of equality and participation discourses, see, among others, the works of Michel Foucault, Hans Achterhuis, Arturo Escobar, Michael Taussig, Ivan Illich, René Girard, Bernard Schaffer.

Second, if Inclusion and Participation is the objective, the obvious question is: inclusion in *what?* Participation in *whose objectives, visions, and terms*? To this respect, the Second World Water Forum (2000) concluded that: "...there is a recurrent problem for indigenous peoples, who are often constrained to deal with vital issues on terms dictated by others. Traditional knowledge is seen as inferior in current political, legal, and scientific systems and therefore their arguments are discarded time and again by courts and other institutions".

Third, regarding the important current concepts of 'integrated' water management and 'integrated' policies, there seems to be a general consensus, but: *who* does the integration? Let us have a look at some common, inclusion-oriented examples:

A first, very common example shows, at field level, the problems of outside-driven integration of indigenous communities in uniform, national legislation, organizational models and engineers' designs[10]: The Ecuadorian State intervened in an indigenous area of 20 communities in the Andes, in Licto, to build an irrigation system and carry out an integrated development program. The design was made in the country's capital, without user involvement. The hydraulic design disregarded community production systems and boundaries, and imposed a classic, universal blueprint.

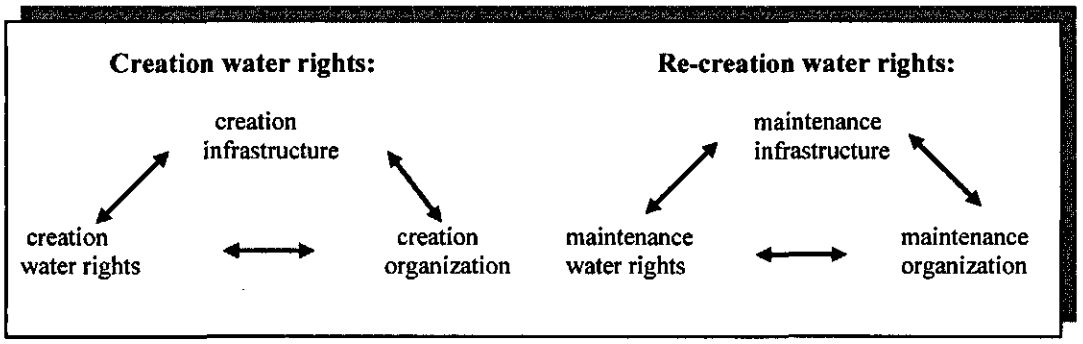
Although the great majority of water users were female, because of male outmigration, the infrastructure had no night reservoirs and the schedule was based on 24 hours irrigation. Night irrigation, however, would make it impossible for women to make use of water rights – because of reasons such as sexual violence, child care, soil erosion, remote fields, and others. The nation-wide, uniform legal recipe dictated the organization of the system, which would strengthen bureaucratic power and artificial leaders, and weaken community structure and collective action - the only way to survive in this region. Law also pre-established that most women could not get water rights –unless they were formally recognized as 'heads of households'-, although *they* were the ones that, according to local indigenous rules, had worked, invested and thus created the water rights.

This, maybe, constituted the major problem according to the indigenous families. The State imposed a model in which water rules and rights were established by uniform government rationality: those individuals who have land and pay fees, get water rights. Indigenous rationality, on the contrary says: you cannot just *buy* rights. Those who contribute with labor, organizational capacities and participate in the meetings, *create* water access and decision-making rights. Thereby, individual rights are derived from the collective ownership of infrastructure.

In many indigenous and peasant communities this is the *motor* of local water management and collective action (see diagram): at the same time that you create your infrastructure, you create your water rights and you create your organization. Then, to maintain and re-create your water rights, you have to maintain and re-create the collective infrastructure, and you strengthen and re-create your organization. There is a dynamic and permanent interaction among the technological system, the normative system and the organizational system.

[10] Based on the chapter 'Recipes and resistance. Peasants' rights building and empowerment in the Licto irrigation system, Ecuador', of the book *Water Rights and Empowerment* (Boelens & Hoogendam 2002)

Diagram 1: "Driving force" behind indigenous water management and collective action:



When the State agency, because of financial crisis and lack of capacity, did not complete system construction, the indigenous communities took over its development with the help of a local NGO. They adapted design, management and water rights to local demands and capacities.

Although many had no formal education or were illiterate, the means were developed to collectively discuss the design, the rules and the rights. For example, by using scale models and user-to-user training in local language, in all communities. Through interactive design and visual capacity-building tools, the creation of infrastructure and water rights were linked. Next, combined literacy training and water management capacity-building strengthened the position of female water users and female leaders, since they were to become involved in the management of the system. And especially they were the ones who were in charge of creating and maintaining water rights in the system. Fundamentally, collective action formed the basis for the construction of infrastructure and the construction of water rights. A system was developed which the communities themselves now manage, from the main level to the field level.

However, once the 20 indigenous communities had finished the system, with clear rules and rights and strong collective management, the State administration came in again. It did not want to recognize local management, regulations and water rights. Simply because local rules were not sustained by national law, they were declared 'illegal'.

At this moment, the State agency, in their interpretation of the universal Decentralization and Management Turnover policy, claims to get the management of the system back from the indigenous communities. It argues: "How can we hand it over if it is not in our hands?" International and national policies usually have different effects in the field than in the theory, and behind official arguments a power play is going on.

Indigenous communities, however, defend their technological, normative and organizational water use system. But they strongly face positivist, uniform law and inclusion-oriented water policies. Ecuadorian Water Law, just as most others, does not allow for local water rights and management principles, and destructs the variety of normative systems that *do* try to find particular solutions for diverse contexts.

Another example is the inclusion of indigenous water communities in current global water policy models. In Chile, indigenous peoples have become included in the 1981 Water Code, dictating privatization of water rights. While ideological studies continue to praise the model, empirical field studies indicate the disintegration of especially collective, indigenous systems: the individualization of water rights has increased insecurity and disorganization - in stead of decreasing insecurity, as neoclassical theory wants to have it (Bauer 1997, 1998; Hendriks 1998; Dourojeanni and Jouravlev 1999; Castro 2002). Moreover, according to the new legislation, decision-making rights on water management are now attached to economic buying power of individuals: right-holders with more 'water actions' (volumetric rights per time unit) have more decision-making power, contrary to indigenous management and collective interests. In many cases, the interests of a water rights owning elite have been able to effectively deny the interests of the majority (the group of poorer users), and impose their own playing rules (Hendriks 1998).

Next, since individual water property owners can make use of the water entirely according to their personal interests, Chile faces the problem of strong increase in water contamination, and

individual property owners are not sanctioned for polluting *their* property. Often, indigenous communities and downstream cities bear the consequences (Bauer 1997, Dourojeanni and Jouravlev 1999).

At the same time, the water market itself has not developed (or in some cases only very marginally), but extreme monopolization, speculation and hoarding of water rights *did*. As was mentioned earlier, a few power-generating and mining companies have accumulated the fast majority of rights, most of it is not used at the moment: the Water Code does not request water rights owners to actually make use of these rights, neither are they obliged to pay concession fees. This makes hoarding and speculation of water rights, in a context of scarcity, extremely attractive (Solanes and Getches 1998, Solanes and González-Villareal 1999).

A major source for this accumulation and monopolization of water rights was the expropriation of the so-called "unregistered" indigenous community rights (Castro 2002, Dourojeanni and Jouravlev 1999, Gentes 2002, Hendriks 1998, Van Kessel 1992). When the new Water Code was enforced in 1981, most indigenous communities were left unaware of the need to officially register their century old customary rights. A Mapuche leader: "The big landowners here in the area have registered the water rights in their names, and the Mapuches, for not knowing about the laws of the Chilean State, were left without possibilities to claim their rights" (Solón 2003). Water rights that are not claimed, or the so-called 'unused rights', were allocated to those who presented official requests: powerful commercial companies, especially mining and power generation enterprises and landlords. Mapuche communities are furious about this. As one Mapuche leader phrases his anger: "The water sources that originate in the communities here have 98 % of their trajectory on Mapuche territory, but the owner of the water is a landlord who lives in the city. He bought the water from the State, and nobody can use it. We cannot use it for irrigation, not even for drinking water, because the water has been bought. But the water was born in and flows through Mapuche communities, and no one of the Mapuches was aware of the need for official recognition when this person registered the water rights on his name. No one of us was consulted and no Mapuche ever knew of the existence of this law" (Solón 2003). It is not only the neo-liberal assumption that (market) information is freely available to every-one that is challenged here, but also the very basis for rights claims. Mapuche communities strongly feel that the water is theirs, because they have been using it for centuries and because it flows through their territory, whereas the Water Code demands official registration as a first basis for rights allocation (Boelens & Zwarteveen 2003).

This relates also to a recurrent problem of universal or national policy models: their validity is based on theoretical models and paradigms, but they usually fail to look at human suffering and internal contradictions *in the field* (Cf. Long and Van der Ploeg 1989, Van der Ploeg 2001).

The inclusion of local and indigenous rights frameworks in bureaucratic, State-oriented models or neo-liberal, market-oriented models is not always based on brutal impositions. On the contrary, water reforms are presented as merely neutral and technical interventions aimed at better controlling and managing the water crisis. The suggestion is created that such interventions do not fundamentally alter or influence existing social and political relations. And to peasant and indigenous water user communities it is explained that flows of money and water follow universal, scientific, laws and that human beings share the same aspirations and motives everywhere. Such inclusion-oriented policies establish a universal rationality based on a 'natural' truth and 'objective' criteria for optimizing efficiency and water management.

Peasant and indigenous movements point at the fact that this is a false representation of reality: the proposed water reforms are not just slight modifications which basically leave existing social relations intact, but they involve quite radical modifications in the social and political structures in which water management is embedded. The proposed ways in which water is to be owned, distributed and managed imply fundamental change, and so do the ways in which different water users relate to each other. If the policies are implemented, such relations are increasingly dictated by extra-communal laws, institutions and markets (Boelens & Zwarteveen 2003).

-o-o-o-

Particularly the local peasant and indigenous water users' collectives are the ones who face both the water scarcity crisis and the policies that are developed to counter that crisis. Paradoxically, precisely the ones with solutions - the producers of local livelihood and national food

security, who developed a variety of water rights and management systems in order to adapt them to the multiple local constraints and opportunities - are being denied and suffer most from the devastating consequences of 'modern water approaches': inclusive policies and uniform, positivist legislation and market-oriented receipts. But, if current cultural politics and policies of *'inclusion'* constitute the problem, the solution can never be to go back to *'exclusion'*. Participation, yes, but with a different rights approach. Taking into account, from a critical perspective, that peasant and indigenous communities want to take part on their *own* terms, considering the plural identities, organizational forms and normative frameworks that govern their water management in practice. And, at the same time, considering the fact that most access and control rights have been taken away from them.

The 'politics of inclusion' meet with fierce resistance of different social movements who demand for alternative strategies of natural resource use and maintenance. While such movements are motivated by a range of concerns: social justice, the environment, 'right to livelihood' or ethnic identity, they all make claims for more equitable and just access to environments and natural resources. And all center on the question of property rights. This is logical, because whoever controls property rights controls the processes of resource extraction and environmental change. The struggle is not just over control over water, but also and importantly over the right to define what a water right entails.

On the one hand, there is a general demand for greater justice and equality regarding the unequal distribution of decision-making power, water, and other water-related benefits. On the other, there are the demands for internal distribution to be based on autonomous decisions, locally established rights and principles, and local organizational forms for water control which reflect the diverse strategies and identities found in indigenous communities today. Therefore, in indigenous and peasant communities today, water users claim *both* the right to equality *and* the right to be different.

BIBLIOGRAPHY

Achterhuis, Hans
1988 "Het Rijk van de Schaarste. Van Thomas Hobbes tot Michel Foucault". Baarn: Ambo.
Almeida, José
1998 "Andean social construction of identity and political direction". In *Searching for Equity*. R. Boelens & G. Dávila, eds., Pp. 203-210. Assen: Van Gorcum.
Arguedas, José María [1935]
1987 "Agua". In *Relatos completos*. Lima: Editorial Horizonte.
Assies, Willem
2000 "David fights Goliath in Cochabamba: water rights, neo-liberalism and the renovation of social protest in Bolivia". Draft, Colegio de Michoacán, Rural Studies Institute, Zamora, Michoacán.

Baud, Michiel
1997 "In de schaduw van de bosrand. Over de dekolonisatie van de Latijnsamerikaanse geschiedenis". Leiden: CNWS / University of Leiden.
Baud, Michiel, Kees Koonings, Gert Oostindie, Arij Ouweneel & Patricio Silva.
1996 "Etnicidad como estrategia en América Latina y el Caribe". Quito: Abya Yala.
Bauer, Carl
1997 "Bringing water markets down to earth: the political economy of water rights in Chile, 1976- 95". In *World Development*, vol. 25, no. 5. Pp. 639-656.
1998 "Slippery property rights: multiple water uses and the neoliberal model in Chile, 1981-95". In *Natural Resources Journal*, vol. 38, Pp. 110-155.
Beccar, Lily, Rutgerd Boelens & Paul Hoogendam
2002 "Water rights and collective action in community irrigation". In *Water Rights and Empowerment*, R. Boelens & P. Hoogendam eds., pp. 1-21. Assen: Van Gorcum.
Benda-Beckmann, Franz von
1996 "Citizens, Strangers and Indigenous Peoples: Conceptual Politics and Legal Pluralism". In *Law and Anthropology* 9 (1996), pp. 1-42.
Benda-Beckmann, Franz von, Keebet von Benda-Beckmann & Joep Spiertz
1998 "Equity and legal pluralism: taking customary law into account in natural resource policies". In: *Searching for equity*. R. Boelens & G. Dávila, eds., Pp. 57-69. Assen: Van Gorcum.
Boelens, Rutgerd
1998 "Equity and rule-making". In: *Searching for Equity*. R. Boelens & G. Dávila, eds., Pp. 16-34. Assen: Van Gorcum.
Boelens, Rutgerd & Gloria Dávila (eds.)
1998 "Searching for Equity. Conceptions of justice and equity in peasant irrigation". Van Gorcum, Assen.
Boelens, Rutgerd & Bernita Doornbos
2001 "The Battlefield of Water Rights. Rule Making Amidst Conflicting Normative Frameworks in the Ecuadorian Highlands". In: *Human Organization*, 60 (4): 343-355.
Boelens, Rutgerd & Paul Hoogendam, eds.
2002 "Water Rights and Empowerment". Assen: Van Gorcum.
Boelens, Rutgerd, Axel Dourojeanni, Alfredo Durán & Paul Hoogendam
2002 "Water Rights and Watersheds. Managing multiple water uses and strengthening stakeholder platforms". In *Water Rights and Empowerment*. Boelens & Hoogendam eds., pp. 110-143. Assen: Van Gorcum.
Boelens, Rutgerd & Margreet Zwarteveen
2002 "Gender dimensions of water control in Andean irrigation". In: *Water Rights and Empowerment*. R. Boelens & P. Hoogendam, eds., Assen: Van Gorcum.
Boelens, Rutgerd, Dik Roth and Margreet Zwarteveen
2002 "Legal complexity and irrigation water control: analysis, recognition and beyond". Paper for the International Congress of Legal Pluralism, 7-10 April 2002, Chiang Mai, Thailand.
Boelens, Rutgerd & Margreet Zwarteveen
2003 "The politics of Andean water policy reforms. Local and indigenous rights in the context of privatization policies", forthcoming in *Austrian Journal of Development Studies*, vol.4.
Bolin, Inge
1990 "Upsetting the power balance: cooperation, competition and conflict in an Andean irrigation system" in *Human Organization* 49 (2): 140-148.

Bustamante, Rocio
2002 "Legislación del Agua en Bolivia". WALIR: Centro AGUA / UMSS, CEPAL & Wageningen University, Cochabamba.
Castro, Milka
2002 "Local norms and competition for water in Aymara and Atacama communities, Northern Chile". in *Water Rights and Empowerment*, R. Boelens & P. Hoogendam, eds., p. 187-201. Assen: Van Gorcum.
CEPAL
1988 "Gestión para el desarrollo de cuencas de alta montaña en la zona andina". CEPAL / United Nations, Santiago, Chile.
CONAIE
1996 "Propuesta Ley de Aguas". CONAIE, Quito.
Cooke, Bill and Uma Kothari
2002 "Participation. The new tyranny?" London: Zed Books.
Correas, O.
1994 "La teoría general del derecho y el derecho alternativo". In *El Otro Derecho*. ILSA Journal, no. 15, Mexico City.
Cruz, Rodrigo De la
1993 "Aportes del Derecho Consuetudinario a la reforma jurídico del Estado". In: *Derecho, pueblos indígenas y reforma del Estado*. Pp. 71-96, Quito: Abya-Yala.

Degregori, Carlos Iván (ed.)
2000 "No hay país más diverso. Compendio de la antropología peruana". Lima: PUCP, UP, IEP.
Dourojeanni, Axel & Andrei Jouravlev
1999 "El Código de Aguas en Chile: entre la ideología y la realidad". *Serie Recursos Naturales e Infraestructura*, no. 3, CEPAL, Santiago, Chile,

Escobar, Arturo
1995 "Encountering development. The making and unmaking of the Third World". Princeton, New Jersey: Princeton University Press.

Fanon, Frantz
1967(1954) "Black skin, white masks". New York: Grove Press.
Flores Galindo, Alberto
1988 "Buscando un Inca. Identidad y utopia en los Andes". Lima: Editorial Horizonte.
Foucault, Michel
1978 "Discipline and punish: the birth of the prison". New York: Pantheon Books / Random House.
1980 "Power / Knowledge: selected interviews and other writings 1972 – 1978". edited by Colin Gordon. New York: Pantheon Books.

Galárraga-Sánchez
2000 "Informe Nacional sobre la Gestión de los Recursos Hídricos en el Ecuador, Quito": Foro Nacional de RR.HH.
Gelles, Paul H.
1998 "Competing cultural logics: State and 'indigenous' models in conflict". In *Searching for Equity*. R. Boelens & G. Dávila eds., pp. 256-267. Assen: Van Gorcum.
2000 "Water and Power in Highland Peru: The Cultural Politics of Irrigation and Development". New Brunswick, New Jersey: Rutgers University Press.
2002 "Indigenous Water Rights and Andean Identity". WALIR: CEPAL & Wageningen University, Wageningen/ Riverside, California.
Gelles, Paul H. & Rutgerd Boelens
2003 "Water, Community and Identity: The politics of cultural and agricultural production in the Andes". In *Imaging the Andes: Shifting margins of a marginal world*. T. Salman & A. Zoomers eds., CEDLA Latin America Studies 91, Aksant / CEDLA, Amsterdam.
Gentes, Ingo
2002 "Estudio de la Legislación Oficial Chilena y del Derecho Indígena a los Recursos Hídricos". WALIR: CEPAL & Wageningen University, Santiago de Chile.
2003 "Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en Chile". WALIR: CEPAL & Wageningen University, Santiago de Chile.
Gerbrandy, Gerben & Paul Hoogendam
1998 "Aguas y acequias". Cochabamba: PEIRAV – Plural Editores.

Getches, David
2002 "Indigenous Rights and Interests in Water under United States Law". WALIR: CEPAL & Wageningen University, Wageningen/ Boulder, Colorado.
Guevara G., Armando, Iván Vera D., Patricia Urteaga C. and Gustavo Zambrano
2002 "Estudio de la Legislación Oficial Peruana sobre la Gestión Indígena de los Recursos Hídricos". WALIR: CEPAL & Wageningen University, Lima.
2003 "Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en el Perú". WALIR: CEPAL & Wageningen University, Lima.
Guillet, David
1992 "Covering Ground: Communal water management and the State in the Peruvian Highlands". Ann Arbor: University of Michigan Press.

Hale, Charles R.
2002 "Does multiculturalism menace? Governance, cultural rights and the politics of identity in Guatemala". In *Journal of Latin America Studies* 34 (3): 485-524.
Hazeleger, Barend & Rutgerd Boelens
2003 "The Right to be Different. The struggle for water and identity in the Andes". Documentary, Wageningen University and Agrapen, Wageningen.
Hendriks, Jan
1998 "Water as private property. Notes on the case of Chile". In *Searching for Equity,* R. Boelens & G. Dávila eds., pp. 297-310. Assen: Van Gorcum.
2002 "Water Rights and Strenghtening Users' Organisations: the Art of Negotiating". In *Water Rights and Empowerment*, R. Boelens & P. Hoogendam eds., pp.52-74. Assen: Van Gorcum

Iturralde, Diego
1993 "Usos de la Ley y usos de la costumbre: La reivindicación del derecho indígena y la modernización del Estado" In *Derecho, pueblos indígenas y reforma del Estado.* Colección Biblioteca Abya-Yala, vol. 2, Quito: Abya-Yala.
IUAES-CFLLP
2000 "Derecho consuetudinario y pluralismo legal: desafíos del Tercer Milenio". Congreso Internacional, March 2000. Arica, Chile: International Union of Anthropological and Ethnological Sciences & Commission on Folk Law and Legal Pluralism.

Kessel, Juan van
1992 "Holocausto al progreso: Los Aymarás de Tarapacá". Hisbol, La Paz.

Lauderdale, Pat
1998 "Justice and Equity: a Critical Perspective" In *Searching for Equity.* R. Boelens & G. Dávila eds., pp. 5-10. Assen: Van Gorcum.
Laurie, Nina & Robert Andolina & Sarah Radcliffe
2002 "New exclusions: the consequences of multicultural legislation for water policies in Bolivia". In *Multiculturalism in Latin America: indigenous rights, diversity and democracy.* R. Sieder ed.. Palgrave, London.
Long, Norman & Jan Douwe van der Ploeg
1989 "Demythologizing planned intervention: an actor perspective". In *Sociologia Ruralis 29 (3/4),* Pp. 226-249.
Lynch, Barbara D.
1988 "The Bureaucratic Transition: Peruvian Government Intervention in Sierra Small Scale Irrigation". Ph.D. dissertation, Cornell University, New York.
1993 "The Bureaucratic Tradition and Women's Invisibility in Irrigation". Proceedings of the 24th Chacmool Conference, pp. 333-342. Alberta: University of Calgary Archeological Association.

Manrique, Nelson
1985 "Colonialismo y pobreza campesina: Caylloma y el Valle del Colca siglos XVI –XX". Lima: DESCO.
Mayer, Enrique
2002 "The Articulated peasant. Household economies in the Andes". Boulder, Oxford: Westview Press.
McCay, Bonnie J. and S. Jentoft
1998 "Market or Community Failure? Critical Perspectives on Common Property Research" in *Human Organization* 57 (1), pp. 21-29.
Méndez, Cecilia
2000 "Incas sí, indios no: apuntes para el estudio del nacionalismo criollo en el Perú". Lima: IEP.

Mitchell, William P. & David Guillet, eds.
1994 "Irrigation at high altitudes: The social organization of water control systems in the Andes". Society for Latin American Anthropology, Publication Series, V.12. Washington D.C.: American Anthropological Association.
Moore, Sally Falk
2001 "Certainties Undone: Fifty Turbulent Years of Legal Anthropology, 1949-1999". In *Journal of the Royal Anthropological Institute,* vol 7, pp. 95-116.

Oré, Maria Teresa
1998 "From agarian reform to privatization of land and water: the case of the Peruvian Coast" In *Searching for Equity,* R. Boelens & G. Dávila, eds., pp.268-278, Van Gorcum, Assen.

Pacari, Nina
1998 "Ecuadorian water legislation and policy analyzed from the indigenous-peasant point of view". In *Searching for equity.* R. Boelens & G. Dávila, eds., Pp. 279-287. Assen: Van Gorcum.
Palacios, Paulina
2002 "Estudio nacional de la Legislación Oficial y los Marcos Normativos Consuetudinarios referente a la Gestón Indígena de los ecursos Hídricos". WALIR: CEPAL & Wageningen University, Quito.
2003 "Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en el Ecuador". WALIR: CEPAL & Wageningen University, Quito.
Patterson, Thomas
1991 "The Inka Empire: The Formation and Disintegration of a Precapitalist State". New York: Berg Press.
Ploeg, Jan Douwe van der
1998 "Peasants and power". In *Searching for Equity.* R. Boelens & G. Dávila, eds., Pp. 39-45. Assen: Van Gorcum.
2001 "De Virtuele Boer". Assen: Van Gorcum.

Schaffer, Bernard & Geoff Lamb
1981 "Can equity be organized? Equity, development analysis and planning". Brighton: Institute of Development Studies, Sussex University.
Second World Water Forum
2000 Forum Session conclusions 'Water and Indigenous People', www.worldwaterforum.org, The Hague, March 2000.
Solanes, Miguel and David Getches
1998 "Prácticas recomendables para la elaboración de leyes y regulaciones relacionadas con el recurso hídrico". BID /CEPAL, Washington D.C.
Solanes, Miguel & Fernando González-Villareal
1999 "The Dublin principles for water as reflected in a comparative assessment of institutional and legal arrangements for integrated water resources management". *TAC Background papers,* no. 3, Stockholm: Global Water Partnership.
Solón, Pablo
2003 "La Sangre de la Pachamama". Documentary, Fundación Solón, La Paz
Stavenhagen, Rodolfo
1994 "Indigenous rights: some conceptual problems". In *Indigenous peoples. Experiences with self-government.* Willem Assies & André Hoekema, eds., Copenhagen / Amsterdam: University of Amsterdam & IWGIA
Stavenhagen, Rodolfo & Diego Iturralde, eds.
1990 "Entre la ley y la costumbre. El derecho consuetudinario indígena en América Latina". Mexico City: Instituto Indigenista Interamericano e Instituto Interamericano de Derechos Humanos.

Tipton, John
1988 "Institutional factors influencing public sector decision-making on the management of Andean river basins". In *Management for the development of high-mountain river basins in the Andean región,* CEPAL, United Nations, Santiago, Chile.

Vidal, Ana
1990 "Derecho oficial y derecho campesino en el mundo andino" In *Entre la Ley y la Costumbre.* R. Stavenhagen & D. Iturralde eds., Mexico City: Instituto Indigenista Interamericano & Instituto Interamericano de Derechos Humanos.

Vincent, Linden
2002 "Water rights, livelihoods and empowerment". WWW.INDIGENOUSWATER.ORG 7 March-Internet-Articles-9oct 2002, Proceedings International Seminar on Water Law and Indigenous Rights, March 2002, Wageningen.

WALIR
2002 "Water Law and Indigenous Rights. Towards structural recognition of local and indigenous rights and management rules in national legislation". CEPAL-United Nations / Santiago de Chile & Wageningen University / Wageningen.
2003 "Análisis de la situación del riego en la República del Ecuador". Misión de Consultoría (Hendriks, Mejía, Olazával, Cremers, Ooijevaar, Palacios), Quito: CONAM-BID.

Whitaker, Morris D.
1992 "El rol de la agricultura en el desarrollo económico del Ecuador". Quito: IDEA.

Zoomers, Annelies, and Gemma van der Haar, eds.
2000 "Current Land Policy in Latin America. Regulating land tenure under neo-liberalism". Amsterdam: KIT.

Zwarteveen, Margreet
1997 "Water: from basic need to commodity. A discussion on gender and water rights in the context of irrigation". In *World Development* 28 (8), pp. 1335-1349.

2 Políticas Aguadas y Canalización del Poder. Descentralización, gobiernos locales y el reconocimiento de los derechos campesinos e indígenas[11]

2.1 Introducción

En los países andinos, los debates sobre las políticas de gestión de los recursos naturales y la búsqueda de una legislación apropiada llenan los foros y mesas de discusión. El tema es urgente, ya que sólo en muy pocos casos, y generalmente en ámbitos aislados, se lograron definir e instalar políticas coherentes que conducen a un régimen democrático, equitativo, que además resguarda la sostenibilidad del sistema ecológico a más largo plazo. Por la ausencia generalizada de reglas públicas efectivas para el interés común, el uso de los recursos naturales se caracteriza por conflictos desmedidos.

El caso de los recursos hídricos es ejemplar, y se ha vuelto tema central en muchos de los debates, luchas y propuestas políticas de las organizaciones campesinas e indígenas y de las plataformas de la sociedad civil. Tal como en muchas otras regiones del mundo, se observa una creciente competencia sobre el uso del agua entre diferentes usuarios y tipos de aprovechamiento. La demanda local y exógena de agua se expandió de forma rápida. La creciente presión demográfica y el proceso de migración, transnacionalización y urbanización de las áreas rurales, entre otros, están llevando a cambios profundos en la estructura agraria, en las culturas locales y en las formas de manejar los recursos. Nuevos grupos de interés, sobre todo los grandes centros urbanos y las empresas agrícolas, industriales, mineras y energéticas, entran los territorios de pueblos indígenas y comunidades campesinas. Reclaman una porción sustantiva de los derechos de agua existentes y frecuentemente ignoran los acuerdos y reglas locales. A esto se agrega que hay una disminución de la disponibilidad de agua.[12] Por estas razones, el contexto de los derechos de agua y las reglas de su gestión está cambiando rápidamente en los países andinos.

Además, en los nuevos procesos de reforma hídrica es común ver a los actores poderosos arreglárselas para influir en las nuevas regulaciones y políticas para monopolizar el acceso y el control del agua. Las élites y empresas nacionales e internacionales usan tanto la intervención estatal como las nuevas políticas de privatización para anular y apropiarse de los derechos de agua indígenas y campesinos. Encima de la históricamente desarrollada y extremadamente desigual distribución del agua, el marco de los derechos y beneficios recientemente generado por las políticas públicas (estatistas) presenta una situación espantosa. Esta constituye la pista de despegue para las nuevas políticas neoliberales, comúnmente muy agresivas frente a las comunidades usuarias del agua. Ecuador es un caso ilustrativo. De acuerdo con el estudio de Whitaker (1994), en la época de las grandes inversiones públicas en el desarrollo del agua los productores campesinos e indígenas con menos de 1 ha, responsables de la mayor parte de la producción nacional de alimentos, representan 60% de todos los agricultores pero sólo recibieron 13% de los beneficios del Estado en términos de inversiones en el riego. Al mismo tiempo, los grandes terratenientes representan sólo 6% de los agricultores y recibieron 41% de los beneficios de los gastos estatales en riego. El público financió todo esto: las inversiones estatales del Ecuador para riego en ese momento representaban 11,6% del total de la deuda externa (Whitaker 1994). De manera similar, la distribución de los derechos de agua es sumamente inequitativa y beneficia a una minoría pequeña de terratenientes. Hoy en día, 88 % de los minifundistas tienen acceso a solo entre 6 y 20 % de las recursos hídricos disponibles, mientras que los hacendados tienen derecho al entre 50 y 60 % del agua (Galárraga-Sánchez 2000).

[11] Capítulo borrador (versión julio 2005) del libro "*Movimientos Indígenas y Gobiernos Locales*" Eds. Willem Assies y Hans Gundermann (a publicarse en diciembre 2006)

[12] A causa de cambios climáticos y por la degeneración de la capacidad de retención y almacenamiento de agua, hecho que contribuye también al aumento de los caudales extremos en épocas de lluvia. La competencia, además, no se limita al tema de la disponibilidad del agua (cantidad, lugar y temporalidad), sino se extiende también a su calidad.

Por la proclamada crisis, "agua" figura prominentemente en las agendas políticas nacionales e internacionales. En el discurso internacional se suele hablar sobre el peligro de las 'guerras internacionales por el agua', y el movimiento civil supra-nacional generalmente tiende a enfocar sobre todo los conflictos abiertos, como entre pueblos indígenas y grandes empresas hidroeléctricas, o las luchas de la sociedad civil organizada frente a los consorcios mineros o forestales. Es llamativo también la atención internacional que han recibido las llamadas 'guerras del agua' en Cochabamba - todo esto, sin embargo, frente al silencio ensordecedor sobre los miles de guerras sucias y silenciosas que día a día se producen en localidades cotidianas de la región andina. Son las comunidades indígenas y campesinas, así como otros grupos locales de gestión hídrica, que buscan mantener y mejorar sus sistemas de riego, agua potable, pequeñas hidroeléctricas, y otros usos múltiples, pero que a más de perder sus derechos de agua a actores nuevos, sufren las políticas orientadas a la intervención vertical o al fomento de la inversión privada en la explotación de sus aguas. De manera similar, las leyes que sustentan estas políticas, de manera general, niegan sus propios sistemas de gestión y marcos normativos del agua.

Pero emergen algunas oportunidades para las culturas locales y sus sistemas de derechos propios. La mayor parte de los países andinos ha aceptado convenios internacionales que piden respetar la pluralidad étnica y la multiculturalidad (o interculturalidad). Además, los nuevos discursos y políticas tienden a reconocer la necesidad de "descentralizar" el poder de gestión hacia organizaciones locales. Sin embargo, en el momento de materializar estos acuerdos generales en la práctica, o en campos legislativos concretos como las leyes y políticas de agua, las formas de gestión de agua indígena o campesina tienden a ser negadas, prohibidas o minadas (Bustamante 2002, Gentes 2002, Guevara et al. 2002, Pacari 1998, Palacios 2002).

En las secciones siguientes haré un análisis breve de las propuestas y enfoques políticos sobre la gestión del agua en la región andina, con ilustraciones del caso ecuatoriano. Ya que el uso de agua para fines de producción agrícola cubre alrededor de 80 % del uso total y consecuentemente domina el debate, inclusive los debates de gestión integrada de cuencas, daré mayor atención a la temática del sector riego. Cada uno de los enfoques 'estatistas', 'mercantiles', y de 'concertación', tiene su propio análisis, solución, y discurso, y así como su visión sobre el papel y el rumbo que deben tener los procesos de 'descentralización'. En la siguiente sección presentaré un bosquejo general del debate sobre la descentralización del gobierno hídrico en la región, dibujando algunos rasgos distintivos de los enfoques y, lo que es más importante, los fundamentos y supuestos erróneos que estos comparten. En la tercera sección profundizaré el centralismo legal del enfoque estatista mostrando su fuerte inclinación positivista y universalista. En la cuarta sección haré los mismo para el modelo de gobierno hídrico neoliberal, que es el fundamento materializado del enfoque mercantil. En la quinta sección analizaré, sobre la base de algunas ilustraciones, cómo muchos de los enfoques de concertación suelen heredar las perspectivas positivistas en sus propuestas de descentralización, siempre cuando no se basan en un análisis contextualizado de las relaciones de poder y del pluralismo legal y cultural. En la última sección daré algunas reflexiones sobre estos enfoques y propuestas, analizando las respuestas de las comunidades campesinas e indígenas usuarias del agua.

2.2 *El debate de la descentralización de la gestión del agua*[13]

Estudios en países como Ecuador, Bolivia y Perú han mostrado que los proyectos estatales y las agencias responsables de la gestión del agua, en su mayoría responden en primer lugar a preferencias políticas - no sólo deben servir como soluciones hídricas y sociales, sino también tienen como objetivo implícito el generar apoyo político y oportunidades económicas para las élites y los gobernantes. Existe una desorden en la política del agua, y la aplicación de las regulaciones oficiales muestra una gestión fragmentada y desarticulada, a menudo a través de la intervención descoordinada de una serie de organismos sectoriales que administran separadamente los distintos usos del agua. Fomentan acciones con intereses muy particulares que muchas veces son contradictorias con los intereses públicos y derechos colectivos (Hendriks et al. 2003; Cremers et al. 2005; Dourojeanni 2000; Bustamante 2002).

[13] Para una mayor profundización de esta sección y casos ilustrativos de diversos países andinos, véase Boelens, Dourojeanni y Hoogendam (2005).

La falta de funcionalidad y las consecuencias negativas de las políticas públicas actuales no es un fenómeno que se limita a los países andinos. Por ello, a nivel internacional, creció el interés en buscar una mayor coordinación de la gestión hídrica, formulando leyes que den mayor libertad de decisión a nivel local. En esta visión se considera que es necesario llegar a una mayor descentralización y desconcentración de funciones y atribuciones, desde las autoridades nacionales hacia el ámbito de organizaciones de cuencas, subcuencas y microcuencas, en las que los múltiples grupos de interés deben decidir sobre la adjudicación, distribución y manejo de agua. Este llamado a favor de la descentralización y desconcentración de la gestión de agua, se fundamenta en argumentos como (Boelens, Dourojeanni y Hoogendam 2005):

- Los conflictos sobre el agua entre usos y usuarios múltiples seguirán aumentando a causa de la creciente demanda y escasez del agua y el aumento de su contaminación. Estos conflictos multisectoriales se materializan en el ámbito de las cuencas.
- Los límites de la jurisdicción de gestión de agua deben coincidir con los límites de la unidad geográfica en la que se acumulan y fluyen las aguas.
- Las instituciones y gobiernos locales tienen diferente capacidad que las agencias nacionales para entender, analizar y resolver los problemas locales de la gestión del agua.
- Cuando las decisiones se toman al nivel de la cuenca, es más fácil mejorar las relaciones de responsabilidad entre los proveedores o reguladores y los usuarios del agua.
- Se pueden reducir pérdidas económicas y gastos públicos en la gestión de agua cuando se minimizan conflictos entre los grupos de usuarios mutuamente dependientes.
- La gestión del agua debe hacerse con la participación de los gobiernos locales e instituciones de usuarios cuyos límites político-administrativos se superponen o forman parte de los límites de las cuencas a ser gestionadas.

Las propuestas de cambio en las políticas de gestión de aguas, se recogieron en los debates de formulación de nuevas leyes de agua en la región andina. Bajo títulos como descentralización, participación, privatización y transferencia de gestión, se están proyectando procesos para transferir parte de las responsabilidades de la gestión de agua hacia autoridades estatales locales/municipales, grupos de usuarios, empresas privadas o instituciones mixtas. Los aspectos por transferirse varían según las circunstancias y visión política. Puede tratarse del manejo de toda una cuenca, la operación de un embalse, sistemas de distribución de agua o las unidades secundarias o terciarias de los grandes sistemas de riego, el mantenimiento de ciertas obras y su operación, hasta incluir la privatización de la infraestructura y el agua misma, como en el caso de Chile.

En la región, existe consenso entre la mayoría de los actores involucrados - tanto grupos de mayor poder de inversión, como las organizaciones indígenas, comunidades campesinas y sectores marginados - sobre la necesidad de un cambio hacía la descentralización de la gestión del agua. Sin embargo, sus motivos, los intereses y las propuestas concretas difieren mucho. Por ello, la redefinición de las políticas de agua, es un tema difícil y sumamente contestado. Las discusiones se centran alrededor de temas como el rol del estado versus el sector privado, y la aptitud de las fuerzas del mercado para adjudicar el agua[14]. De manera general, las acciones gubernamentales para privatizar los servicios de agua y establecer mercados de agua no se complementen con instancias regulatorias adecuadas. Donde se implementaron instancias, muchas veces sólo fueron de 'buenas intenciones', pero sin el respaldo suficiente de estrategias, medios y capacidades realistas (CEPAL 1992; Dourojeanni 2000. Cf. Wester & Warner 2002). Como resultado, en varias partes, se crearon entidades de gestión de agua virtuales o artificiales, que no se basan en un análisis detallado de los problemas y prácticas locales ni en la participación efectiva del abanico de actores, sino que fueron liderados por los burócratas o élites locales. Estas entidades, además, fácilmente pueden negar y sustituir las iniciativas locales de gestión del agua.

En el debate y en los diferentes discursos, preguntas claves sobre la gestión integral del agua en un contexto de creciente escasez y competencia, tienen que ver con: ¿Qué mecanismo de

14 Las interrogantes principales de estos debates son: 'Se puede y se debe tratar el agua como una mercancia privatizada, o como una necesidad humana básica y no-transferible, como un derecho público y colectivo?' y 'La adjudicación y el servicio de la provisión del agua deben ser controlados por autoridades públicas nacionales, o se puede descentralizar y privatizar este control?'

regulación puede dar los destinos más adecuados al agua?, ¿Qué instancia de regulación debe encargarse de su asignación?, y ¿Cómo pueden resolverse los conflictos sobre el reparto de agua así obtenido? Las respuestas básicas tienen diferencias marcadas, y fundamentalmente se puede distinguir entre cuatro enfoques políticos, desde los que se formulan propuestas y contra-propuestas legales y estrategias de intervención (Boelens, Dourojeanni & Hoogendam 2005):

1. El *enfoque 'estatista'*; que propone el control estatal sobre la gestión del agua y la adjudicación y adecuación de derechos de agua.
2. El *enfoque 'mercantil'*; que busca la descentralización de la gestión y la adjudicación de los derechos mediante la regulación mercantil y la 'racionalidad de actores individuales'.
3. El *enfoque de 'gestión consensual' o de 'concertación'*; que pretende la descentralización de la gestión y la adjudicación de los derechos mediante la regulación por mesas de concertación multi-usos y multi-usuarios.
4. El *enfoque de 'acción colectiva'*; que propone el fortalecimiento de las organizaciones y redes locales (grupos de base y sectores marginados) para generar equilibrio entre el poder y las capacidades de los actores involucrados en la descentralización de la gestión del agua.

En las últimas décadas, los primeros dos enfoques han dominado los debates sobre el agua y todavía dominan la práctica en la región. Aunque parecen contradictorios, en aspectos fundamentales son muy similares, sobre todo en cuanto al fuerte sentido de positivismo que les caracteriza (que se compagina bien con la tradición positivista del profesionalismo del hídro-desarrollo y las ciencias hídricas). Les une también (en gran parte como consecuencia de su positivismo y universalismo) por su negación de la realidad existente de la gestión del agua en los países andinos: la gestión de sistemas colectivos por los grupos, pueblos y comunidades campesinas e indígenas, con sus propios derechos, marcos normativos, y formas organizativas. Un tercer elemento importante (también común en las ciencias positivistas del agua) es que niegan las relaciones de poder que dan la base para la formulación de las leyes y políticas hídricas, que moldean su implementación, así como influyen en la distribución del recurso mismo. A menudo, el tercer enfoque, de manera consciente o inconsciente, comparte este último aspecto, razón por la cual grupos de usuarios marginados muchas veces se resisten en contra de la implementación de los tres y, en la práctica de la gestión del agua, tratan de construir una forma contextualizada del cuarto enfoque. Analicemos.

2.3 *Centralismo legal, positivismo, y la gestión del agua – una ilustración ecuatoriana*

En los Andes, las normas y prácticas propias de las comunidades campesinas e indígenas conforman un papel clave en la gestión local del agua. En el caso del riego, las organizaciones de usuarios han desarrollado, a veces durante varios siglos, sus prácticas de gestión de riego que incorporan elementos de las tradiciones hídricas andinas, coloniales, y republicanas y de las normas y tecnologías 'modernas'. Tanto los sistemas de riego antiguos como los sistemas nuevos, sean éstos 'comunales', 'estatales' o 'particulares', se caracterizan por prácticas y normas propias y específicas, donde las normatividades se derivan de marcos legales locales y supra-locales (Beccar et al. 2002). Por tanto, pese a la existencia de un marco normativo general y oficial a nivel del Estado-nación, el juego de reglas de cada uno de los sistemas de riego se diferencia del otro. Simultáneamente, la gestión local no funciona de una manera aislada del contexto nacional. El 'derecho campesino', 'derecho indígena' o 'derecho local' está imbricado con normas, reglas y formas organizativas del derecho oficial. Usuarios apelan usualmente a reglas y prácticas locales 'mixtas'.

Así, la existencia de un pluralismo legal es común y corriente en la región, hecho que, sin embargo, no siempre fue reconocido políticamente.[15] Históricamente, la mayoría de los países

[15] El pluralismo legal, en su sentido de reconocimiento y uso *analítico*, se refiere a la posibilidad teórica de existir más de un sólo marco normativo en el mismo espacio sociopolítico y físico-técnico. No establece una jerarquía moral o jurídica entre los diversos repertorios existentes. En un segundo sentido, se refiere a la existencia empírica de una pluralidad normativa en una sociedad particular, con sus relaciones sociales concretas (con marcos normativos que además suelen interactuar mutuamente): es el reconocimiento o la constatación analítica sobre una base empírica.

andinos se ha caracterizado por un centralismo legal muy fuerte, en particular en el ámbito de la legislación de los recursos hídricos. La producción de leyes, procedimientos, y la definición y adjudicación de derechos sobre el recurso fueron, y muchas veces son todavía consideradas prerrogativas exclusivas del Estado. También el control sobre la ejecución de estas leyes y la aplicación de las sanciones respectivas siempre han sido considerados como el monopolio de las instituciones y agentes estatales. [16]

Una característica importante de estas legislaciones es la negación de la existencia de esta gran variedad de formas de gestión y repertorios sociolegales para regular los derechos y el uso del agua (ver Beccar et al. 2002; Gentes 2002; Peña 2004; Urteaga et al. 2003). De manera general, las prácticas sociales de la gestión del agua no son consideradas en la formulación de las leyes nacionales y toda la sociedad es dibujada como una realidad homogénea, en la cual no caben derechos distintos (Vidal 1990). Además, muchos de sus conceptos y procedimientos resultan de copiar ordenamientos jurídicos extranjeros, basándose en el mito de la ingeniería social y legal. Este supone que con la sola formulación y sanción de normas legales oficiales se puede moldear y homogenizar la multifacética realidad de la gestión del agua en los Andes transformándola en una gestión 'moderna', 'eficiente' y 'racional'. Volvamos al caso del Ecuador:

A pesar de contener algunos avances importantes en comparación con leyes anteriores[17], la Ley de Aguas de 1972 y sus respectivos reglamentos dan poca responsabilidad y autoridad a los usuarios: sólo permiten realizar las tareas y funciones verticalmente establecidas, de forma autoritaria. De ninguna manera correspondan con procesos de gestión local, ni otorgan la autoridad para establecer reglas y organizaciones que responden a los problemas, soluciones y capacidades particulares de cada contexto.

Por ejemplo, la administración de los sistemas de riego estatales[18] en las últimas décadas ha sido normada por un reglamento rígido y único: una sola versión que norma la gestión de los sistemas en todo un país que se caracteriza por tener zonas sumamente diversas, como la Costa, la Sierra y la Región Amazónica, con poblaciones y sistemas de riego muy distintos. El reglamento debe regir tanto para el riego costeño con sus sistemas estatales de gran escala y las empresas agroexportadores, como para los pequeños sistemas andinos manejados por minifundistas campesinas e indígenas, que producen mayoritariamente para el autoconsumo.

Un problema ilustrativo tiene que ver con la estipulación detallada y uniforme de la asignación de derechos y la distribución del agua entre los usuarios, que no coinciden con la práctica campesina. Por ejemplo, la Ley introduce la obligatoriedad del riego, o sea, la utilización de las aguas de riego conducidas por canales construidos por el Estado es obligatoria. Este norma se combina con dispositivos tecnicistas en la legislación que establecen que: "la distribución de las aguas, el sistema de riego, intervalos, láminas y tiempo de riego, se hará sobre bases técnicas" (Art. 40, Cap. IV, Regl. Ley de Aguas) y que las asignaciones de agua son establecidas de acuerdo con la superficie del predio. De esta manera queda explícito, que todo terreno debajo del canal debe ser regado, y si un propietario dispone de terrenos más grandes, según la Ley la intervención estatal debe favorecerle mediante una inversión más grande en sus propiedades. Y después, también en sistemas con escasez de agua – de manera obligatoria - debe obtener más agua. Esta forma de diferenciación social legalmente institucionalizada no deja espacio para concepciones locales más

En un tercer sentido se refiere a un reconocimiento político-administrativo y jurídico, generalmente por parte del Estado, de que existen múltiples órdenes legales en la misma sociedad concreta (Boelens & Hoogendam 2002; Benda-Beckmann et al. 1998).

[16] Cabe mencionar que la legislación hídrica en los diferentes países andinos se caracteriza por rasgos y contextos institucionales distintos. Por ejemplo, históricamente, Perú y Ecuador han conocido una intervención estatal (legal, administrativa y mediante proyectos) mucho más fuerte que Bolivia.

[17] Avances que se refieren sobre todo a la asignación de derechos según prioridades sociales y la restricción de la acumulación de derechos en las manos de pocos, los monopolios por grupos hegemónicos, y la especulación dentro de un régimen privatizador.

[18] Si hablamos de los sistemas estatales es necesario entender que muchas veces la mayoría de los beneficiarios son comuneros de las comunidades campesinas e indígenas. La diferencia principal con los sistemas campesinos particulares es que éstos últimos generalmente son construidos y administrados por los mismos usuarios, mientras que los sistemas estatales se operan bajo una administración burocrática o de 'co-gestión'.

equitativas y las muchas soluciones locales que distribuyen la escasez de agua entre todos los usuarios (Boelens & Doornbos 2001). [19]

Directamente vinculado con los derechos, está la reglamentación de las obligaciones de los usuarios. El marco regulatorio original declara una sola tarifa para el agua en todos los sistemas de riego. No distingue entre proyectos de gran o pequeña inversión, ni entre los distintos sistemas y regiones en cuanto al incremento de la productividad que pueda darse para el retorno de las inversiones y autofinanciar la operación y mantenimiento; tampoco distingue entre sistemas orientados principalmente al autoconsumo y sistemas para la producción exportadora. Forzado por la mínima recuperación (sólo 4 %) de los costos de inversión estatal, nuevos decretos legales han otorgado más autonomía a las agencias regionales para determinar la tarifa básica de riego (recuperación de la inversión) y la tarifa volumétrica (gastos de operación y mantenimiento). Pero muchas veces no se ha implementado este cambio (véase Hendriks et al. 2003).

Otro ejemplo es la rigidez e inaplicabilidad de la reglamentación oficial que, detallada y uniformemente, establece la estructura organizativa para la gestión de riego. La Ley de Aguas de 1972 impone, en el caso de más de cinco usuarios, la formación de un Directorio de Aguas. Además, el reglamento dicta la formación de Juntas de Regantes en cada unidad terciaria - 'módulos' artificiales y nuevos, cuyos linderos, según el Reglamento, se basan en datos sólo físico-técnicos. Esta estructura organizativa niega completamente las formas organizativas existentes, incluso puede romperlas fácilmente debido a la superposición. El espíritu del texto legal pretende encajar el Directorio de Aguas dentro de una dependencia administrativa del Estado que debe hacer cumplir las disposiciones dictadas por el Estado, casi sin autoridad propia. Esta tendencia de tutela que (formalmente) deja poco espacio a la gestión autónoma de los usuarios, es característica para toda la normativa legal. El reglamento es uno de los instrumentos principales para manejar el sistema de riego y entonces debe estar adecuado a las circunstancias específicas de los regantes y de la zona. En cambio, el reglamento nacional impone una estructura rígida a la cual los regantes tienen que adaptarse, instalando nuevas formas artificiales de liderazgo y estructuras organizativas inadecuadas. Por tanto, no existen sistemas en donde funciona el reglamento en la manera como se había previsto. Y es cierto, en el caso de que sí funcionara, significaría una amenaza fuerte para la actual estructura y organización comunal de sobrevivencia de las comunidades andinas.

Ejemplos como el caso de la Ley de Aguas de Ecuador son muy comunes en los Andes. La concepción ideológica es que la Ley es omnipresente y no puede tomar en cuenta las particularidades de las diversas normas existentes. Los principios fundamentales del derecho oficial son la generalidad de la aplicación de las leyes nacionales en todo el territorio nacional, y la igualdad ante la ley de todos los sujetos sociales, sin establecer excepciones que reconozcan a otros repertorios sociolegales para la regulación de los recursos hídricos.

En este discurso, la función ideológica del derecho apunta claramente a la formación de una identidad nacional dentro de una 'comunidad imaginada' (Anderson 1983), concretada en una nación uniforme en que todos tuvieran intereses armónicos y posiciones iguales con respecto a la gestión de los recursos hídricos. En la práctica, sin embargo, la "comunidad imaginada" en los Andes se basa en los intereses de los grupos hegemónicos. Las normas locales sobre la gestión del agua no caben dentro de este imperio uniformizadora orientado a las percepciones de la 'hidrocracia' (Rap, Wester y Pérez-Prado 2004) sobre lo que es una gestión 'moderna'. Según los hidrócratos – aquellas personas que dominan las estructuras y discursos oficiales de gestión y políticas de agua a nivel nacional (e internacional) - esta gestión moderna se caracteriza por un manejo hídrico 'high-tech' acorde al modelo occidental, basado en un proceso de producción enteramente mercantilizado. Aún hasta después de las últimas reformas en el sector hídrico, esta 'tradición burocrática' tecnicista, legalista, masculina y etnocentrista ha persistido como un factor determinante en la formulación de políticas de riego y de gestión del agua.[20] En este sentido, la

[19] Existen muchos repertorios normativos en el riego campesino en los que, en situaciones de escasez, se opta por distribuir el agua en base de unidades familiares en vez de unidades parcelarias, se privilegia cultivos de subsistencia, o se decide limitar la superficie a regar por cada familia, o alternativamente los derechos de agua se basan en la mano de obra que los usuarios han invertido en la construcción del sistema. El reglamento oficial bloquea estas perspectivas sobre una distribución más equitativa.

[20] Ver Gelles 2003, Gelles & Boelens 2003, Lynch 1993, Vera 2005, Vos 2003, Zwarteveen & Boelens 2005. Cf. Roth et al. 2005, Wester & Warner 2002, Zwarteveen 1997.

'nueva' tradición neoliberal y privatizadora en la gestión del agua (ver abajo) ha heredado gran parte de estos rasgos fundamentales.

Sin embargo, no siempre los países andinos han seguido este modelo monojurídico y monocultural. En los primeros dos siglos después de la conquista, la situación legal y la práctica con relación a la gestión del agua y los derechos indígenas fueron fuertemente cambiantes y complicadas, entre la segregación y la inclusión.[21] Con la independencia de los países andinos, en el siglo XIX, se legtimizó el modelo asimilacionista, basado en el derecho monista del Estado-nación y una ideología liberal. A nivel de la nación se formuló una ´ideología de la igualdad´ en términos de un gran proyecto político de mestizaje: equiparar e igualar a todos los habitantes de la nación al modelo de los grupos hegemónicos blanco-mestizos, en cuanto a los códigos culturales, normas, y aspectos físicos inclusive (Albo 2002, Assies et al. 1998, Baud 2005, Degregori 2000, Stavenhagen & Iturralde 1990). Luego, sobre todo por influencia de las corrientes indigenistas[22], este modelo asimilacionista se combinó con un modelo integracionista (Yrigoyen 1998), que pretendió otorgarles a las comunidades indígenas mayores derechos e integrarles en un sistema mercantil, para hacerles partícipe de los beneficios de la sociedad ´moderna´. Si bien se revalorizaron ciertas ´normas culturales indígenas´, incluso en la legislación, éstas no debieron afectar a la ideología y la soberanía de la administración política del Estado-nación. El enfoque de normalizar e igualar a los ´inferiores´ al modelo de los grupos hegemónicos blanco-mestizos se combinó con un enfoque paternalista orientado a ´apoyar a los atrasados´, reconociendo ciertas normas tradicionales, costumbres folclóricas, así como los derechos individuales.

En la última década, sin embargo, se ha dado un cambio importante en la legislación de la mayoría de los países andinos. En Colombia, Perú, Bolivia, y Ecuador las constituciones ahora reconocen formalmente la diversidad cultural y el pluralismo legal. Las constituciones otorgan validez jurídica, en diferentes grados y amplitud, a la jurisdicción propia de los pueblos indígenas, a las normas y autoridades propias en las comunidades campesinas y nativas. La inclusión de los contenidos del Convenio 169 de la Organización Internacional de Trabajo (OIT) en la legislación nacional, así como otros dispositivos de los convenios internacionales sobre derechos indígenas, otorga mayor fuerza a este derecho de reclamar reconocimiento de normas propias (ver Guevara et al. 2002, Palacios 2002). Pero es muy temprano para analizar la dirección real y la profundidad de los últimos procesos de cambios legislativos. Muchas veces estos cambios no se han materializados en forma práctica y concreta, y hace falta un proceso de apropiación (Assies et al. 1998; Yrigoyen 1998). Las comunidades de regantes a menudo no han sabido o podido aprovechar las oportunidades de autogobierno que ofrece la nueva constitución de un estado pluricultural y multiétnico (com. pers. Nina Pacari, oct. 2004).

En cuanto a nuestro interés temático, de igual manera, los cambios relacionados al reconocimiento de la diversidad no se reflejan en la siempre ´poderosa´ Ley de Aguas o Ley Agraria. A pesar de la gran importancia que tienen las múltiples formas de gestión del agua para las sociedades locales, éstas siguen siendo negadas. En Bolivia se está discutiendo la versión número 33 de la propuesta sobre una nueva Ley de Aguas (con ciertos avances en campos específicos como el de riego), en el Perú tampoco se avanza en promulgar una Ley de Aguas que respete los derechos campesinos e indígenas y la diversidad del país, y en Chile los sectores hegemónicos con derechos monopólicos al agua (todavía) logran impedir un cambio legal que busca mayor justicia social, equilibrio ambiental y democracia política. En Ecuador la CONAIE[23] lideró un proceso para formular una propuesta de una nueva Ley de Aguas (CONAIE 1996), que reconoce la diversidad de poblaciones, regiones e instituciones de gestión hídrica en el país. El Foro de los Recursos Hídricos, plataforma amplia de instituciones de la sociedad civil, de igual manera, presentó sus propuestas al respecto (FRH 2004). Sin embargo, sigue cierto lo que Nina Pacari, líder indígena y ex-Ministra de Asuntos Exteriores en el Ecuador, comentó sobre la resistencia de los sectores de poder en contra de reformas legales que reconozcan la diversidad:

[21] Para un análisis de la historia de la legislación especial y plural sobre agua y comunidades indígenas y campesinas en los Andes, véase Boelens et al. (2005).

[22] El indigenismo fue encabezada sobre todo por intelectuales mestizos, y surgió en las primeras décadas del siglo pasado, como respuesta a la subordinación de los indígenas y a la sentida ausencia de una identidad nacional propia, para lo cual la cultura indígena fue ´revalorizada´. La actitud hacia las poblaciones indígenas contemporáneas se caracterizó por una gran ambivalencia y varias corrientes: de romanticismo, paternalismo y enfoques revolucionarios.

[23] Confederación de Nacionalidades Indígenas del Ecuador.

"Al momento, sobre la Ley de Aguas, hemos preferido detener el debate porque una correlación de fuerzas no favorable en el Congreso puede trastocar la defensa de los pueblos indígenas para una mejor distribución del agua. Prima más bien la lógica del mercado, la lógica de privatización y en este contexto más bien [estos grupos de poder] lograrían con un instrumento legal viabilizar o materializar a la brevedad posible sus objetivos rentistas y de mercado, y esto de ninguna manera contribuye a la sociedad ecuatoriana. Desde este punto de vista, creemos que es preferible mantener nuestra propuesta en stand-by y seguir por el momento con la Ley que hoy tenemos". (com. pers. Nina Pacari, agosto 2002).

Este último hecho parece ser clave: hasta qué punto los cambios legales de 'reconocimiento' y su implementación en la sociedad pueden contar con el apoyo político y social necesario? Cuáles son los poderes reales detrás de las disposiciones legales? De qué manera las nuevas disposiciones logran reproducirse más allá de la constitución, tanto en la legislación 'fuerte' (como la Ley de Aguas), como en los procedimientos y la administración pública, y en la práctica cotidiana de la gestión del agua? Y hasta qué punto los nuevos cambios legales realmente responden al reclamo de mayor autonomía local y autogobierno en la gestión del agua?

2.4 *Neoliberalismo, positivismo, y la descentralización de la gestión del agua*

Cómo analizar la paradoja de que justamente la década en que emergió un mayor reconocimiento oficial de los derechos indígenas y consuetudinarios en los países andinos, en que además fue descentralizado el aparato estatal para la gestión del agua, es la misma década en que se instrumentaliza el modelo neoliberal y privatizadora. Muchos lo han explicado diciendo que está contradicción surge por la resistencia de los pueblos indígenas y sectores campesinos y populares en contra del modelo hegemónico y uniformizador, sea estatista o mercantilista. Cuanto más fuerte la imposición del modelo neoliberal, cuanto mayor resistencia y reclamos de los sectores campesinos e indígenas, y más cambios que estos sectores y sus aliados logren en la arena jurídico y las políticas nacionales. Otros, sin embargo, han señalado el gran apoyo que prestan las instituciones multilaterales y los organismos de préstamos financieros a la causa de la 'multiculturalidad' y el 'reconocimiento de la diversidad'. De hecho existe una convergencia de objetivos e intereses entre el modelo neoliberal y ciertas corrientes multiculturales (ver, por ejemplo, Hale 2002). Típicamente, la ideología liberal defiende el reconocimiento de la libertad de individuos de transitar entre la diversidad de culturas e identidades autodefinidas. Pero en la racionalidad del proyecto neoliberal moderno son también los colectivos indígenas y campesinos y las instituciones de la sociedad civil los que pueden facilitar la transición hacia una sociedad 'decentralizada' y mercantilizada, siempre y cuando respetan las reglas del juego. Paradójicamente, en la era neoliberal con su reducción del aparato estatal era común que la 'decentralización' de la administración del agua fue aprovechado por gobiernos centrales para reducir sus responsabilidades y en ciertos campos *fortalecer* su legitimidad y control a nivel local (véase Boelens & Zwarteveen 2005, Pereault 2004). Por ejemplo, como ilustran Conaghan et al. (1990), el gobierno boliviano mencionó explícitamente que el objetivo central de la descentralización es el re-establecer la autoridad del Estado sobre la sociedad. La legislación con respecto a la gestión de cuencas hidrográficas en el Perú es otro ejemplo ilustrativo de cómo el Estado usa el nuevo discurso 'participativo y descentralizador' para fortalecer su control (véase Boelens, Dourojeanni & Hoogendam 2005). El 'reconocimiento' contiene claros contenidos ideológicos y políticos, que se fundamentan en la posición de aquellos grupos que tienen el poder decisivo (Cf. Assies 2003, Baud 2005, Gelles 1998, Van der Ploeg 1998).

En el tema de los servicios de agua para riego, el debate de la privatización y el reconocimiento de normas locales adquiere especial importancia, ya que a diferencia de la privatización de muchos otros servicios públicos - que se transfieren a manos de empresas comerciales y privados -, aquí se trata sobre todo de una transferencia de poder de gestión desde la burocracia central hacia colectivos locales.[24] Aparentemente los argumentos y reclamos tradicionales de los sectores

[24] El debate de la privatización de los servicios de *agua potable urbanos*, por lo tanto, es distinto, ya que allí, mayormente, si se trata de transferir autoridad y poder a compañías comerciales multinacionales. También es necesario distinguir entre el debate de la privatización neoliberal de los *derechos de uso del agua* (la propiedad de los derechos sobre el recurso) y la privatización de los *servicios de gestión del agua*.

campesinos, indígenas y progresistas coinciden con aquellos de los políticos neoliberales. Pero la coincidencia es superficial, ya que las razones de fondo del último grupo son distintas, orientadas sobre todo a la reducción del presupuesto estatal en servicios de riego y a la instalación de un mercado de servicios y derechos de agua. Así, al igual que 'reconocimiento' en el modelo burocrático, también en el modelo neoliberal no todas las formas organizativas y normas de gestión están reconocidos políticamente: sólo aquellos que corresponden a los intereses de los gestores del 'reconocimiento'.

Definitivamente, las políticas oficiales de reconocimiento no responden solo a reclamos de los sectores marginados por mayor autoridad y autonomía. Aunque esto si puede ser el argumento retórico para el cambio legal, el interés de la burocracia hídrica (la poderosa 'hidrocracia') o los hacedores de políticos neoliberales es distinto. El congelamiento y la subordinación de repertorios sociolegales legales a través de estrategias de 'reconocimiento oficial' contribuyen al control que pueden ejercer sobre un conjunto de normas locales dinámicas y derechos diversas 'intangibles'. Además, ilegaliza a los sistemas normativos locales 'no reconocidos' y no convenientes al proyecto de control uniformizado por el Estado y por el mercado. El congelamiento de ciertas normatividades locales combinado con la ilegalización de otras, facilita y refuerza el control político y el poder vertical de los hidrócratos, y ayuda a los sectores neoliberales a incorporar los grupos y organizaciones locales en el sistema mercantil (Boelens y Zwarteveen 2005). [25] Analicemos entonces más de cerca los fundamentos del proyecto neoliberal para la gestión del agua, y cómo y qué tipo de comunidades de usuarios de agua quiere 'reconocer'.

Los regímenes de propiedad privada prevalecieron en los Andes mucho antes de que se pasaron las leyes de agua estatistas (que en muchos países nacionalizaron los derechos de propiedad de agua, en los años setenta). Muchos estudios han documentado cómo la privatización histórica conllevó una masiva transferencia de los derechos de agua desde los sistemas comunales indígenas hacia dueños privados poderosos, especialmente las haciendas. Para muchas organizaciones campesinas e indígenas en los Andes, las reformas de agua actuales son una más en una serie de intentos seculares de expropiar los recursos que forman la base de su sustento y su identidad. Las nuevas herramientas y teorías instrumentales científicas han dado un ímpetu al antiguo modelo de política, y defienden la importancia de ponerlo en práctica. La fe en la superioridad y la aplicabilidad universal de las tecnologías y de los modelos institucionales científicamente desarrollados se asemeja a la antigua proclamación de la superioridad de la civilización occidental.

Los tres ingredientes básicos de las recetas para las reformas hídricas neoliberales son: toma de decisiones descentralizada, derechos de propiedad privada y mercados. La atención hacia los derechos de propiedad (privada) se justifica principalmente porque los mercados dependen de ellos. En pocas palabras, el razonamiento es así: el agua necesita ser transferible y mercadeable de modo que pueda ser usada de una forma económicamente eficiente, produciendo los retornos marginales más elevados posibles. Para que los esfuerzos privatizadores tengan éxito, se necesita establecer derechos de agua claramente definidos y exigibles. Los derechos de agua son así una condición crítica para que los mercados de agua emerjan. Los derechos de agua permitirían que el agua sea puesta precio por unidad consumida, induciendo a los usuarios a reducir el desperdicio del recurso. Además, los derechos de agua proveen de una buena base para distribuir las responsabilidades de mantenimiento de los sistemas entre los beneficiarios. También proveen de manera importante de seguridad de tenencia a los usuarios, lo que en el pensamiento neoliberal es muy valorado puesto que parece establecer incentivos para la inversión en infraestructura.

A la par de sus efectos profundamente problemáticos en la práctica de las colectividades de usuarios andinos, el pensamiento neoliberal sobre el agua tiene algunas fallas conceptuales importantes. Por ejemplo, de manera errónea liga automáticamente los derechos de agua con los mercados de agua, como si ambos fueran inseparables. Esto no es verdad. La mayoría de beneficios atribuidos a los mercados de agua se lograrían a través de la provisión de la seguridad de la tenencia por sí sola, sin importar si los derechos de agua son mercantilizados o transferidos. Otro error mayor, entre otros, es la suposición de que la seguridad en la tenencia sólo puede ser

[25] El siguiente análisis del modelo neoliberal de las reformas hídricas está basada en un artículo que hice con Margreet Zwarteveen (Boelens & Zwarteveen 2005). Para ilustraciones de las grandes contradicciones y errores de este modelo aplicado en el campo andino, refiero a este documento.

alcanzada por medio de los derechos de agua privados. Esto es obviamente falso desde la perspectiva de los usuarios de agua campesinas e indígenas andinos, cuya seguridad de agua fue típicamente menor durante las épocas de privatización.

El pensamiento neoliberal conecta lo global con lo local (véase tambien Assies 2003; Swyngedouw 2003) al mismo tiempo que desconoce y destruye lo local. Predica que el manejo del agua se basa en verdades globales, no basadas en localidades particulares y conocimientos contextualizados. El modelo, de hecho, activamente promueve la deslocalización y la externalización de los derechos de agua: los derechos de agua deben ser desligados del la tierra, de la comunidad o del territorio, de modo que se permita la competencia y se mejore el libre comercio del agua hacia sus usos más productivos. Sin embargo, los usos y formas de distribución del agua existentes en las comunidades campesinas e indígenas de los Andes son típicamente locales, embebidos y específicos según el contexto. Son instituciones dinámicas que han evolucionado y siguen evolucionando a través de largos procesos históricos de inversiones colectivas en infraestructura y una lucha común contra los intrusos. Existen a través de la contextualidad y la historicidad, y los procesos de externalización y deslocalización amenazan su exigencia y supervivencia.

Mientras el discurso neoliberal ve los derechos de agua primariamente desde una posición positivista e instrumental, como una expresión de la ley estatal y la lógica mercantil, los derechos de agua en las comunidades andinas típicamente existen y funcionan en condiciones de pluralismo legal. Los derechos *individuales* (o a nivel de unidad familiar) para usar el agua y su infraestructura, y para participar en la toma de decisiones relacionada con el agua, existen porque hay derechos *colectivos* de toda la comunidad, con los cuales están ligados. Los derechos individuales (o familiares) son por tanto radicalmente diferentes a los derechos privatizados desde el punto de vista de las políticas neoliberales. Además, las definiciones de derechos, usos apropiados y la legitimidad de los usuarios y sus autoridades están cercanamente *embebidas* en panoramas históricos específicos de estructuras políticas y económicas así como en sistemas culturales de significados y valores (Gelles y Boelens 2003; MacCay y Jentoft 1998; Pacari 1998; Roth et al. 2005).

Estas instituciones locales de gestión del agua que han existido desde hace décadas y siglos en los Andes, tienen particularidades y una lógica de su funcionamiento que son difíciles de explicar a través del lenguaje moderno de la racionalidad instrumental de mercado. No obstante, las políticas y las leyes neoliberales cada vez más dictan no sólo los términos discursivos, sino también los términos materiales de su existencia. A través de poderosas leyes y reglas, el modelo neoliberal del mundo hídrico se vuelve realidad a la fuerza. Efectivamente, y en las palabras de Bourdieu (1998: 86), "lo que se presenta como un sistema económico gobernado por las leyes de hierro de una suerte de naturaleza social, es en realidad un sistema político que puede constituirse solamente con la complicidad activa o pasiva de los poderes políticos oficiales".

Cuando el comportamiento relacionado con el riego y el manejo del agua no puede ser entendido ni expresado en términos hídricos 'modernos', es probable que esto sea usado como una prueba de su atraso e irracionalidad. Las colectividades de riego que despliegan tal comportamiento son "anomalías" que merecen languidecer y ser presas de las fuerzas del mercado: no hay lugar legítimo para ellas en las sociedades modernas. En contraste, aquellas comunidades de riego que están conformes con las nuevas políticas y reglas son premiadas con la estampilla de aprobación del "buen gobierno": son recompensadas con apoyo y ayuda para que se vuelvan instituciones modernas que se comportan de acuerdo con la nueva lógica institucional y mercantil.

Una creencia importante que energiza las nuevas políticas hídricas es que el comportamiento de los usuarios y administradores del agua se deja llevar por incentivos que están mayormente determinados por las instituciones formales y el mercado. El producto de los procesos organizacionales y políticos en el manejo del agua se ve como la suma de las decisiones racionales hechas por individuos con base en intereses que pueden ser definidos objetivamente y pueden ser conocidos desde afuera. En otras palabras, se piensa que, dadas las estructuras de incentivo apropiadas, los seres humanos desplegarán el mismo comportamiento con respecto al agua en cualquier parte del globo. Supone que todos los seres humanos son iguales y comparten una racionalidad común.

El pensamiento neoliberal sobre el agua, con su negación de las conexiones entre poder y conocimiento y su moralismo de los derechos individuales, acopladas a la casi religiosa referencia

a la racionalidad científica, generan una herramienta política poderosa para la justificación de reformas e intervenciones de largo alcance[26]. Estas intervenciones, a su vez, alimentan aún más la fe en el modelo neoliberal ya que se establecen las condiciones para que éste funcione como se ha pronosticado.[27] No es coincidencia que la política neoliberal, que pretende *libertad individual* para todos, fue materializado mediante la reforma de agua de más largo alcance precisamente por uno de los regímenes dictatoriales más represivos de un país andino, el de Pinochet. Sólo el régimen dictatorial en Chile fue capaz de *crear las condiciones necesarias* para que el modelo se concretara, por medio del silenciamiento y el control coercitivo de las voces de protesta y de los actos de resistencia en las comunidades campesinas e indígenas. El régimen pinochetista creó las oportunidades de experimentación y las condiciones para que el modelo cumpliera con sus propios términos de éxito.

Mientras tanto, muchos organismos internacionales siguen considerando la ley y la política de descentralización hídrica a la chilena como uno de los modelos más exitosos y efectivos. En las décadas de 1980 y 1990, Perú, Bolivia y Ecuador, así como otros países en Latinoamérica, fueron forzados por el Banco Mundial, el FMI y el BID a adoptar legislaciones de agua neoliberales copiadas del modelo chileno. Los bancos contrataron expertos de Chile para promover el modelo en los países vecinos y cuando, bajo protestas populares a escala nacional e intensas luchas de los sectores indígenas y campesinos, éstos no pudieron aceptar su adopción, se usaron el chantaje y la amenaza de no ser sujetos de préstamos de los Bancos.[28]

La ley también preestablecía que la mayoría de mujeres no pudieran tener derechos de agua, a no ser que fueran formalmente reconocidas como "jefes de familia", a pesar de que *ellas* eran las que, de acuerdo con las reglas locales, habían trabajado, invertido y así creado los derechos de agua. En muchas comunidades indígenas y campesinas éste es el *motor* de la gestión local del de agua. En muchas comunidades indígenas uno crea una infraestructura, uno crea también agua y de la acción colectiva: al mismo tiempo que uno crea una infraestructura, uno crea también los derechos de agua y uno crea la organización. Después, para mantener y re-crear los derechos de agua, uno tiene que mantener y re-crear la infraestructura colectiva, y uno refuerza y recrea su propia organización. Hay una interacción dinámica y permanente entre el sistema tecnológico, el sistema normativo y el sistema organizativo.

Esto fue posiblemente el mayor problema de acuerdo con las familias indígenas. El estado impuso un modelo en el que las reglas y derechos de aguas eran establecidos a través de un razonamiento oficial uniforme: aquellos individuos que tienen tierra y pagan tasas tienen derecho al agua. El razonamiento indígena en la zona dice lo contrario: no se pueden simplemente *comprar* los derechos. Aquellos que contribuyen con mano de obra, capacidades organizacionales y participación en mingas, crean derechos de acceso al agua y derechos de participación en la toma de decisiones. En tal racionalidad, los derechos individuales se derivan de una propiedad colectiva del sistema y la gestión común.

Según las comunidades usuarias el argumento formal de la agencia fue: ¿Cómo podemos entregar la gestión a los usuarios si no está en nuestras manos? Las políticas nacionales e internacionales usualmente tienen efectos diferentes en el campo y en la teoría, y detrás de los argumentos oficiales se desarrolla un juego de poderes. Las comunidades indígenas, no obstante, han seguido defender su sistema. Pero se enfrentan a una ley uniforme y positivista y a políticas de gestión de agua orientadas hacia lo que significa la descentralización *en la práctica*. La Ley de Aguas del Ecuador y las políticas antiguas y nuevas no permiten derechos ni principios de gestión locales, y destruyen la variedad de sistemas normativos que *sí tratan* de encontrar soluciones particulares en contextos diversos.

---

[26] Véanse también Gleick 2002; Goldman 1998; Moore 1989; van der Ploeg 2003; Zoomers y van der Haar 2000; Zwarteveen 1997.

[27] Además, en la aplicación de programas neoliberales los .esultados y productos son medidos versus las expectativas de los mismos modelos formales, pero las suposiciones relacionadas con el comportamiento y la operación en la práctica muy pocas veces se validan. Así, la creencia en el modelo y consecuentemente en la efectividad de los mecanismos de control de quienes planifican jamás se objeta, como tampoco se cuestionan las bases de la validez del conocimiento sobre el agua.

[28] Este chantaje fue atestiguado en Ecuador cuando se filtraron ciertos documentos que hacían que los nuevos préstamos estuvieran condicionados a que se pasara una nueva ley de aguas tipo chileno (Red Bancos 1995). En el caso del Perú, el ex-consultor del Banco Mundial Trawick reveló el mismo tipo de prácticas (véanse Trawick 2003). Ilustrativos son también las experiencias con las propuestas de privatización actuales en Bolivia, por ejemplo en Cochabamba y en el Alto.

En sus oficinas, los planificadores neoliberales poco han percibido de la razón de las protestas: es que originan de las mismas comunidades andinas que no logran actuar "racionalmente" o "democráticamente", y por eso fallan en su adaptación al modelo. Las formas actuales de manejar y usar el agua en muchas comunidades andinas no son vistas ni juzgadas en sus propios términos, ni siquiera sobre la base de la eficiencia en el uso del agua y los retornos marginales, sino que son evaluadas contra el modelo universal ideal. Tienden a ser vistos como obstáculos para el control eficiente y moderno del agua, que tienen que ser removidos para pavimentar la vía hacia la modernización del agua y para el surgimiento de los actores 'racionales'. Los problemas acerca de eficiencia y equidad no son vistos como *efectos* de las leyes y políticas neoliberales, sino que se analizan como algo originado en una implementación aún incompleta del modelo y en la incorporación aún imperfecta de las comunidades en los mercados y en los sistemas legales estatales. Por eso, y paradójicamente, el remedio recetado es incrementar las reglas del mercado libre en las comunidades locales y dar más libertad a los grupos de interés privados externos para mejorar la gestión, incrementar la eficiencia y poner en vigor los derechos de agua. Así, el modelo neoliberal de agua se vuelve una profecía que se comprueba a sí misma.

Es por estas razones también que el modelo no logra percibir sus propios errores y contradicciones fundamentales que a menudo causan resultados contrarios a los pronosticados: inseguridad de la tenencia del agua, disminución de la inversión por los usuarios, reducción de la productividad, baja de la decisión democrática, menor eficiencia de uso, y mayor inestabilidad de los sistemas andinos (para algunos ejemplos llamativos, ver Hendriks 1998; Boelens & Dávila 1998; Boelens & Zwarteveen 2005). Por la naturaleza necesariamente colectiva del agua en la mayoría de los sistemas y cuencas andinos, con condiciones adversas e impredecibles, para poder manejar el agua y generar sustentos sostenibles se requiere de la colaboración, como una condición fundamental, en vez de la competencia entre los usuarios de las mismas fuentes hídricas.

También en el tema de la descentralización las propuestas neoliberales tienen fuertes contradicciones intrínsecas, como muestra la experiencia chilena (Hendriks 1998; Bauer 1997, 1998; Dourojeanni & Jouravlev 1999). Bauer (1998), entre otros, describe cómo el modelo neoliberal ha llevado a retos y conflictos inmensos no solamente a nivel del sistema, sino también a nivel de sectores de uso múltiple, por ejemplo a nivel de microcuenca y cuenca. Si antes de la privatización los conflictos entre las empresas generadoras de energía y los grupos de regantes podían ser resueltos con base en argumentos relacionados con el interés público, a raíz de la introducción de la política de agua neoliberal debieron empezar a competir como contendores supuestamente iguales en el "mercado libre". Las plataformas de múltiples interesados, propuestas dentro de este esquema como mecanismos para encontrar las soluciones, fueron dominadas por los representantes de las compañías, que eran personas más locuaces y con más educación formal, mientras que los resultados eran fácilmente ignorados porque no tenían rigor legal y no estaban apoyados en políticas públicas. Si bien la descentralización debía ayudar en la reducción de la intervención estatal (y los gastos gubernamentales), parece que en realidad, para resolver sus disputas, los diferentes actores dependen crecientemente de caros procedimientos legalistas en la cortes centralizadas y, por lo tanto, de la burocracia estatal.

Este bien conocido ejemplo chileno es la razón de que muchos defensores de los mercados de derechos de agua y de la privatización "con rostro humano" en los Andes argumentan que el modelo debe ir acompañado de, y estar embebido en, un marco legal equitativo. Pero si bien las compañías privadas saben bien cómo hacer uso de las cortes civiles y de los marcos legales cuando se trata de defender sus intereses privados en el agua, aparentemente hay una carencia enorme de capacidad legal en los países andinos al momento de defender los derechos de propiedad comunitarios o públicos.[29]

Además, a pesar de que la privatización tiene como meta la delegación de las decisiones al nivel más bajo posible, las actuales reformas hídricas en los Andes tienden a tener consecuencias opuestas para los sistemas de derechos locales. A través de la instalación de las regulaciones estatales y derechos neoliberales, los sistemas de propiedad colectiva localmente embebidos se vuelven desembebidos de las relaciones sociales y de los sistemas de seguridad de la comunidad, y los actuales arreglos de gestión del agua son remplazados por reglas de juego foráneas. Pero

[29] La subyugación de facto de la Ley Indígena al Código de Aguas y al Código de Minería en Chile es un claro ejemplo (Gentes 2000; Boelens et al. 2005).

no todos los usuarios o usuarias aceptan estas reformas de normalización y descentralización impuestas y cada vez más demandan una adherencia a estándares diferentes de equidad en vez de los que ofrecen los modelos neoliberales como algo inevitable y natural. De manera creciente las organizaciones campesinas e indígenas se levantan contra los esfuerzos privatizadores y los programas de reforma hídrica neoliberales. La resistencia demuestra que el "no calzar" en el modelo es a menudo una opción consciente y no el resultado de atraso, irracionalidad y terquedad sin razón.

2.5 *Políticas aguadas: la 'devolución del gobierno del agua' en la práctica*

A la par de enfoques estatistas y mercantiles en la región, un tercer conjunto de estrategias y propuestas institucionales para el manejo de los conflictos intersectoriales sobre el agua, el fomento del uso beneficioso y de derechos equitativos del agua y la preservación del ambiente, se fundamenta en el enfoque de la gestión consensual o la 'concertación'.[30] No es el Estado omnipotente, ni las reglas del mercado libre, sino la negociación y colaboración entre los distintos actores, muchas veces con intereses divergentes pero mutuamente dependientes, que tienen que llevar a una situación consensuada y equilibrada para todos. Las estrategias y propuestas incluyen como elemento central la generación o el fortalecimiento de plataformas y mesas de concertación para la gestión integrada del agua al nivel de la cuenca, subcuenca o microcuenca. Idóneamente suelen ser conformadas por entidades mixtas: organismos gubernamentales y no gubernamentales, multisectoriales, endógenos y exógenos, que representan las necesidades de los distintos grupos de interés. La gestión concertada requiere de un adecuado sistema de información que además sea transparente y de acceso general. Generalmente las propuestas y proyectos de concertación tienen pretensiones que no se limitan a la gestión multisectorial del agua sino involucran a otros recursos y actividades.

Sin embargo, hay muy pocos casos en los Andes en que se concretizaron verdaderas plataformas de gestión democrática y multisectorial. A menudo existen sólo en papel o fueron institucionalizadas desde arriba por agencias estatales o organismos de desarrollo (Dourojeanni 2000). El punto aparentemente fuerte de este enfoque es también su debilidad: se requiere de un marco de concertación democrático y transparente en el que todos los actores son conscientes de los objetivos que plantean, de sus responsabilidades y de las consecuencias futuras en el manejo del agua (IPROGA 1996). Sin embargo, el ordenamiento concertado del uso del agua y la adecuación o redistribución armónica de derechos de agua a nivel territorial no es tarea fácil para tal plataforma, justamente porque va en contra de intereses establecidos, muchas veces poderosos. Teóricamente se basan en el consenso 'general' y pueden funcionar bien cuando existen posibilidades de transacción entre los actores. Estas transacciones sólo se logran con conocimiento de propuestas de solución y análisis de costos y beneficios sociales, ambientales y económicos, y con un interés político para un cambio social real. Si no se encuentran beneficios mutuos, el proceso de adecuación de derechos comúnmente es obstaculizado por los actores o sectores poderosos. Los últimos buscarán cómo dominar las plataformas, caso contrario recurrirán a otros medios para lograr sus intereses (Boelens, Dourojeanni & Hoogendam 2005).

La mayoría de las propuestas de concertación, por tanto, tiene como presuposición que a través de una racionalidad (positivista) que todos compartirían se lograrán las soluciones más óptimas. Y aunque reconocen la importancia de las posiciones de poder divergentes, no suelen basar sus estrategias en esta constatación. Pero conciliar los intereses y descentralizar la gestión fundamentalmente significa redistribuir recursos, autoridad y poder; entre autoridades, usuarios, no-usuarios y los 'concertadores' mismos. Las relaciones de poder existentes, que se manifiestan en el reparto desigual de los medios de producción y de la riqueza generada, obviamente tienen una influencia decisiva en la formulación y ejecución de estas políticas y plataformas descentralizadas.

En los procesos de concertación a menudo hace falta cuestionar las estructuras de poder y los intereses político-económicos (Warner y Moreyra 2004). Particularmente los programas formales de descentralización evitan las discusiones públicas al respecto y las posibles estrategias de

[30] Boelens, Dourojeanni & Hoogendam 2005; véase también CEPAL 1992, Dourojeanni 2000; IPROGA 1996.

solución: son reemplazadas por políticas de intervención 'ya establecidas' y por criterios profesionales 'ya probados'. También en el campo socio-organizativo hay una tendencia de imponer las reglas y estructuras organizativas 'más adecuadas' de la entidad de concertación, que en la práctica canalizan los intereses y mensajes de las instituciones exógenas, o refuerzan las regulaciones jurídicas nacionales. Por el consecuente y común fracaso de estas plataformas multi-sectoriales y multi-usuarios verticalmente establecidas en la región andina, las políticas de descentralización a menudo se han limitado a 'transferir' las *responsabilidades y tareas* de la gestión del agua a los usuarios, mientras que (casi) no transfirieron los *recursos y poderes*, o solamente a entidades del gobierno 'decentralizado'. Además, la transferencia irresponsable ('*dumping*') de la gestión de muchos de los sistemas estatales más respondió a la urgencia neoliberal de reducir el aparato estatal y los gastos públicos que a un proceso de transferencia de recursos y capacidades para apoyar sistemas viables. De manera general se transfirieron los problemas a los usuarios: sistemas degenerados casi sin viabilidad y perspectiva, que requerirían enormes esfuerzos e inversiones de los usuarios para operar y mantenerlos.

La implementación en la práctica de las políticas de descentralización nacionales e internacionales entonces es un proceso complejo que no se presta a una especie de 'ingeniería social' o 'ingeniería legal'.31 Las medidas legales son influenciadas, mediadas y modificadas – a veces fuertemente – por los ámbitos locales políticos, económicos y normativos. Por esta razón, entre otros, es claro que no se ha dado un proceso real de 'gestión integrada' o 'gestión por plataformas descentralizadas'en la gran mayoría de las cuencas andinas. Aquí influye también el arriba mencionado caos en las legislaciones hídricas de la región, lo que facilita a los políticos y hidrócratos a que manejen sus propios juegos y defienden sus propias instituciones, frente a los usuarios menos acomodados. La interpretación de las legislaciones y políticas hídricas en condiciones de legislación caótica y sobrepuesta ofrece espacios a los agentes oficiales de 'hacer su propia torta legal'.32 Además, las políticas de descentralización en casos concretos emitan mensajes muy contradictorios. Una investigación de WALIR en el Ecuador (Hendriks et al. 2003; Cremers et al. 2005) ha mostrado como los múltiples decretos de descentralización de la gestión del agua ha llevado no sólo a una reducción tremenda de la capacidad nacional para una gestión verdaderamente pública del agua sino que además ha permitido que una variedad de actores oficiales 'descentrales' han recibido poderes traslapados e intransparentes, sin que se han cambiado sus bases 'hidrocráticas', lo que fácilmente lleva al nuevo abuso de las familias usuarias en las comunidades campesinas e indígenas.

Abajo se revisa algunos de entre un sinnúmero de casos que muestran que la descentralización positivista, sin atención a los poderes reales existentes ni a la pluralidad normativa local, no resuelve la crisis del agua – al menos, no para los grupos marginalizados. Partimos de un sistema intercomunitario de riego campesino-indígena en Licto, provincia de Chimborazo, Ecuador. Se analiza ejemplos cotidianos de su interacción con *aquellas instituciones que según las políticas oficiales (y en ausencia de plataformas multi-actores) deberían recibir los poderes descentralizados*, como es la Junta Parroquial del cantón, la Corporación Regional de Desarrollo de Chimborazo (CODERECH), el Municipio de Riobamba, y la Agencia de Aguas.

Caso 1: La defensa de la autogestión del sistema Guargualla en Licto[33]

Licto es el nombre de una zona de la provincia de Chimborazo en el centro de los Andes ecuatorianos, que hospeda a 28 comunidades campesinas indígenas. También es el nombre del

[31] Esta perspectiva positivista, común y corriente en procesos legislativos y en intervenciones de desarrollo rural, asume que relaciones sociales son calculables y planificables tal como en las ciencias naturales se usan las fórmulas hidráulicas. Es un mito, porque las legislaciones que intentan cambiar la situación social muchas veces fracasan, no tienen resultados o tienen efectos no planificados y no previstos. Es justamente porque, para tener éxito, deben cambiar las relaciones sociales. Y frecuentemente las relaciones sociales y de poder existentes tienen más fuerza y efectividad que reglas nuevas y externas.

[32] Dentro y fuera del aparato estatal, es frecuente que los actores hegemónicos en el sector hídrico de la región andina tienen gran influencia sobre la selección de los ingredientes de esta 'torta'. Su influencia va más allá de solo la selección de dispositivos legales existentes. En palabras de Weber: "Son precisamente estos grupos con intereses propios que se encuentran en la posición de distorsionar el propósito intentado de una norma legal, hasta el punto de convertirla en su opuesto..." (Weber, en Moore 1973).

[33] Basado en investigaciones de campo que realicé entre 1992 y 1997, y en 1998, 2000, 2002 y 2004; publicado en e.o. el capítulo 7 del libro *Water Rights and Empowerment* (Boelens y Hoogendam 2002).

pueblo, el centro poblado de la región, alrededor del cual se ubican estas comunidades. La población total de Licto cuenta con 13.000 personas, de las cuales alrededor de 90 % son de auto-identificación indígenas y 10 % mestizas. Las últimas residen mayoritariamente en el pueblo. En la zona, como en muchas partes de los Andes, históricamente se ha dado un proceso de subordinación de las comunidades indígenas frente a los 'blanco-mestizos': los terratenientes y otros grupos de poder en el pueblo. En gran parte de su historia, la dominación en Licto fue encabezada por la 'Santisima Trinidad': cura - hacendado - teniente político. Hasta hace pocos años, cualquiera actividad para cambiar la situación de marginación en las comunidades indígenas fue atacada por los grupos de mando en Licto pueblo.

Cuando en 1989 la organización CODOCAL (Corporación de Organizaciones Campesinas de Licto) fue invitada de participar en un ambicioso proyecto, el desarrollo del Sistema de Riego Guarguallá, no era de sorprenderse que las comunidades indígenas se mostraron sumamente desconfiadas. El recelo era fuerte, más aún, porque anteriormente habían sido justamente los moradores de Licto pueblo que habían impulsado este proyecto a través de sus contactos con el INERHI (Instituto Ecuatoriano de Recursos Hidráulicos), la anterior agencia estatal de riego. A pesar de ello, algunos líderes indígenas de las comunidades y personas – sobre todo mujeres - de los grupos menos acomodados del mismo pueblo, aprovecharon la oportunidad de este proyecto como un medio para desafiar las estructuras de poder existentes. En estas comunidades andinas el *agua* es un factor de mucho poder, y razonaron que, para cambiar la situación, 'hay que meterse adentro, sea como sea'.

Desde el año de 1974 el INERHI había estado trabajando los estudios, diseños y obras principales. Fue un ejemplo clásico de un proceso de diseño y ejecución vertical, en el cual se excluyó a la población campesina de la toma de decisiones. Los diseños fueron realizados de manera recetaria en las oficinas de Quito por técnicos sin conocimiento de la realidad campesina. Para ejecutar las obras conforme a sus diseños, el INERHI contrató a empresas privadas. La falta de compromiso de los ejecutores con el sistema y su debilidad técnica no sólo conllevó a actos de corrupción, al aumento explosivo del costo de las obras, a retrasos y a la construcción de canales de mala calidad, sino que también hizo imposible que los usuarios futuros se involucren en el diseño y la ejecución del sistema.

Este diseño, sin base en las condiciones y necesidades locales[34], fue acompañado por un diseño organizacional, también recetario y rígidamente fundamentado en la Ley, que reforzó las falencias técnicas enunciadas y las consecuencias socio-políticas. Por ejemplo, el Reglamento para la Administración de los Sistemas de Riego del INERHI establece que cada módulo de riego debe nombrar cinco cargos directivos (presidente, vice-presidente, etc.). Considerando el hecho de que Licto contaría con unos 120 módulos de riego, esto implicaría la obligación de nombrar unos 600 dirigentes nuevos, una estructura dirigencial *paralela* a las estructuras de liderazgo comunales ya existentes. En el diseño, estos módulos cruzarían los linderos de las comunidades y tendrían que ser encabezados por una Junta General. Así se generaría un conjunto de estructuras organizativas adicionales que – por controlar el factor agua - contaría con mucho poder, con el gran peligro de cruzar, desintegrar y reemplazar a las estructuras comunales (y no modulares) existentes. Implicaría que, no sólo el liderazgo y el poder de decisión, sino también las asambleas y los trabajos comunitarios tendrían que ser reorganizados artificialmente de acuerdo con los nuevos límites modulares.

Las comunidades, entonces, formularon una contra-propuesta al INERHI: adecuaron el Reglamento a la situación particular de Licto y a los criterios formulados por los usuarios. Después de unas rondas de discusión en todas las comunidades y la aprobación en la Asamblea General, el documento fue remitido al INERHI, que calificó el documento como 'ilegal'. A la par de este contra-propuesta administrativa 'oficial y externa', los futuros regantes iniciaron la elaboración de un reglamento interno: un reglamento 'vivo y dinámico' que en los años posteriores iba 'creciendo' durante la generación e implementación del sistema de riego. En todo este proceso, los gobernantes blanco-mestizos de la zona (e.o. juntados en la Junta Parroquial), habitantes del pueblo de Licto, buscaron frustrar el trabajo colectivo de las comunidades indígenas en la

[34] Por ejemplo, a pesar de que, debido a la emigración masculina, la gran mayoría de usuarias eran mujeres, la infraestructura no incluyó reservorios nocturnos y el horario estuvo basado en turnos de 24 horas de riego. El riego nocturno hubiera hecho imposible, sin embargo, que las mujeres hicieran uso del riego, por razones como la violencia sexual, el cuidado de infantes, la erosión del suelo, la lejanía de los campos y otros.

construcción del riego. A través de sus contactos con los oficiales del Estado trataron de mantener sus posiciones de poder, manipulando la incipiente organización intercomunal. Fue sólo después de un largo proceso de lucha, liderado por dirigentes indígenas y sobre todo las mujeres de los estratos más pobres de Licto que – muchas veces *a pesar de* los procesos y discursos oficiales de descentralización – se produjo el cambio. Los mestizos pobres del pueblo se deshicieron de sus líderes manipuladores y se unieron a la organización intercomunal.

Cuando INERHI, que desde 1994 fue descentralizado en Corporaciones Regionales de Desarrollo (ahora CODERECH, para la provincia de Chimborazo), debido a una crisis financiera y la falta de capacidad por la privatización, no pudo completar la construcción del sistema (salvo las obras del canal principal), las comunidades indígenas tomaron a cargo su desarrollo, con el apoyo de la ONG CESA. Aún cuando al inicio bajo protesta fuerte de los técnicos estatales y luego de confrontaciones importantes con la agencia estatal, adaptaron el diseño, la gestión y los derechos de agua a las demandas y capacidades locales.

Se desarrollaron medios para colectivamente discutir el diseño, las reglas y los derechos. Fundamentalmente, la acción colectiva fue la base para la construcción de la infraestructura y para la construcción de los derechos de agua. También se incorporaron otras comunidades Licteños en el sistema que habían sido excluidas, así como módulos hidráulicos que técnicamente y organizativamente respondieron a las estructuras (inter)comunales. Obras estratégicas (por ejemplo, reservorios para evitar el riego nocturno) complementaron el diseño. Se desarrolló un sistema que ahora es manejado por las mismas comunidades desde el nivel principal hasta el nivel de campo.

Pero una vez que las comunidades habían terminado el sistema, operándolo con reglas claras y socializadas, derechos equitativos y una fuerte gestión colectiva, la descentralizada administración estatal vino a reclamar. No quería reconocer la gestión local ni sus reglas y derechos. Por el simple hecho de no estar reconocidas por la ley nacional fueron declaradas "ilegales". La agencia estatal, en su interpretación particular de la política de Descentralización y Transferencia de Manejo de los Sistemas de Riego, reclamó a las comunidades indígenas la devolución del manejo del sistema *a la agencia*. En palabras de la dirigente campesina Inés Chapi (entrevista agosto 2002): "Con el CODERECH mismo tenemos un gran problema porque ellos han dicho que ya que todo sistema está terminado tienen que hacer *ellos* la administración, operación y mantenimiento y que tenemos que pagar tarifa a ellos".[35]

Los usuarios no se oponen a tarifas en si, pero que sean organizadas a través de su propia organización para invertir en su propio sistema. Además, se resisten a 'transferir' el sistema y toda la administración e información autogeneradas al Estado. "En cuanto a la gestión, ellos han mandado un oficio que ellos van hacer en su totalidad la administración y la operación, incluso han mandado un oficio que les proporcionemos ya los planos y catastros, [...] no estamos de acuerdo, si ellos quieren tener planos, quieren tener catastros, tienen que hacer por su cuenta. [...] El sistema tenemos que manejar nosotros, la junta, porque nosotros hemos trabajado desde antes y seguimos trabajando. Ya hemos pagado cuotas y estamos trabajando para la operación y el mantenimiento de nuestro propio canal. [...] No hemos de dar paso al CODERECH en el sistema. Para nosotros es necesario defender nuestro sistema. Vamos a defender nosotros, organizando más de lo que hemos estado, si es posible tenemos que hacer comisiones a Quito al Consejo Nacional de Recursos Hídricos, tenemos que hacer marchas [...]. No es que nosotros vayamos al CODERECH y decir 'bueno, vamos a pagar', nos hemos de organizar. Somos 1.300 usuarios y están ingresando más usuarios, hemos de tomarnos si es posible la oficina del CODERECH pero no hemos de permitir que ellos vengan y digan 'ya esta terminado el proyecto y ahora ya hay que administrar nomás el CODERECH'. No pues, nosotros hemos trabajado, nosotros hemos aportado, nosotros hemos sufrido y tenemos derecho nosotros a mantener el sistema" (Inés Chapi).

Caso 2: El enfrentamiento entre las comunidades regantes y el Municipio de Riobamba

"Para mi sería una falta tremenda cuando quieren quitar estos señores del Municipio, nosotros hemos trabajado, hemos tenido durante treinta años de luchamiento para tener esta agüita, !ahora

[35] Otra institución que es importante en las políticas de descentralizació está involucrada también: "Así mismo, nos van a cobrar otra tarifa de la Agencia de Aguas, sin consultar a nadie ellos han aprobado una tarifa que hay que pagar" (Inés Chapi).

estos señores quieren quitar nuestros terrenos, que quieren expropiar ellos! Lo más hemos tenido trabajo nosotras las mujeres, llevando nuestras criaturas en la barriga, llevando nuestras criaturas en la espalda, con todo el sacrifico. Íbamos a pie a las 3.00 de la mañana, 4.00 de la mañana levantando, íbamos al puesto de trabajo que se llama bocatoma, allá al río Guarguallá para trabajar. Venimos trayendo agüita para riego, ahora estamos felices, pero ahora estos señores vienen a querer expropiar, no estamos de acuerdo y estaremos hasta las últimas consecuencias en nuestros terrenos, nuestro reservorio, no estamos para soltar..." (Pacífica Yupacabay).[36]

Junio de 2002. El camino que conduce a la zona de Tulabug, parte del área de riego de Licto-Guarguallá, se encuentra bloqueada por una barrera enorme, hecha por los moradores locales. Grupos de vigilancia de las comunidades cercanas controlan la entrada de cada persona. Líderes, organizadas instantáneamente en el comité de defensa de la tierra regada, se trasladan permanentemente a la ciudad de Riobamba para reclamar y negociar con la alcaldía y para reforzar sus alianzas con instituciones afines como la Comisión Permanente de los Derechos Humanos, la Defensoría del Pueblo, y hasta fueron hablar con el Congreso Nacional en Quito. Es alerta roja para las comunidades unidas en el sistema de riego, que se han puesto solidarias con las familias regantes amenazadas por la expropiación de sus terrenos. Según los técnicos del Municipio, es necesario esta expropiación ya que la planta de tratamiento del nuevo sistema de agua potable tiene que ubicarse precisamente en la zona de Tulabug – "no hay otra alternativa técnica y económicamente viable".[37] Para ello es necesario expropiar entre 6 y 14 hectáreas de los minifundios regados, una gran cantidad de terrenos de unas treinta familias campesino-indígenas de diversas comunidades. Las comunidades también protestan ferozmente frente a la propuesta oficial de afectar una parte importante de su sistema de riego mediante esta expropiación, lo que posiblemente perjudica a su reservorio nocturno más grande, el de Bellavista.

El Municipio de Riobamba, para abastecer la población urbana con agua potable, ha formulado y diseñado un gran proyecto que doblaría el caudal actual.[38] El alcalde de Riobamba, en la promesa principal de su campaña electoral, ha asegurado la población riobambeña realizar este proyecto en menos de dos años – "... en mi administración soluciono el problema del agua, en agosto ya son dos años que estoy aquí, yo ofrecí solucionar el problema y no quedo mal, no me quedo cruzado de brazos" (Dr. Fernando Guerrero, Alcalde de Riobamba). De la misma manera, el Vice-alcalde (Dr. Luís Cargua Ríos) expresa la gran importancia política de este proyecto: "... estamos abocados ya a la salida del gobierno, el sistema de agua potable es clave... imagínase si ahorita por todas las emisoras nos están pero insultando que no hemos hecho nada en agua potable con el proyecto Alao, que sólo palabras ... que sólo palabras han sido".

Pero los usuarios de riego locales, después de muchos años de sacrificio y sufrimiento para construir e implementar el sistema Guarguallá y traer el agua de lejos, están determinados de no soltar sus chacras. Como afirma Pacífica: "El Señor Alcalde tiene que respetar nuestras tierras, sin tierra no podemos vivir, porque somos campesinos necesitamos tierra, este pequeño minifundio necesito para mis hijos, para mantener, para poder defender, hasta las últimas consecuencias regaré mi sangre en mi terreno, pero no he de salir!".

El Alcalde de Riobamba también hace referencia al fuerte deseo de la gente de no moverse de sus tierras ancestrales, es sólo que su interpretación de este hecho es algo distinta de aquella de los afectados: "Hay gente que se aferra por ancestros, y aunque no le sirve el pedazo de terreno para nada, le defiende a morir. Es la 'Ñucallaqta', en quechua la Madre Tierra, la tierra, con ese pedazo de tierra me muero, aquí me muero y con eso me voy, esas personas son beligerantes, esas pelean, esas dicen 'me matan pero yo no salgo de aquí' ".

Uno de los lideres del comité explica la resistencia: "...muchas personas se tiene un único lote y son 30 años de lucha de trabajo para conseguir el agua de riego, mucha gente ya ha fallecido sin ver ni el agua, se han quedado esposas con hijos pequeños, necesitan el agua para sostener a sus hijos en sus tierras. También nos preocupa que no solo se perjudicaría esas hectáreas, sino se perjudicaría a más ese reservorio que alimenta a 20 módulos, de Tulabug, Molobog y Licto.

[36] Las entrevistas de esta investigación realicé en los meses de junio hasta agosto de 2002.
[37] Entrevista con Ing. Angel Obregón, Director del Dept. de Agua Potable, Municipalidad de Riobamba.
[38] A los 475 l/s actuales se añadirían 500 l/s extra mediante la extracción de un caudal de un río que actualmente se aprovecha para uso no consumptivo por una central hidroeléctrica (Alao). Es un proyecto de 12 millones de dólares, a ser financiado a través del Banco del Estado (Entrevista con Ing. Diego Saltos, Vice-Director del Dept. de Agua Potable, Riobamba).

Nosotros como Junta de Riego no nos oponemos a la obra, es una obra social que va a hacer el Municipio, pero lo que si decimos que no se haga los tanques de tratamiento de agua potable ahí en esos terrenos, nosotros como Junta de Riego lucharemos hasta las últimas consecuencias".

Las comunidades han expresado claramente su no-oposición a la realización del proyecto de agua potable en sí, pero durante los últimos meses el furor colectivo ha crecido enormemente, ya que son justo las tierras regadas de los minifundios las que se quieren expropiar, y esto es inaceptable para ellos; más aún ya que han ofrecido al Municipio que construya la planta en otro sitio, no regable, encima del canal de riego y de propiedad de las comunidades mismas. "Ya le dijimos nosotros: 'no estamos contra del proyecto de Alao de agua potable', nosotros hasta hemos ofrecido con mano de obra una minga no calificada aquí en el cerro Bellavista, queríamos que se haga allí y ahora ellos dicen que está muy alto, que está muy trabajoso, 'no queremos ahí, sino queremos éstas tierras, es más fácil, más bueno'. Ellos le botan [este plan], eso nosotros no permitimos".

Además, siendo campesinos, teman que la agenda política del Municipio no sólo es expropiar algunas hectáreas para fines de construcción de obras de agua potable, sino que se exija más terreno de lo netamente necesario para con ello urbanizar el campo. El temor es que la expropiación acelera un proceso de construcción de viviendas y servicios para los no campesinos, cambiando el estilo de vida y despojando cada vez más minifundistas de su tierra. Lauro Sislema, dirigente de la comunidad Chumug, expresa esta sospecha: "En primer lugar es para el paseo verde, segundo lugar para canchas deportivas, tercer lugar para las piscinas y cuarto lugar para hacer la vivienda". Al expropiarles, en sus ojos (y de acuerdo con sus experiencias concretas) las autoridades urbanas no valoran el gran aporte que dan los campesinos a la ciudad. En palabras de Pacífica: "A nosotros vienen queriendo expropiar nuestros terrenos, los señores del Municipio; ellos no se dan cuenta, nosotros aquí con nuestro producto estamos manteniendo a la ciudad, produciendo nuestros animalitos, desde huevos, un huevito, un cuycito, una gallinita, un chanchito, un ganadito, todo llevamos a la ciudad de Riobamba, al pueblo servimos. También cuando produce maicito, produce frejolito, papitas. Gracias a dios, con el agüita tenemos cultivos nuevos, hacemos producir, todo produce, todo llevamos allá, con eso estamos sirviendo a la ciudad, ellos no se dan cuenta que nosotros servimos a la ciudad".

La reacción de las autoridades urbanas, autodeclaradas los sirvientes del bien común, es una de no entender la resistencia. Es llamativo cómo las autoridades políticas perciben su propio actuar como uno que responde a los discursos de la descentralización y la participación popular. Asuman que haya acuerdo colectivo, basado en la supuesta socialización de la información sobre el proyecto: "¡Pero porqué no cuestionaron eso cuando supieron, porque no cuestionaron eso hace tres años! Cuando hoy el proyecto yo lo retomo y les digo 'nosotros vamos a hacer', allí se presenta el problema: no quieren vendernos sus terrenos, porque dicen que ya tienen su agricultura, que han hecho mucha inversión, efectivamente, allí hay tuberías de riego, etc., etc." (Alcalde de Riobamba).

Sin embargo, al investigar las bases fundamentales del proyecto, su formulación y diseño no han sido tan participativos como los políticos quieren hacer creer. La misma hidrocracia, las autoridades técnicas con poderes ahora descentralizadas, de ninguna manera han cambiado su práctica de siempre de diseñar los proyectos de manera recetaria y sin consultar a la gente. Sin preocuparse de esta práctica vertical generalizada, el Director del Departamento de Agua Potable explica: "Con lógica se hizo el proyecto, no creo que muchas veces debemos involucrar al inicio de un proyecto a la masificación ciudadana, a poner a consideración de todo el mundo, porque muchas veces el hecho de que piense demasiada gente hace que algunos proyectos queden en el aire. Hay muchos criterios y todo el mundo quiere hacerse sabio, entonces es una pérdida de tiempo bastante grande, por eso es que entiendo la administración anterior, arrancó con un proyecto, se hizo una prefactibilidad, se dio factibilidad y se hicieron en términos definitivos".

Según los comuneros, además, otras razones habían jugado un papel evidente en el no considerar una participación popular en la elaboración del proyecto: la aparente presión financiera sobre los plazos de formulación y ejecución. Inclusive, este argumento fue usado para presionar a las comunidades de aceptar el proyecto y, en caso de no lograr el financiamiento de la obra, culpar a ellas por el fracaso: "Dijeron que ya tenían la plata, que del BID habían hecho un primer préstamo, [...] que ellos ya iban a pagar esos intereses y que por culpa nuestra iban a perder esa plata. Tenían que pagar intereses, y por lo tanto ellos ya tenían unos planos todos diseñados: de donde van las cajas, donde va la zanja, donde va el clorador, donde va la caseta, todo tenían ya

los planos listitos" (Inés Chapi). La no-información y la ausencia de alguna forma de diseño participativo o siquiera proceso consultivo con los afectados fue ampliamente confirmada en las comunidades. Como Pacífica explica: "... señores autoridades, señores alcaldes, señores concejales, a nosotros nunca han preguntado, nunca han preocupado ellos, ahora si quieren nuestras tierras. Pero nosotros de beneficio de ellos nada hemos tenido, nada, con nuestra fuerza, con nuestro sudor, con nuestro dinerito que tenemos en nuestra cintura, con eso salimos y con eso andamos. Ahora, para este problema perdimos tres meses de dios, a nosotros tienen en la calle estos señores, desesperados con pena. Con lágrimas en los ojos, porque tenemos nuestros hijos [...] Y esos señores, que beneficio han dado a nosotros? y luego que vengan atropellar a nosotros, mandar empujando a nosotros, a mandar sacando a nuestras criaturas: a dónde vamos a ir?, a producir delincuencia?, a producir tantos robos, en tantas matanzas, no se."

Claramente, la mudanza a otras tierras ajenas o la compensación con dinero no encuentran aceptación entre los afectados. En el análisis del problema y la búsqueda de alternativas se puede apreciar mundos y racionalidades sumamente distintos. Para el Director de Agua Potable, uno de los problemas principales es el egoísmo, y la solución se encuentra en la valoración económica de la alternativa. Básicamente, a través del valor universal del dinero se pueden comparar e igualar los precios intrínsecos de la tierra, del agua, y de los otros factores fundamentales de la convivencia campesina – hasta la comunidad misma. Para ello le sirve una llamada referencial a la civilización, contrastándolo con la falta de ella en las comunidades afectadas: "Los países sobre todo de Europa son desarrollados, no existen egoísmos, todos queremos estar al mismo nivel y es lo mas obvio, no? Como en los grandes proyectos tenemos que ceder, tenemos que ceder, porque el beneficio es para la gran mayoría, acá en este proyecto apenas pueden ser unas 40, 30 personas que se les puede afectar, pero afectar con el retiro temporal de la tierra, porque les estamos ubicando en otro lado, o les estamos dando la alternativa a través del dinero....".

En cambio, para los comuneros afectados la tierra regada no puede expresarse en sólo términos monetarios o valores de cambio. Detrás de la resistencia de no aceptar la compensación hay todo un mundo distinto de valores productivos propios de la tierra y el agua, de la historia de los antepasados que habitaron estas tierras y de la lucha por adquirir el agua, de los significados y símbolos de estos elementos centrales para la economía campesina y el sustento local, y del mismo significado de 'comunidad' e 'identidad' dentro del contexto de Tulabug y sus alrededores. No se trata de algunos 'lotes individuales', como manifiesta Pacífica: "Pensamiento del Municipio, a nosotros lo que dicen es: que están comprando dice por otros lugares terrenos para pagar a nosotros aquí. Otras tierras ya son cansadas, otras tierras están puro piedras, estas tierras están ya arena, esas tierras no queremos nosotras, queremos nuestras tierras [...] A nosotros cuesta nuestra tierra, de nuestros padres, nuestras madres, nuestros abuelitos, nuestras abuelitas, somos nacidos aquí. Este señor alcalde, en dónde pensará que va a poner a tanta familia, tantas personas, tantos comuneros que tiene este minifundio. Entonces por eso no queremos, yo estoy con mis mujeres, con mis compañeras estamos aquí andando, estamos aquí trabajando. Nosotros no dejamos nuestras tierras, estamos aquí permaneciendo sea de noche sea de día".

El argumento utilitario del Director de Agua Potable, de que hay que sacrificar algunos para el beneficio de 'la gran mayoría', no les suena justo a los campesinos. De manera contraria, el hecho de que no son solamente las familias directamente afectadas que protestan sino los comuneros y dirigentes de los 17 comunidades del sistema de riego que se han solidarizado - más algunas instituciones de defensoría del pueblo - es incomprensible para las autoridades urbanas, y mucho se molestan de esto. Desconocen que a la par de intereses individuales de la gente también hay estructuras, motivaciones y comportamientos colectivos, necesarios para que sobre todo las familias menos acomodadas sepan sobrevivir en el contexto adverso de los Andes.[39] Lo califican como manipulación, como expresa el Director de Agua Potable: "Muchas veces las imposiciones, sobre todo en el área indígena y la solidaridad, hacen que se involucren terceros, aunque no sea el deseo de ellos [....] Es una afectación a pocas familias, de ahí entonces las que deberían exclusivamente pelear serían las familias de acá no más. No podríamos meter al resto de las comunidades indígenas de la provincia, o tal vez involucrar a los indígenas del país, creo que no, para qué?!". El Alcalde de Riobamba, de la misma manera, niega a ver la posibilidad de que cuando se pisen los derechos y reclamos justificados de grupos marginalizados, haya personas e

[39] No me refiero a la frecuentemente romantizada 'solidaridad andina'. Aquí se trata de que, al encontrar algunas familias comuneras fuertemente amenazadas por fuerzas exógenas, se cierran las líneas de defensa colectiva.

instituciones de base que ya no lo aceptan y se hacen solidarios. "Hay gente ajena a la zona que nada tiene que hacer, hay esas organizaciones como se llaman políticas, y abogados que están sacándoles el dinero, sabemos quienes son, entonces hay gente ajena al problema pero que se va a hacer solidario para sacar provecho político".

Al observar que la situación desborde el control político, fundamentalmente vemos a dos reacciones intermitentes de los grupos de poder. La primera es la cara suave, el discurso de la participación y de la inclusión. Allí, siguiendo la tradición liberal, se pone énfasis en la supuesta igualdad entre todos los humanos, fortaleciendo el discurso de la 'comunidad imaginada': "Deberían pensar en que todos somos cantón Riobamba, jurisdiccionalmente todos somos iguales, estamos en una misma provincia estamos en un mismo país" (Director de Agua Potable). Para mantener esta igualdad y el bienestar común de todos, entonces no deberíamos extrañarnos de que hay algunos (aquellos un poco menos iguales, en términos de Orwell) que tienen que sufrir. "Por el agua que se va a captar, es inevitable se debe hacer un tratamiento del agua, entonces hay que entender que alguien tiene que sacrificar, arrimar el hombro para el desarrollo del resto".

Pero las utopías liberales de la igualdad han sido desenmascaradas por los dirigentes indígenas. Además, las propias autoridades estatales cambian de tono y muestran la segunda cara, la más dura y violente, cuando los comuneros no aceptan el discurso de la participación y del bien común. En una carta dirigida a los dirigentes campesinos amenazan con la expropiación, en caso necesario con la violencia policial, sobre la cual el Estado tiene el monopolio. Argumentan que no puede ser que por el interés propio de un par de campesinos indígenas sin criterio técnico el bienestar de toda una ciudad tiene que postergar o arriesgarse. Nina Pacari analiza este fenómeno con precisión: "Hay un contenido racista inconsciente de no darles prioridad [...] como que son algunas familias nomás y a más de esto son indígenas nomás. Cuando se dice que 'para algunas familias indígenas no podemos parar el proyecto de toda una ciudad', hay un racismo de por medio porque se trata de comunidades indígenas, pero si fuera un terrateniente..... ". Es cierto, el desarrollo histórico y reciente del agua en los Andes se caracteriza por hechos repetidos en que unas pocas personas de poder político-económico profúndamente manipulan las políticas e intervenciones hídricas. En Alao hay varias haciendas, y no es muy difícil encontrar allí un terreno amplio y técnicamente apto para construir la planta de tratamiento. Rosa Guamán, dirigente campesina de Licto, ha experimentado este fenómeno durante todo su vida: "Siempre es así, les parece tan fácil de perjudicar a los más débiles, los minifundistas".

Sea con el discurso horizontal de la participación, sea con el más vertical de la violencia legitimada - ambos en términos del 'interés público' - los planes hídricos oficialmente establecidos no deben obstruirse, menos aún cuando los campesinos reclaman marcos normativos propios que no encuentran respaldo en la ley. El hecho de que las familias afectadas no tienen papeles oficiales de titulación de tierras y que han 'creado' sus derechos de agua mediante su labor en la construcción del sistema pero no tienen papeles otorgados por el Estado, significa que no tienen ninguna base para reclamar. Más bien, así va la lógica, al ofrecerles una compensación el Estado les hace un favor, no es un derecho. La legislación liberal, positivista y universal no reconoce anomalías y justicia propia que, según el Director de Agua Potable, es rasgo propio de los caníbales, no de los educados: "Mire, al estar nosotros en un Estado soberano creo que nosotros debemos ser, estar obligados a cumplir con las leyes de la República porque todos tenemos obligaciones, deberes, derechos y creo que debemos cumplirlos, no creo que nosotros debamos retroceder al canibalismo y hacer justicia con nuestras propias manos, entiendo que todos ahora tenemos la oportunidad de pensar, hemos estudiado, se pretende que todo el mundo sea educado. [...] Yo creo que las leyes son en algunos aspectos universales, siempre se están viendo el aspecto global, el aspecto general de la gente, los beneficios y las posibilidades de desarrollar. Creo que en todo el mundo el momento que se tiene que hacer un proyecto que abarque gran extensión, en el que abarque gran capital, en el que abarque soluciones por muchos años, se tiene que optar por las leyes y eso es lo que pasa aquí" (Director de Agua Potable).

Claramente, aún cuando las políticas oficiales de la descentralización en Latino América dan mucho peso a la institución del Municipio como representante más cercana y más fiel a las bases, esto no es ninguna garantía para aliviar la situación de los grupos marginados, y las comunidades campesinas e indígenas también conocen la otra cara de estas representaciones. Como observa uno de los dirigentes del comité de defensa de Tulabug: "Yo lo califico como un acto criminal, que no se puede concebir que el Municipio de Riobamba que representa al pueblo, está en contra del

pueblo y en contra de la cultura indígena: si no tenemos tierra no tenemos cultura y si no tenemos cultura no tenemos vida. Si el Municipio va a ejecutar este proyecto creo que las comunidades indígenas están dispuestas a defender inclusive con su sangre estas tierras".

A esta observación se suma Inés Chapi, argumentando que la descentralización en sí no asegura de ninguna manera la participación ciudadana. "Solo la lucha es la que nos ha de sacar en adelante, solo luchando podremos defender nuestros derechos, lo que nos corresponde. No porque somos indígenas, porque somos campesinas, nos van a venir atropellar nadie...". La situación es complicada, "...yo me temo de que va a ocurrir un enfrentamiento entre el Estado y los usuarios, los campesinos, porque como el Municipio es institución del Estado para ellos es fácil traer policías, traer al ejército y querer desalojar a la fuerza. Pero nosotros, claro, esta comunidad de aquí no es una sola comunidad, son 17 comunidades que se solidarizarían para apoyar aquí a los compañeros, pero me temo que debe haber una lucha bien fuerte, un enfrentamiento. [...] Se puede dar un enfrentamiento aquí, como el gobernador también está de parte del Municipio. Fácil es para el gobernador pedir a la policía, al ejército y que haya un enfrentamiento, ellos tienen armas, ellos tienen gases, en cambio nosotros como campesinos nosotros no tenemos nada de eso. Lo que nos defendemos es así reclamando nuestros propios derechos" (Inés Chapi).

Estas historias no tienen fin, solo fines temporales. Fue un gran alivio de todas las familias campesinas que las previsiones de la dirigente Inés esta vez no se hicieron realidad, y que el enfrentamiento con el ejército, que se ha producido tantas veces en la historia muy reciente de Licto, no se ha dado esta vez. Por la gran protesta campesina indígena, las autoridades municipales se vieron forzadas a presionar para que los técnicos diseñaran otra alternativa para la ubicación de la planta de tratamiento, en un terreno de una ex-hacienda (de Molobog, que de todas maneras ya estaba en proceso de vender sus terrenos). Aparentemente, la anteriormente proclamada "*única* opción técnica y económicamente viable" del discurso científico-positivista de los técnicos, no fue tan única. Como todo diseño de obras hidráulicas, fue una construcción político-social, una de las múltiples que se pueden concebir cuando la gente reclama y ya no acepta la hegemonía del positivismo y el primado de la reglas de la hidrocracia nacional y local.[40]

Caso 3: La Interjuntas frente a la Agencia de Aguas - la injusticia descentralizada

En medio del proceso de privatización y descentralización de las instituciones estatales encargadas de la cuestión hídrica en el Ecuador, desde 1994, el Estado armó una estructura nacional de gestión sin ninguna consulta popular. En la región central del país así se creó la Corporación Regional de Desarrollo Sierra Centro (CORSICEN) en las provincias de Chimborazo, Tungurahua y Cotopaxi. Cuando, después de dos años, el gobierno decidió 'recentralizar' la estructura, aglutinando las oficinas regionales de las tres provincias para establecer la sede central de CORSICEN en Tungurahua, surgió una gran protesta de las organizaciones de usuarios del agua en Chimborazo. No aceptaron el desplazamiento de la oficina de Riobamba, porque les dificultaría enormemente reclamar sus derechos y realizar sus trámites. A raíz de este conflicto surgió la creación de la Junta Provincial de Regantes, en 1997, para velar por los intereses de las organizaciones asociadas. Como resultado de su protesta se estableció una sede estatal en Chimborazo, CODERECH. Por razones de manipuleo político y falta de democracia interna y representatividad la Junta se debilitó, hecho que llevó a la creación de una plataforma de organizaciones de base mucho más activa, representativa y democrática: la organización provincial Interjuntas Chimborazo. Esta organización inter-sistemas, iniciado por las organizaciones intercomunitarias de Guarguallá-Licto, Chambo, Cebadas, Chingazo Pungales, Penipe , Quimiag y otras, agrupa a una gran cantidad de organizaciones locales, grandes y pequeños, todos mayoritariamente de familias minifundistas. Su objetivo es "... agrupar a todos los sistemas de riego y agua para consumo humano de la provincia y generar capacidad de defensa y propuesta política y legal de los usuarios. Busca además el fortalecer la capacidad de gestión de organizaciones de usuarios de sistemas de agua e impulsar espacios de interlocución, concertación, coordinación, capacitación, y debate" (Interjuntas 2004).[41]

[40] Poco tiempo después, el Estado no pudo cumplir con sus promesas financieras y hasta ahora el proyecto queda, con numerosos otros proyectos de gran escala, en la 'lista de espera'.

[41] Interjuntas tiene una relación de trabajo estrecha con la Comisión Permanente de Derechos Humanos, SNV, y el programa WALIR (Water Law and Indigenous Rights)

A la par de incidir, desde abajo, en la construcción de políticas y legislación hídricas, un tema principal de Interjuntas es la gestión de conflictos: entre usuarios y entre sistemas asociados, pero sobre todo entre grupos marginados y terratenientes así como entre los campesinos indígenas y el Estado. Allí su rol es de representante y defensor legal de los grupos marginados. Por la gran cantidad de conflictos, muchas veces a raíz de juegos de poder o por adjudicaciones de caudales irreales y no existentes por la Agencia de Aguas de Chimborazo, Interjuntas ha decidido establecer un centro de defensa de derechos y mediación de conflictos dentro de su federación. Allí, campesinos indígenas, muchos de los cuales no pueden pagar un abogado común, encuentran respaldo para sus reclamos. Allí también, los lideres campesinos junto con algunos abogados jóvenes solidarios se enfrentan con el gran problema que las estructuras de poder y las políticas hídricas del país han causado:

Mientras que los caudales se disminuyen y la demanda de la población y actores exógenos crece, hay más solicitudes para el registro de derechos al agua. Las Agencias de Aguas, sin embargo, no tienen la capacidad de monitorear los caudales realmente existentes en las fuentes y ríos – no existe un sistema de monitoreo de las tomas de agua, y la situación de personal habilitado para esto se ha empeorado después de las olas de privatización irresponsable. Aún así, muchas Agencias de Aguas siguen otorgando nuevas concesiones sin poder controlar ni la existencia de caudal suficiente, la extracción actual, o el uso de tomas no autorizadas. Muchas veces son los usuarios poderosos, como terratenientes o empresas agrocomerciales, los que logran conseguir nuevas concesiones; allí, en las sentencias de la Agencia de Chimborazo es común que la coima, el color de la piel y el estatus político-económico son factores decisivos. Luego, la sobre-adjudicación de derechos al agua causa nuevos conflictos (robo, destrucción de obras, distribución injusta, etc.), muchos de los cuales llegan al proceso judicial, donde es la misma instancia, la Agencia de Aguas, que tiene que 'hacer justicia' (Interjuntas 2004). La Agencia, con la limitada capacidad personal, además con sus prácticas discriminatorias, no está en la capacidad de resolver estos conflictos, y así sigue el círculo vicioso.

Es evidente como la Agencia de Aguas, que cae bajo el CNRH (Consejo Nacional de Recursos Hídricos) y que es una de las bases del programa de descentralización, constituye uno de los mayores problemas para los usuarios menos acomodados (Dávila et al. 2005). Como dicen los minifundistas, es regla casi general que la Agencia no respeta a las sentencias que ella misma ha otorgada (Interjuntas 2004). Muchas veces son maltratados por razones de clase (campesino), etnia (indígena) o género (cuando son mujeres). Además de los resultados injustas en la adjudicación de derechos y el alto costo (intransparente) de los trámites, el proceso de adjudicación es largo y muy inseguro. A mediados de 2003, el total de las personas empleadas en las oficinas de las Agencias es de sólo 84 técnicos, que tienen que tramitar la acumulación de las 21.000 solicitudes de concesiones y otras demandas legales; para fines de comparación: en todas las décadas anteriores se ha logrado registrar un total de 35.000 derechos hídricos (Hendriks et al. 2003; Cremers et al. 2005).

Los dirigentes y usuarios miembros de las organizaciones que constituyen Interjuntas, cansados de los muchos años de abuso, discriminación, corrupción y arbitrariedad por parte de la jefatura y la secretaría judicial de la Agencia de Aguas de Chimborazo, decidieron tomar acción colectiva para definitivamente acabar la injusticia. En enero 2005, 200 representantes de las organizaciones miembras fueron a Quito para denunciar el jefe de la Agencia ante el Secretario General del CNRH. Forzados por las protestas, el CNRH no podía hacer otra cosa que instalar una comisión de investigación para analizar las denuncias. El 24 de marzo, durante una reunión con CNRH en Riobamba, los dirigentes campesinos y jóvenes abogados presentaron una gran serie de casos de corrupción y racismo notorios, minuciosamente preparados en las semanas anteriores. Al mismo tiempo se llenaron las calles de Riobamba con centenares de campesinos regantes de toda la provincia, y entraron las salas del Consejo Provincial en una protesta masiva. El CNRH solo pudo decidir despedir al jefe y el staff abusivo de la Agencia de Aguas. A los dirigentes de Interjuntas se les propuso proponer el mejor candidato para reemplazar al Jefe de la Agencia. La federación presentó de candidato a una profesional de agua muy comprometida con la causa de los regantes comunes.

Sin embargo, después del cambio del gobierno nacional – producto del levantamiento nacional contra la presidencia – se cambia también la directiva nacional de CNRH, y por juegos políticos la misma nuevamente ratifica en su cargo al antiguo y corrupto Jefe de la Agencia de Aguas, desoyendo abiertamente los reclamos y demandas planteadas por las organizaciones de usuarias

de Chimborazo. Los usuarios campesinos e indígenas, nuevamente y con aún más ferocidad, deciden movilizarse frente a esta injusticia, y el 27 de junio más de 4.000 usuarios de agua de toda la provincia, se toman la Agencia de Aguas. Durante 16 días, y mediante turnos constantes para defenderse, ocupan la sede de la Agencia, hasta que por fin logren que su reclamo sea escuchado, que el Jefe sea destituida y que la Agencia se transforme en un órgano más justo, transparente y democrático (Interjuntas 2005, Dávila et al. 2005).

-0-0-0-0-0-

Los tres casos muestran no sólo que las políticas de descentralización no presentan ninguna garantía de una mejora en las relaciones hídricas y la toma de decisiones democrática sino también apuntan al gran peligro que puede producir la implementación de estas políticas en la práctica, sobre todo para los actores menos acomodados. Como dice Nina Pacari (com. pers., oct. 2004): "La descentralización según el modelo occidental ha estado en que se distribuya la toma de decisión un poquito mejor geográficamente, pero la forma de decisión siga siendo hegemónica". Tienden a canalizar el poder y la toma de decisiones hacia las mismas autoridades de siempre, pero ahora al nivel del gobierno local. La gran importancia de que estos poderes siguen siendo 'monitoreados' por los grupos de base - mediante control de las prácticas, acción colectiva y, si es necesario, resistencia - es fundamental para garantizar o instalar (suficiente grado de) democracia política, justicia distributiva, y respeto de los derechos campesinos e indígenas en la gestión de sus aguas. La descentralización y la redistribución del agua y del poder para la toma de decisiones necesariamente debe hacerse por medio de la participación ciudadana.

Allí, esta participación no es regalada y muchas veces no se basa en el diálogo abierto, transparente, habermasiano, entre iguales, en un ambiente de armonía. Las relaciones sociales y estructuras de poder existentes dan el trasfondo de la concertación. El caso andino muestra que la gran mayoría de las inversiones públicas en la gestión del agua se las realiza en beneficio de las áreas y los actores ya bien acomodados y más organizados. Muestra también que la acción pública y las instituciones estatales, nacionales o del gobierno local, no son neutras. El acceso a los recursos generalmente refleja los intereses de aquellos grupos que pueden influir en la construcción de las reglas locales y nacionales sobre el reparto.

Las luchas arriba analizadas también muestran que no son, como muchos observadores creen, una batalla simple entre intereses públicos y privados sobre el agua, ni tampoco es un conflicto entre regímenes comunales y privados con los primeros asociados con la tradición y los segundos con la modernidad. Los derechos, y las luchas sobre derechos y autoridad, no ejemplifican solamente la naturaleza inherentemente política del agua y su asociación cercana con las relaciones de poder, sino que en los Andes también están estrechamente asociados con identidades y significaciones culturales. De allí que, si bien lo que está en juego en estas luchas es la seguridad en la tenencia de agua, las luchas no son sólo por el agua misma. También lo son acerca de la representación y la toma de decisiones, acerca de significaciones culturales y etnicidad, acerca del derecho de autodefinirse y existir como entes colectivos e individuos, acerca de la igualdad y la diferencia, acerca del poder y de la identidad.

2.6 *Reflexiones*

Es llamativo como las nuevas propuestas y acciones de reforma hídrica en la región andina ligan el ámbito local con lo internacional. No sólo obedecen a una política de descentralización, supuestamente basado en principios de subsidiaridad, sino que también tienen como objetivo realizar un gobierno que facilita la interacción e intercambio entre el plano local, nacional e internacional mediante derechos y reglas compartidos entre todos. Es llamativo también como en las últimas dos décadas estas nuevas políticas internacionales, que pretenden democratizar la gestión del agua y descentralizar la toma de decisiones, se han impuesto sobre la región andina, con mucha agresividad y sin posibilidad de interferencia y control algunos de la gran mayoría de los usuarios y usuarias del agua.

Debajo de las premisas de eficiencia y racionalidad, como sucesoras de los enfoques y políticas estatistas, los procesos de individualización de la gestión colectiva y las políticas de privatización de derechos de agua crean un enorme peligro para las comunidades indígenas y

campesinas en los Andes. Esto también es la causa mayor para las recientes y muy intensas guerras de agua bolivianas, y las protestas masivas en Ecuador y Perú. Los programas de reforma política y legal de la gestión de recursos hídricos se fundamentan en la uniformización de las normas de gestión. Para facilitar el control burocrático, en la tradición de los hidrócratos, o para crear un mercado eficiente de derechos de agua, en la línea de los neoliberales, se considera necesario superar las prácticas de la población campesina andina que se denominan 'atrasadas' o 'no adecuadas a los objetivos comunes nacionales'. Según esta lógica, la eficiencia económica y social y el bienestar de todos incrementarían considerablemente si todos siguiesen el mismo discurso, con las mismas normas, y si existiesen reglas generales que se pueden aplicar a todos los sujetos de la misma manera. Por lo tanto, aún cuando se producen cambios legales para 'reconocer jurídico y políticamente' los derechos consuetudinarios y descentralizar el gobierno del agua, los fundamentos básicos y valores superiores que se mantienen son la generalidad y la homogeneidad legal.

La legitimación de esta generalidad se fundamenta en un supuesto objetivo común de los diversos sectores sociales con respecto a la gestión del agua: una armónica fusión de intereses e ideologías. Supone también la existencia de una institución o entidad de regulación imparcial, el Estado, el mercado, o últimamente, inclusive la plataforma multi-actor descentralizada y concertada, que vigile uniformemente y racionalmente los derechos de todos. Sin embargo, las experiencias en cuanto a los conflictos sobre el agua y su gestión en los Andes muestran lo contrario: la falta de respeto para los derechos locales dentro del marco legal y la falta de imparcialidad de las instituciones rectoras para la gestión del agua. No es difícil constatar que el argumento liberal de la igualdad ante la Ley, fundamental en todos los enfoques presentados, resulta ser un mito en la práctica legal de los países andinos - esto es ilustrado, por ejemplo, por la capacidad de los sectores hegemónicos de manipular legalmente los conflictos sobre los recursos naturales. Sin embargo, la *ideología* del argumento si es suficientemente fuerte como para contrarrestar las demandas de diversos grupos étnicos y sociales por un reconocimiento *real* del derecho de ser diferente. Esta ideología deslegitima la gestión del agua de acuerdo a las normas locales y organizaciones autónomas.

Tal como el modelo estatista, el discurso neoliberal deriva principalmente su fuerza y su legitimidad de su presentación despolitizada y la imposición de lo suyo como algo auto-evidente, pero además, construye e impone activamente una institucionalidad y lógica de su propia inevitabilidad. Al hacerlo, el modelo neoliberal no sólo asume y desea leyes universales, sino que activamente las establece. Aunque proclama 'decentralizar' y respetar el pluralismo legal y cultural existente, por ejemplo, en la gestión del agua, la coexistencia de una gran diversidad de reglas, leyes, derechos y obligaciones es activamente desalentada, ya que tal diversidad obstruiría las transferencias y ventas regionales e internacionales, lo que requiere de un marco legal uniforme. Las reglas y los derechos locales son consideradas anomalías que frenan las inversiones y el lucro. Por tanto, en la región andina, las políticas de agua mercantiles no remplazan a las políticas burocráticas, como comúnmente se ha sugerido en los discursos de la descentralización, sino que se complementan unas a otras al disciplinar y actuar en contra del pluralismo de los repertorios de derechos de agua. Así, las burocracias estatales son "reformadas" para proveer y pasar una legislación que permita que los mercados de agua emerjan. Los sistemas de derechos comunitarios y colectivos que no calzan en el cuadro neoliberal son, por definición, atrasados e ineficientes. Por lo tanto, son condenados a marchitarse y verse (sutilmente) incluidos en el mercado como algo con potencial para igualarse[42], o son forzados a juntarse al juego neoliberal en términos desiguales (Boelens y Zwarteveen 2005).

[42] Tanto en el modelo estatista (liberal), como en el pensamiento político neoliberal se asume que todos los actores relacionados con el agua se comportan como si fueran iguales. Para el último, tal suposición es crucial, ya que los mercados solo funcionan si todos los participantes actúan "como iguales". Los estándares de esta igualdad permanecen escondidos bajo la capa de la ciencia positivista. Tal escondimiento permite que los estándares y normas sean presentados como una inevitable ley natural. Las diferencias que realmente existen, caracterizadas por divisiones y diferenciaciones históricamente enraizadas en términos de poder de toma de decisiones, ingresos monetarios, habilidades aprendidas, información y educación, que fuertemente favorecen a las compañías privadas y a los actores de poder económico, se ignoran en el discurso o se presentan precisamente como el hueco sobre el cual hay que tender un puente para que los potenciales iguales se unan al juego mercantil.

Para aquellos sistemas indígenas y campesinos que tienen disposición de incluirse el análisis positivista llega a la conclusión de que el problema principal es que 'carecen de educación y reglas modernos para la gestión racional del agua' ya que tienen un atraso y falta de acceso a la legislación oficial. Por tanto, el discurso oficial sugiere que a través de la explicación - es decir, la capacitación legal - y el mejoramiento de los medios de comunicación y el acceso legal e institucional - mediante el desarrollo rural y del mercado - se debería posibilitar la inclusión de estos pueblos y de sus organizaciones de usuarios de agua, que se consideran excluidos del sistema normativo general, y consecuentemente, de los beneficios sociales de la sociedad nacional. Así se llega a la capacitación de los 'incapaces', la conscientización de los 'inconcientes' y la inclusión de los 'excluídos'.

Pero las prácticas actuales en el uso del agua y de los sistemas de derechos de agua en los Andes están profundamente embebidas en sistemas normativos, instituciones legales y sociales, redes políticas y ambientes agroecológicos plurales. La sugerencia fundamental de las políticas neoliberales de que los "derechos de agua" pueden ser de manera sencilla levantados y aislados de esta realidad compleja y de esta organización histórica de control, para poder "llevarlos al mercado", no puede ser tomada en cuenta de manera seria a menos que se acepte una destrucción o una transformación radical de las subsistencias locales. Las reformas de agua propuestas, aunque son presentadas como neutras y científicas, involucran modificaciones bastante drásticas de las estructuras sociales y políticas en las cuales están embebidos los sistemas de gestión de agua, y de las maneras en las que el agua es apropiada, distribuida y manejada. Si se implementan estas políticas, tales relaciones se ven dictadas por leyes, instituciones y mercados extracomunales.

Sin embargo, la lógica asimiladora basada en la 'normalización de los no normales' hace que muchos sectores sociales, en particular las comunidades indígenas y campesinas, no se reconozcan y no se sientan reconocidos. Aún cuando algunas constituciones si reconocen la multiculturalidad, esto generalmente no se traduce en criterios y procedimientos concretos en la legislación hídrica o agraria. Por ello, efectivamente, la última década se ha caracterizado por una auto-reorganización de la identidad andina e indígena, tanto en el campo de la lucha por una normatividad hídrica como en las sociedades andinas en general. Allí llegamos al cuarto enfoque de 'acción colectiva' descrita en la segunda sección: a la par de estrategias campesinas e indígenas dirigidas a la (re-)apropiación del recurso agua y la infraestructura asociada, también se produce una lucha por auto-definir las reglas, derechos y formas organizativas para la gestión del agua, así como por la legitimidad de la autoridad local para establecer y sancionar estos derechos y reglas. Además, es una pugna en torno a la construcción de sus propios discursos sobre 'la comunidad', 'lo andino' y 'lo indígena', y las políticas para regular el agua de manera concomitante. Obviamente, este proceso estratégico-político, que busca una contra-identificación dinámica, no necesariamente está basado sólo en verdades y derechos 'tradicionales', ni solamente en normas y reglas 'locales'. El mismo proceso de reclamar la redefinición del derecho positivo también es y nutre a la construcción, re-invención y transformación de los mismos 'derechos consuetudinarios', así como que es una afirmación y también reconstrucción de las identidades locales y culturas hídricas.

Simultáneamente es una lucha en contra de las políticas de reconocimiento hidrocrático y neoliberal que buscan domesticar esta variedad de reglas y derechos 'desobedecientes y no-planificables'.[43] Las luchas por el agua en los Andes, entonces, también son luchas para lograr una especificidad y una autonomía locales, para ejercer el derecho de autodefinir la naturaleza los problemas del agua así como para decidir sobre la dirección de las soluciones. Las luchas son una crítica de la propia racionalidad de las reformas y activamente cuestionan sus pretensiones de neutralidad y objetividad. Muestran que las opciones de políticas que están justificadas sobre la base de la neutralidad y la eficiencia, en la práctica real funcionan para promover una muy clara agenda política. Evidencian también, como se ha ilustrado con algunos casos locales, que una simple política de descentralización y subsidiaridad sin cambiar las relaciones de poder y las estructuras y comportamientos hidrocráticos en los gobiernos locales refuerza en vez de

[43] Aquí es importante constatar que en los Andes hay muchas formas de gestión del agua que a primera vista parecen ser sujetos de una influencia fuerte del sistema legal oficial y las nuevas políticas de reconocimiento y descentralización, mientras que un análisis más profundo muestra lo contrario. No obstante la supuesta homogeneidad y formalidad de estas normas 'para la representación externa' y la 'protección formal' existe una tremenda diversidad organizativa y normativa bajo esta superficie.

cuestionar los abusos existentes. Necesariamente deben rediseñarse estas estructuras institucionales, tanto nacionales como locales. Además tendrían que complementarse con redes e instituciones de base, estrategias interactivas, e instrumentos democráticos que explicitan y presionan por cambiar las relaciones de poder y que vigilan los resultados.

Para ello, en vez de enfoques y políticas que se basan en el positivismo y la objetivación, para entender la lógica campesina e indígena de gestión de agua, y cuestionar las reformas hídricas y proponer alternativas, se requiere de perspectivas que ponen énfasis en la pluralidad y la contextualización. En vez de naturalizar las cuestiones políticas de la distribución y control de los recursos naturales se necesita un reconocimiento mucho más explícito de las políticas y el poder en las discusiones sobre reformas de agua. Hace falta permitir un enfoque sobre las normas reales y prácticas que rodean la distribución hídrica, uno que enfoca el contenido específico de los derechos y leyes de aguas como fuentes y productos de las culturas dinámicas y luchas sociales. Así, efectivamente, la lucha por el control del agua es tanto una lucha por una justicia distributiva como una lucha discursiva y política por el reconocimiento y la legitimidad.

Bibliografia

Albó, Xavier
2002 "Iguales aunque Diferentes". La Paz: CIPCA

Anderson, Benedict
1983 "Imagined Communities: Reflections on the Origin and Spread of Nationalism". London: Verso.

Assies, Willem, Gemma van der Haar & André Hoekema, eds.
1998 "The Challenge of Diversity. Indigenous Peoples and Reform of the State in Latin America". Amsterdam: Thela Thesis Publishers.

Assies, Willem, ed.
2003 "Gobiernos locales y reforma del Estado en América Latina". Zamora, Michoacán: El Colegio de Michoacán.

Baud, Michiel
2005 "Indigenismo y movimientos indígenas en la historia de los Andes". Borrador, a publicarse en: *Políticas Hídricas, Derechos Consuetudinarios e Identidades Locales*. R. Boelens, A. Guevara, D. Getches eds., WALIR, Lima: IEP.

Bauer, Carl
1997 "Bringing water markets down to earth: the political economy of water rights in Chile, 1976- 95". en *World Development*, vol. 25, no. 5. Pp. 639-656.
1998 "Slippery property rights: Multiple water uses and the neoliberal model in Chile, 1981-1995". En *Natural Resources Journal* 38: 110-155.

Beccar, Lily, Rutgerd Boelens & Paul Hoogendam
2002 "Water rights and collective action in community irrigation". en *Water Rights and Empowerment*, Boelens & Hoogendam eds., pp. 1-21. Assen: Van Gorcum.

Benda-Beckmann, Franz von, Keebet von Benda-Beckmann & Joep Spiertz
1998 "Equity and legal pluralism: taking customary law into account in natural resource policies". En: Searching for equity. R. Boelens & G. Dávila, eds., Pp. 57-69. Assen: Van Gorcum.

Boelens, R. & G. Dávila, eds.
1998 "Searching for Equity. Conceptions of justice and equity in peasant irrigation". Van Gorcum, Assen.

Boelens, Rutgerd & Bernita Doornbos
2001 "The Battlefield of Water Rights. Rule Making Amidst Conflicting Normative Frameworks in the Ecuadorian Highlands". En *Human Organization*, 60 (4): 343-355.

Boelens, Rutgerd & Paul Hoogendam, eds.
2002 "Water Rights and Empowerment". Assen: Van Gorcum.

Boelens, Rutgerd & Margreet Zwarteveen
2005 "Anomalous water rights and the politics of normalization. Collective water control and privatization policies in the Andean region". En: *Liquid Relations*. Roth, Boelens, and Zwarteveen, eds., New Brunswick, New Jersey, London: Rutgers University Press.

Boelens, Rutgerd, Ingo Gentes, Armando Guevara Gil & Patricia Urteaga
2005 "Special Law: Recognition and Denial of Diversity in Andean Water Control". En: *Liquid Relations*. Roth, Boelens & Zwarteveen, eds., New Brunswick, New Jersey, London: Rutgers University Press.

Boelens, Rutgerd, Axel Dourojeanni & Paul Hoogendam
2005 "Improving Water Allocation for User Communities and Platforms in the Andes". capítulo a publicarse en *Institutional Options for Improving Water Management*, B. Bruns, C. Ringler & R. Meinzen-Dick eds., Washington D.C. : IFPRI.

Bourdieu, Pierre
1998 "Acts of resistance against the tyranny of the market". New York: The New Press.

Bustamante, Rocio
2002 "Legislación del Agua en Bolivia". WALIR: Centro AGUA / UMSS, CEPAL & Wageningen University, Cochabamba.

CEPAL
1992 "Bases conceptuales para la formulación de programas de manejo de cuencas hidrográficas". CEPAL / United Nations, Santiago, Chile.

Conaghan, C.M., J.M. Malloy & L.A. Abugattas
1990 "Business and the ' boys': the politics of neoliberalism in the Central Andes". En *Latin American Research Review* 25 (2): 3-30.

CONAIE
1996 "Propuesta Ley de Aguas". CONAIE, Quito.
Cremers, Leontien, Marjolein Ooijevaar & Rutgerd Boelens
2005 "Institutional reform in the Andean irrigation sector: Enabling policies for strengthening local rights and water management". En *Natural Resources Forum* 29: 37-50.

Dávila, Gloria
2005 "De la mediación a la movilización social: Análisis de los conflictos de agua de riego en Chimborazo". WALIR, Riobamba/Quito
Degregori, Carlos Iván ed.
2000 "No hay país más diverso. Compendio de antropología peruana". IEP / Red para el Desarrollo de las Ciencias Sociales. Lima
Dourojeanni, Axel
2000 "Water allocation among competing uses with a basin perspective". Ponencia para el Secundo Foro Mundial del Agua, Marzo 2000, La Haya.
Dourojeanni, Axel & Andrei Jouravlev
1999 "El Código de Aguas en Chile: entre la ideología y la realidad". Santiago de Chile, CEPAL, Serie Recursos Naturales e Infraestructura, No. 3.

FRH
2004 Proyecto de Ley Reformatoria de la Codificación de la Ley de Aguas: 6 aspectos claves. Foro Nacional de los Recursos Hídricos, Quito.

Galárraga-Sánchez
2000 "Informe Nacional sobre la Gestión de los Recursos Hídricos en el Ecuador". Quito : Foro Nacional de RR.HH.
Gelles, Paul H.
1998 "Competing cultural logics: State and 'indigenous' models in conflict". En *Searching for Equity*, R. Boelens & G. Dávila, eds., pp.256-267. Van Gorcum, Assen.
2003 "Indigenous peoples, cultural identity and water rights in the Andean nations". WALIR: CEPAL/Wageningen University / University of California, Wageningen & Riverside.
Gelles, Paul H. & Rutgerd Boelens
2003 "Water, Community and Identity: The politics of cultural and agricultural production in the Andes". En *Imaging the Andes: Shifting margins of a marginal world.* T Salman & A. Zoomers eds., CEDLA Latin America Studies 91, Aksant / CEDLA, Amsterdam.
Gentes, Ingo
2000 "Culturas étnicas en conflicto. El Código de Aguas y las comunidades indígenas en el Norte Grande/ Chile". En *Revista Américas* 4 (16): 7-49
2002 "Estudio de la Legislación Oficial Chilena y del Derecho Indígena a los Recursos Hídricos". WALIR: CEPAL & Wageningen University, Santiago de Chile.
Gleick, P.H., G. Wolff, E.L. Chalecki, & R. Reyes
2002 "The new economy of water. The risks and benefits of globalization and privatization of fresh water". Pacific Institute for Studies in Development, Environment and Security.
Goldman, Michael
1998 "Introduction: The political resurgence of the commons". En: *Privatizing nature. Political struggles for the global commons*, ed. M. Goldman. London: Pluto Press.
Guevara G., Jorge Armando, Iván Vera D., Patricia Urteaga C. and Gustavo Zambrano
2002 "Estudio de la Legislación Oficial Peruana sobre la Gestión Indígena de los Recursos Hídricos". Indigenous Water Rights, Local Water Management, and National Legislation. WALIR Studies, Vol. 2, 101-131. Wageningen: Wageningen University & UN CEPAL.

Hale, Charles R.
2002 "Does multiculturalism menace? Governance, cultural rights and the politics of identity in Guatemala". En *Journal of Latin America Studies* 34 (3): 485-524.
Hendriks, Jan
1998 "Water as private property. Notes on the case of Chile". En *Searching for Equity*. R. Boelens & G. Dávila eds., pp. 297-310. Assen: Van Gorcum.
Hendriks, Jan, Rodrigo Mejía, Hugo Olázaval, Leontien Cremers, Marjolein Ooijevaar y Paulina Palacios
2003 "Análisis de la situación del riego en la República del Ecuador". Mission Report, WALIR, Quito.

InterJuntas
2004 "Centro de Defensa legal e Intermediación de conflictos sobre el agua". Propuesta de Colaboración entre WALIR, InterJuntas y Com. Perm. de Derechos Humanos, Riobamba.

IPROGA
1996 "Metodología para la elaboración de planes maestros de cuencas". IPROGA, Lima.

Lynch, Barbara D.
1993 "The Bureaucratic Tradition and Women's Invisibility in Irrigation.' Ponencia 24th Chacmool Conference, pp. 333-342. Alberta: University of Calgary Archeological Association.

MacCay, Bonnie J. and S. Jentoft
1998 "Market or Community Failure? Critical Perspectives on Common Property Research". En *Human Organization* 57 (1), pp. 21-29.

Moore, Mike
1989 "The fruits and fallacies of neoliberalism: The case of irrigation policy". En *World Development* 17 (11): 1733-1750.

Moore, Sally F.
1973 "Law and social change: the semi-autonomous social field as an appropriate subject of study". En *Law and Society Review 7(4).*

Pacari, Nina
1998 "Ecuadorian water legislation and policy analyzed from the indigenous-peasant point of view". En *Searching for equity.* R. Boelens & G. Dávila, eds., Pp. 279-287. Assen: Van Gorcum.

Palacios, Paulina
2002 "Estudio nacional de la Legislación Oficial y los Marcos Normativos Consuetudinarios referente a la Gestón Indígena de los Recursos Hídricos". WALIR: CEPAL & Wageningen University, Quito.

Peña, Francisco, ed.
2004 "Los pueblos indígenas y el agua: desafios del siglo XXI". El Colegio de San Luis, WALIR, IMTA. Obranegra Editores: Mexico D.F. and Bogotá, Colombia.

Perreault, Thomas
2004 "State restructuring and the scale politics of rural water governance in Bolivia". A publicarse En *Environment and Planning A.*

Ploeg, Jan Douwe van der
1998 "Peasants and power". En *Searching for equity.* R. Boelens & G. Dávila, eds., Pp. 39-45. Assen: Van Gorcum.
2002 "Virtual farmer". Assen, The Netherlands: Van Gorcum

Rap, Edwin, Philippus Wester & Luz Nereida Pérez-Prado
2003 "The Politics of Creating Commitment: Irrigation Reforms and the Reconstitution of the Hydraulic Bureaucracy in Mexico". En *The Politics of Irrigation Reform,* Mollinga & Bolding eds.. Ashgate: Aldershot.

Roth, Dik, Rutgerd Boelens & Margreet Zwarteveen (eds)
2005 "Liquid Relations. Contested Water Rights and Legal Complexity". New Brunswick, New Jersey, London: Rutgers University Press.

Stavenhagen, Rodolfo & Diego Iturralde, eds.
1990 "Entre la ley y la costumbre. El derecho consuetudinario indígena en América Latina". Mexico City: Instituto Indigenista Interamericano e Instituto Interamericano de Derechos Humanos.

Swyngedouw, Erik
2003 "Privatising H_2O. Turning local water into global money". En *Austrian Journal of Development Studies* 19 (4): 10-33.

Trawick, Paul
2003 "Against the privatization of water: An indigenous model for improving existing laws and successfully governing the commons". En *World Development* 31 (6): 977-996.

Urteaga, Patricia, Iván Vera & Armando Guevara
2003 "Estudio sobre las reglas y regulaciones indígenas y consuetudinarias para la gestión de los recursos hídricos en el Perú". Borrador, WALIR. Wageningen/ Lima/ Santiago: Wageningen University & UN CEPAL.

Vera, Juana
2005 "Género, etnicidad y derechos de agua en las legislaciones hídricas y normatividades locales. Un estudio comparativo de Perú, Bolivia y Ecuador". Universidad de Wageningen, WALIR : Países Bajos, Wageningen.

Vidal, Ana María
1990 "Derecho oficial y derecho campesino en el mundo andino". En *Entre la Ley y la Costumbre*, Stavenhagen & Iturralde eds., Mexico City: Instituto Indigenista Interamericano & Instituto Interamericano de Derechos Humanos.
Vos, Jeroen
2003 "Metric Matters. Water control in large-scale irrigation in Peru". PhD-thesis Wageningen University.

Warner, Jeroen & Alejandra Moreyra (eds.)
2004 "Conflictos y Participación. Uso múltiple del agua". MSP / WALIR. Montevideo: Nordan
Wester, Flip & Jeroen Warner
2002 "River basin management reconsidered". En *Hydropolitics in the African world: A southern African perspective*, eds., A. Turnton and R. Henwood, 61-71. Pretoria: AWIRU.
Whitaker, Morris D.
1994 El rol de la agricultura en el desarrollo económico del Ecuador. Quito: IDEA.

Yrigoyen, Raquel
1998 "The constitutional recognition of indigenous law in Andean countries". En *The Challenge of Diversity,* Assies, Van der Haar & Hoekema eds., Amsterdam: Thela Thesis Publishers.

Zoomers, Annelies, and Gemma van der Haar (eds.)
2000 "Current Land Policy in Latin America. Regulating land tenure under neo-liberalism". Amsterdam: KIT.
Zwarteveen, Margreet
1997 "Water: from basic need to commodity: a discussion on gender and water rights in the context of irrigation". En *World Development* 28 (8):1335-1349.
Zwarteveen, Margreet & Rutgerd Boelens
2005 "Rights, meanings and discourses: Gender dimensions of water rights in diverging regimes of representation in the Andes". En: *Fluid Bonds: Views on gender and water*, K. Lahiri-Dutt ed., Calcutta: Stree.

3 Cultural Politics, Communal Resistance and Identity in Andean Irrigation Development[44]

RUTGERD BOELENS and PAUL H. GELLES[45]

This article uses two case studies to illustrate how Andean irrigation development and management emerges from a hybrid mix of local community rules and the changing political forms and ideological forces of hegemonic states. Some indigenous water-control institutions are with us today because they were consonant with the extractive purposes of local elites and Inca, Spanish and post-independence Republican states. These states often appropriated and standardized local water management rules, rights and rituals in order to gain control over the surplus produced by these irrigation systems. However, as we show in the case of two communities in Ecuador and Peru, many of these same institutions are reappropriated and redirected by local communities to counteract both classic 'exclusion-oriented' and modern 'inclusion-oriented' water and identity politics. In this way, they resist subordination, discrimination and the control of local water management by rural elites or state actors.

Keywords: Andes, water control, collective action, identity, cultural politics, resistance

3.1 *Introduction*

Against a historical and theoretical backdrop concerning the cultural politics of irrigation development, our article compares local and state norms for managing water in two Andean communities. In addition to detailing different political, economic and cultural forces that affect irrigation management and development in these communities, we examine the ideologies that modernizing nation-states extend to irrigation systems on their periphery. These ideologies claim to work to the benefit of these systems and the communities dependent upon them, while in fact they often serve the controlling interests of the state and national and international power holders. Our article demonstrates that local communities dynamically resist these subordinating water and identity politics through different means.

In large part the product of each nation's colonial and postcolonial history, national irrigation institutions and policies in the Andean region are tied to an international bureaucratic tradition of development (Lynch, 1988). Notwithstanding the last decade's shift to neo-liberal economic policies and state downsizing, official policies have often used decentralization discourses and privatization programs to strengthen, not weaken, their control over local water management. This was done by prescribing new 'rational' forms of water management, and by transferring responsibilities while maintaining decision-making power. The main pillars of the bureaucratic tradition remain in place: the preponderance of technocratic 'expert' knowledge, top-down rule-making and the use of system design and 'modern' management models based on the class, cultural and gender norms of the designers, not the users (Scott, 1990; Diemer and Slabbers, 1992; van der Ploeg and Long, 1994; Escobar, 1995; Bauer, 1997; Zwarteveen, 1997; Pacari, 1998).

After providing the larger historical and theoretical contexts, we illustrate the dynamic political struggles found in highland water control and development through two case studies, one from Ecuador (Licto) and the other from Peru (Cabanaconde). The two cases were chosen because they illustrate both covert and overt forms of domination by outsiders as well as differing local strategies of resistance. Our general argument is that changes in local normative systems must be understood historically in relation to the cultural, political and economic foundations of Andean society, as well as in relation to diverse contemporary power structures within which local irrigation systems are generated, reproduced and transformed. Imperial and postcolonial states appropriated 'indigenous' water-management norms and expanded upon them to legitimate their authority and

[44] Published in Bulletin of Latin American Research, Vol. 24, No. 3, pp. 311–327, 2005
[45] Department of Anthropology, University of California, Riverside, USA

effectively organize surplus extraction. However, our article shows that diverse forms and rules of water management, such as water rights creation mechanisms in Licto and dual organization in Cabanaconde, have been reappropriated by indigenous peasants and now serve counter-hegemonic purposes in these and many other highland communities.

3.2 *The Appropriation of Local Beliefs and Institutions by Inka and Spanish Regimes*

The rituals, beliefs, norms and institutions for collective action associated with Andean communities are those most easily exoticised and romanticized in representations of the Andes. Conversely, critiques of such representations often relegate Andean livelihood strategies and worldviews to the margins, thus trivializing a key component of highland cultural identity. Forged within indigenous and Iberian colonial contexts, Andean livelihood strategies and practices are dynamic and vary greatly from place to place, interacting with other cultural spheres and political ideologies (Gelles and Martínez, 1993; Baud, Konings, Oostindie, Ouweneel and Silva, 1996; Baud, 1997). But even the seemingly autochthonous, local worldviews are often not entirely indigenous to the places where they are practiced, but were forged in a colonial context, albeit that of an indigenous empire, the Inka.

Local practices and beliefs of water control, in both the technical and cultural sense, were connected to wider 'identification policies' and embodied political processes of incorporation and standardization. For example, local mountain cults (often directed to sources of irrigation water) were strongly linked to beliefs about primordial origins and to ethnic identities; these cults were symbolically appropriated by the Inka Empire and incorporated in the broader framework of Inka state religion. The empire used the most local and primordial of religious beliefs to establish its legitimacy and extend its hegemony throughout the Andes. So, too, with water itself.

The Inka claimed Lake Titicaca, the largest body of water in the Andes, as the source of its imperial origin. This was an extension of the widespread belief that the ancestors of local communities and polities originated from particular mountains, springs, lakes and other sources of water (Sherbondy, 1998). By appropriating Lake Titicaca as its origin place, the Inka Empire made itself the centre of this hydrological cosmovision. While their elaborate road system connected the most remote areas to a centralized power apparatus in a military and tribute-paying sense, the symbolic incorporation of all local water sources into one, centralized religious and hydrological presentation became a powerful ideological tool.

We also find that pre-Inkaic forms of cultural and social dualism were appropriated and expanded upon by the Inka state as a means to legitimate its power (by using an existing symbolic and ritual resource, that is, dualism), to organize productively subject peoples and nations (they and their resources were divided along dual lines) and to extract surplus production (tributation was organized along dual lines, i.e., through two ethnic chieftains assigned to each conquered group). Indeed, the dual spatial divisions, that is, opposed halves or moieties (*anansaya/urinsaya* or upper/lower moiety) found in many Andean communities today, are a legacy of Inka and Spanish domination (Gelles, 1995). Under the Inka, for example, this classification was central to the social and spatial organization of the Inka Empire (Sherbondy, 1982, 1998; Urton, 1990; Zuidema, 1990), including the irrigation systems and other productive resources of the distinct peoples they conquered. Because different social and cultural dualisms were present in many pre-Columbian polities, Inka dual organization restructured the resources and people of the conquered areas in a way that was consonant with pre-existing worldviews. Such ideological control facilitated the extraction of resources and surplus value along these dual lines; the Spaniards later appropriated many of these dual divisions for their own extractive purposes (see Gelles, 2000, for more detail).

Because of its key role in the organization of production, and because it even had some affinity with Spanish models of social and political organization, the Spanish state appropriated the saya divisions, which continued to be used as a means of extracting surplus from Andean communities. Today, a variety of activities in many villages and towns throughout the highlands of Ecuador, Bolivia and Peru are still organized along dual lines. As we will see in the second case study below, the saya division often finds its most explicit expression in local models of irrigation.

Another important local norm that was appropriated by both the Inka and Spanish colonizers was the ancestral principle regarding access to irrigation facilities and the creation of water rights. Water users earn water rights and create collective hydraulic property by investing their labor and resources in the construction and maintenance of irrigation facilities (Boelens and Hoogendam, 2002). Today, as we will see in our first case study, this mechanism of water rights creation remains a leading principle in Andean communities. Yet, we also find that the collective labor of local communities was also used for extractive purposes by Inka and Spanish rulers, as well as by local elites: communal labor benefiting the local populace was thus transformed into corvée labor.

In sum, mountain cults, cultural categories based on dualism, the creation of water rights and hegemonic models of water management have conditioned each other in complex and variable ways over the last centuries. Local cultural orientations, symbolically and administratively incorporated into state systems, were active agents in the development and organization of centralized political authority. Today, however, modernizing nation-states have other means of extracting surplus production and other models for organizing irrigation.

3.3 *Imagined Communities and the Cultural Politics of Andean Irrigation Development*

In the Andean nations today, irrigation bureaucracies and the politics of development must be understood in the context of state policies which reflect and deploy the political will and cultural hegemony of a dominant ethnic group, one which has controlled nation-building processes since Independence (in this case since the early nineteenth century). As Herzfeld, in a different context, puts it, 'Nationalist ideologies usually lay claim to some kind of constructed "national character". Their bureaucracies have the task of calibrating personal and local identity to this construct' (1992: 3). In a word, the institutional cultures generated within irrigation bureaucracies are inevitably shaped by the particular kind of 'imagined community' (Anderson, 1983) to which they belong (Maybury-Lewis, 1982; Arce and Long, 1999).

As such, national irrigation and other bureaucracies are directly tied 'to long established forms of social, cultural, and racial exclusion in everyday life' (Herzfeld, 1992: 13). They treat particular individuals and groups differentially, depending on whether they are seen as sharing the bureaucrats' social world and cultural orientations; this is often expressed with metaphors of race and bloodlines. State officials usually ignore indigenous models of resource management not only because of the alleged superiority of 'modern' Western cultural forms and organization, but because the power holders and dominant cultures of these nations regard indigenous peoples as racially and culturally inferior (Gelles, 2000). And, as Lynch (1993) and Boelens and Zwarteveen (2002) have shown, this devaluation and exclusion extends to women, as the gender discrimination found in the field and in irrigation offices is part and parcel of this bureaucratic tradition.

Here, we need to examine an important change that clearly differentiates power relations in the Republican states from their Inka and Spanish colonial predecessors: there is a move from political exclusion to an imagined political 'inclusion' of indigenous peoples, from a discourse of racial (and thus 'natural' social) differentiation to a discourse of equality[46] In addition to appropriating local cultural norms for their own extractive purposes, the Inka emperors and other indigenous leaders, as well as the kings, *conquistadores* and *hacendados* during the Spanish colonial period, differentiated and elevated themselves by *excluding* the subordinated classes from social life, services and the public sphere (Flores Galindo, 1988; Bolin, 1990; van der Ploeg, 1998). Many

[46] It is important not to oversimplify the issue of 'exclusion' in prerepublican eras. For example, in the colonial era, Indians were considered 'miserable but human' and the need for a legal system of guardianship was proposed. As Guevara (1993) has observed, a system of 'miserable-ness' was established, which was discriminatory, but which was also designed to protect Indians from other colonial agencies. Colonial law was established in paternalistic, clientelistic terms, and indigenous peoples had to operate under two legal systems: that of the 'Republic of Spaniards' and that of the 'Republic of Indians'. In this regard, both juridical plurality and interlegality were daily situations in the colonial world (Flores Galindo, 1988; Guevara, 1993; Salman and Zoomers, 2003); certain aspects of the relationship between these two 'Republics' even reflected a pact of reciprocity (Platt, 1982). So, then, at the same time that indigenous communities' water resources were exploited and usurped, their 'rights, uses and customs' were also defended, for example, in the Laws of the Indies and by decisions of the Crown.

different means, including public displays that glorified and reified the might of the groups in power, reinforced this differentiation and social exclusion. In the postcolonial area, the opposite occurs with the establishment of the new republics: it is not so much the powerful authorities and landlords that are made 'visible', but rather the common people, including those living in peasant and indigenous communities, who are now included as 'citizens' in the national project. Indigenous peasants thus become 'key target groups' and 'subjects of development', and are brought to the fore, by means of a Foucauldian 'disciplining', 'participatory' power of 'equalizing normalization', which is present in everyday interactions; 'it actually manifests and reproduces or transforms itself in the workplaces, families and other organizational settings of everyday life' (Foucault, 1980). Yet, the powerful groups that benefit from this 'inclusive' power, as well as the new mechanisms and rules of subordination, in fact remain invisible (Achterhuis, 1988).

New irrigation legislation and state policies are thus often an expression of postcolonial equality discourses; inclusive power strategies gradually get the upper hand, in some instances completely replacing earlier exclusive strategies, at others joining forces with them. As De la Cruz (1993) observed, 'the principle of equality before the law is valid for the identical and profoundly unjust for the diverse' (Stavenhagen and Iturralde, 1990; IUAES-CFLLP, 2000). 'Participation' and 'equality' as citizens in mainstream society becomes an important and subtle tool of subordination. This horizontal, disciplining power functions because it penetrates people and society as a whole. 'This power is exercised rather than possessed; it is not a "privilege", acquired or preserved, of the dominant class, but the overall effect of its strategic positions – an effect that is manifested and sometimes extended by the position of those who are dominated' (Foucault, 1995).

Thus we see, for example, that in the Andes and many world regions, irrigation technicians and development professionals introduce virtually the same irrigation techniques, knowledge and norms (developed in Western research centers, universities and development enterprises). But they are not just 'imposed' in a top-down way: in many instances, it is the indigenous peasants *themselves,* in the Andes and elsewhere, who ask for this same technology, in order to 'progress' and leave behind their traditional 'backward' technology, in order to become like the western-oriented, '*modern* farmers, in order to gain economic parity' (van der Ploeg and Long, 1994; Escobar, 1995; Boelens, 2003).

In this way, power in modern nation-states seeks for the *inclusion*, rather than the *exclusion* of Andean communities, indigenous peasants and other oppressed classes (Achterhuis, 1988; Boelens and Dávila, 1998). At the same time, this 'uniformity' and 'equality' supposedly makes it easy to measure these social groups: they are individualized, classified and made 'cases' according to the ways that they do or do not fit the model. Yet, their participation often results in disappointment, in social and cultural disintegration, and in their being defined as 'permanently backward people', due to the impossibility of meeting the norms for being equal. In the words of Fanon (1963: 163): 'Bourgeois ideology [. . .] which is the proclamation of an essential equality between men, manages to appear logical in its own eyes by inviting the submen to become human, and to take as their prototype Western humanity as incarnated in the Western bourgeoisie. [. . .] The Western bourgeoisie, though fundamentally racist, most often manages to mask this racism by a multiplicity of nuances which allow it to preserve intact its proclamation of mankind's outstanding dignity'.

Another clear example of this is found in the normalizing, 'equalizing' and categorizing properties of neo-liberal market ideologies penetrating the Andean nations, including the legal and policy frameworks regarding water management. Neo-liberal economic principles are, on the one hand, imposed on Andean states by international institutions and national power groups, but, on the other hand, many of these basic principles have been adopted and internalized by Andean communities, penetrating and subtly transforming local management forms and often disarticulating indigenous water control. The gradual individualization of land and water rights, the commoditization of labor and exchange relationships in local water control and the acceleration of monetary water rights transactions and the demise of customary rights acquisition mechanisms are all examples of this transformation. Thus, the deployment of secular, rational, universally applicable irrigation models, supported today by water management privatization ideologies, is a powerful means by which contemporary nation-states and private interest sectors extend their control.

In sum, it is clear that contemporary nation-states employ a new and different symbology of power – espoused in modernization and development discourses as well as in neo-liberal

economic policies, which aims to 'include', not to 'exclude'; it pretends to provide universal benefits – while in fact extending state control and the cultural orientations of national and international power holders. This does not mean that vertical, exclusive power strategies have disappeared. Rather, inclusive and exclusive power strategies are the two, changing sides of the same coin, one that sometimes shows its 'soft', participatory face while at other times appearing as an outright oppressive, top-down strategy. Within this context, the recognition and balanced valuation of local beliefs and practices is necessarily precluded because any legitimization of these local norms calls into question the state's and market ideology's supposed monopoly on rationality and legitimate culture.

3.4 *Constructing Identity and Water Rights in an Ecuadorian Irrigation System*

Licto, the name of a highland area in the Chimborazo province of Ecuador, encompasses 28 indigenous rural communities; it is also the name of the main town. In these communities, which are located between 2700 and 3600 m above sea level, demographic pressure has led to the rapid degeneration of natural resources. Consequently, subsistence agriculture, carried out primarily by women, does not meet basic needs. Intermittent migration and wage labor, especially by men, is a necessary complement to local production.

The total population of Licto is 13,000; 90 per cent are indigenous and ten per cent *mestizo* (mixed). The latter, who traditionally constitute the local elite, generally reside in the town of Licto. As in many Andean regions, there is a long history of white mestizo landowners and other local power holders subordinating the indigenous communities. The situation has been characterized by discrimination and exploitative trade relations; so, too, collective labor investment was until recently expropriated by these landlords to serve their private economic goals.

Although the forms and relationships of exploitation have shifted in the last few decades, poverty and ethnic and class-based discrimination endure. There have been countless promises from outsiders and development institutions to help these indigenous communities, and just as many disappointments. Therefore, when local communities, through the rural indigenous Corporation of Rural Organizations of Licto (CODOCAL), were invited in 1989 to take part in an ambitious irrigation project, many local indigenous residents were wary. Indeed, it was precisely the white-mestizo people living in Licto town who had promoted this project through their contacts with the Ecuadorian Institute of Water Resources (INERHI), at that time the governmental irrigation agency. Nevertheless, some indigenous leaders from the communities, and many poor women from the town of Licto, also saw this project as a potential means to alleviate their poverty and to challenge existing power structures.

INERHI had been working on the studies and execution of the system since 1974. It was a classic example of the kind of vertical design and implementation reviewed in the last section, one that completely excluded the rural population from any decision-making. In their offices in Quito, technical staff who were completely unfamiliar with rural Licto provided the technical and organizational designs, which were presented in 1990 as 'the final designs'.

According to the plans, the main canal would first benefit the town's mestizos, some 500 ha at the head-end of the system. This would yet again weaken the situation of the indigenous communities, located at the tail-end of the system, thus reinforcing prevailing power structures. And contrary to local norms, the design would distribute water to irrigators according to the size of their holdings, regardless of their active labor investment in building or maintaining the system. Moreover, no night reservoirs were included in the design, thus mandating nocturnal irrigation. This implied severe problems for the great majority of future irrigators: women. The difficulties of getting permission to go out at night and of leaving little children behind, and the threat of sexual violence, would make it difficult, if not impossible, for women to enact their water rights. Finally, the canals and hydraulic sectors were designed purely on the basis of technical and geographical criteria, ignoring community boundaries.

This top-down blueprint was bolstered by an organizational and legal design grounded in national law and uniformly enforced nation-wide. For example, INERHI's Regulations for Administration of Irrigation Systems established that each hydraulic sector should appoint five

officers (such as president and vice president). Considering that Licto would have some 120 hydraulic sectors, this would entail appointing some 600 new leaders, and these would be *parallel* to the existing community leadership structures. As has happened elsewhere in the region, these imposed structures would have interfered with communal institutions that assure collective survival. Moreover, the Regulations set a single blanket fee that everyone would pay for water service, in this way ignoring user labor and organizational contributions, as well as the broad, national diversity in system productivity and profitability.

The combination of these organizational, legal and technical designs clearly illustrates the Foucauldian techniques of governance, or instruments of discipline, mentioned in the last section. The power of the state agency, as well as that of local elites, would now have an even stronger influence on the daily running of the irrigation system. Most communities that joined the project did not question the sociotechnical designs since these were portrayed as being 'normal' (i.e. according to the set standards), as well as 'modern and efficient' (based on expert knowledge). The majority of water users thus saw their communities' self-regulation according to these modern norms as a rational, coherent and even progressive response to the project's water development opportunities. Nevertheless, these uniform, 'equalizing' rules from outside institutions would deny local control over decision-making; they would also facilitate extraction and intensify exogenous domination over local livelihoods. The design of the system would thus further strengthen state control by the so-called 'inclusion' of the indigenous communities in exogenous, 'modern' management.

However, in the course of 1992 and 1993, the sociopolitical panorama changed dramatically in Licto. CODOCAL elected new, strongly committed leaders who wanted to solve conflicts between communities, bringing them together within a unified indigenous organization. They established a water users' organization, the Irrigation Directorate, within CODOCAL's intercommunal structure and rooted it in community organization – not based on the hydraulic sector formula prescribed by law. An Ecuadorian NGO, CESA (Central Ecuatoriano de Servicios Agrícolas) joined the water-development efforts of the local communities and supported their claims vis-à-vis the government agency.

In late 1993, INERHI sent the official regulations for administering and organizing governmental irrigation systems. But rather than accepting the organizational blueprint and simply paying for the water at nation-wide rates (the official approach, which in practice favored some powerful white-mestizo families), the communities decided to establish their own rules and rights based on a fundamental principle: *The right to water and management decision-making is earned by those who work in the communal labor work-parties, who participate in the water users' organization, and who pay their dues according to collectively established contribution rates.* The crux of the indigenous peasants' protest and proposal was that *'rights cannot be purchased – they must be earned'*. This is in keeping with notions of 'proportionality' and equity found elsewhere in the Andes (Mitchell and Guillet, 1994; Mayer, 2002; Trawick, 2003).

At the same time, the communities, with support from the NGO, carefully analyzed the technical, organizational, and normative designs and discussed their implications and probable consequences; they then redesigned the system. However, the government agency's technical and administrative officers would not agree to such fundamental changes in 'their system'. In addition to having to discard the designs and norms in which they were professionally heavily invested, they would have to agree to the design criteria of 'outsiders', indeed, that of 'Indians', which was entirely counter to the prevailing racial logic in Ecuador.

But after two years of struggle and negotiations[47] in which the countervailing power of the indigenous communities grew strongly, the agency had to accept that the project was destined to fail and, even worse, was in danger of becoming a political fiasco; social peace, public image, and election votes were at risk. INERHI was forced to redesign the system with the participation of the communities and the NGO. But they refused to discuss the 'illegal' organizational and normative proposals proposed by the communities.

[47] For an elaboration of this political, sociotechnical and discursive struggle, see the film 'The Right to be Different' (Wageningen University-Agrapen, 2003), Chapter 36 of Boelens and Da'vila (1998) and Chapter 7 of Boelens and Hoogendam (2002).

Again the communities prevailed. Despite the fact that the State agency was unwilling to ratify the rules formulated by the indigenous organization, the latter quickly enforced those rules as the guiding principles of their own system. According to these principles, paying fees to the State was not enough to obtain rights to water and decision-making; rather these rights would be 'created' during system construction and 'recreated and consolidated' through the users' participation in operation and maintenance. This ancient Andean norm, which in the past had been appropriated by states for their own hegemonic interests, was now reappropriated by local communities; it became the solid foundation for the system's management, and, indeed, much more.

This norm became an all-purpose tool that indigenous communities could use to challenge both the State as well as the town's white-mestizo families. On the basis of this criterion of *'creating rights'*, there has been a consciousness-raising process in which communities built a new identity, a 'hydraulic identity', based on their own specific rules. First, the tail-end indigenous communities were united in an indigenous irrigators' association with its *own* principles; second, once they were on solid ground with clear, strong norms and the capacity for negotiation, this organization 'invited the town to join'. The white-mestizo townsfolk of Licto thus had to accept the equitable criteria already established by the communities themselves.

As one might expect, this organizational strategy and transformation at first faced great resistance from white-mestizo power groups in the town of Licto. When they saw their power dissipating, some tried to keep manipulating the situation; as one indigenous informant, recreating a conversation between powerful mestizos that he had overheard, related: 'Don't worry – when the water gets here we'll just talk with our buddies at the irrigation agency and we'll get all the water. There's no need to work in the communal work parties. C'mon, how could we possibly work with Indians?!' (Boelens and Hoogendam, 2002: 162).

Nevertheless, the strategy of the intercommunity irrigation organization, structured within the indigenous peasant organization CODOCAL, succeeded; it has now grown to become the strongest political force in Licto. But change has come about, not only through the empowerment of indigenous communities and the efforts of CODOCAL and the NGO, but also through 'subversive' processes in the town of Licto itself. The poorest groups in town, many headed by women, called together all the neighborhoods in the town of Licto in order to form a democratic irrigation organization, just as the indigenous communities had done (for a gendered analysis, see Arroyo and Boelens, 1997). Despite protests from the priest, the town's administration board, and many white-mestizo families, this Licto irrigation committee joined forces with CODOCAL. The indigenous communities' criteria for equitable rules and water rights were accepted by these poor townspeople; so, too, the communities helped the poor of Licto to weaken the internal oppressive structures in the town of Licto itself.

We see, then, that together, indigenous communities and the poor of Licto proper successfully faced down the abusive power relationships of the region. And since that time, through a series of ups and downs, the Licto irrigators' organization has earned increasing respect from development and state agencies, as well as recognition from more and more of the local mestizos, who have been forced to 'make the best of a bad situation' and who have now applied for membership in the irrigation organization.

Obviously, this is not the end of Licto's struggle for a well-functioning and more equitable irrigation system, but part of an ongoing battle as new threats gain momentum. For example, at the national level, neo-liberal policies currently threaten to bring about the privatization of water rights and the individualization of collective water control[48] However, the indigenous and peasant movement of the Licto region described above has created an important and solid base to counter such threats.

3.5 *Cultural Identity, Resistance, and Reappropriation in a Peruvian Irrigation System*

Cabanaconde located at 3270 m above sea level in southern Peru (Province of Caylloma, Department of Arequipa) and founded as a *reduccion* in the 1570s, is the largest community of the

[48] Boelens and Zwarteveen (2003) present an elaborate discussion of the important implications of the neoliberal water policy model in the Andean region.

Colca Valley. The people of Cabanaconde, numbering upwards of 5000 at present, are bilingual Quechua and Spanish speakers who distinguish themselves ethnically from other groups in the region. There has long been a considerable amount of seasonal and permanent out-migration, and today the community has migrant colonies in Arequipa, Lima and Washington, DC, with approximately 1000, 3000 and 600 members, respectively. So, too, in the last few years, the community has been further joined to the outside world through the introduction of television, the telephone and other media technologies. But together with transnationalism and these other cultural transformations, the mountain worship and the Inka-derived dual organization reviewed in the second section of this article continue to structure many community activities, including irrigation.

All of Cabanaconde's agriculture is irrigated, the water coming from the Majes Canal and the snow melt of Hualca-Hualca, a 6000-m high peak. Twenty-four hours a day, for several months a year, irrigation water descends the Hualca-Hualca River and passes directly through a series of canals to more than 1200 ha of agricultural terraces found in Cabanaconde's main fields. Hualca-Hualca Mountain, alongside 'Earthmother' and figures in the Catholic pantheon, is a principal deity and the object of much worship.

The cult to Hualca-Hualca Mountain is ancient. In 1586, the ethnic lords of the ancient Cavana polity told a Spanish crown official that their ancestors emerged from Hualca-Hualca Mountain, the source of their irrigation water. The same document states that the Cavana people dutifully worshipped her (Ulloa Mogollón, [1586] 1965). As we saw earlier in the article, beliefs about origins in, and the worship of, mountains and other sources of water is very much part and parcel of widespread and longstanding Andean notions of identity that link people, place and production.

Today, the irrigation and ritual practices associated with the cult of Hualca-Hualca Mountain are exemplified in the 'local model' of irrigation. During most of the yearly distribution cycle, water management is in the hands of two men who carry snakeheaded staffs of authority and often have flowers adorning their hats. They alternate, each spending four consecutive days and nights in the fields 'together with the water'. These are the water mayors (*yaku alcaldes*), the men responsible for the distribution of irrigation water. They are at the centre of the local model of dual organization and distribute water to the land classified as belonging to their moiety, either 'anansaya' or 'urinsaya'.

The water mayors are ritual actors and carry out countless rituals throughout the irrigation cycle. The ritual attainment of fertility and the symbolic control over the sources of water through worship of mountain deities and the earth are crucial aspects of the local model, and its rationale and practice must be understood in terms of these. Water, however, can also bewitch, and can even be deadly to those who do not carry out the proper rituals. The dual organization of the anansaya and urinsaya fields is a remnant of the extractive form of Inka dual organization reviewed early in this article. At the same time, dual organization involves alternation and an overriding conceptual dualism that seeks equilibrium through the complementarity of opposites (Maybury- Lewis, 1989) and is a fundamental element in the Cabaneños cosmovision (Gelles, 1995).

But the cultural orientations embodied in this local model are challenged by the policies and bureaucracies of the Peruvian state. Officially, the Peruvian state ostensibly has the right to decide not only the uses and allocation of water, but also the organizational models by which it is managed. While the Peruvian state has declared that all water in Peru is the property of the state since the early twentieth century (Andaluz and Valdez, 1987), it is only since the 1960s that the state has centered its energies on extending its control to highland irrigation by imposing water user associations and new forms of distribution.

Since the 1970s, the state has consistently attempted to intervene in the distribution practices of Cabanaconde. Today, for a brief but important period during the yearly agricultural cycle, there is a different type of 'repartitioner', or person in charge of distribution. These individuals, who are community members like the water mayors, implement the state's model of distribution. They are called controllers (*controladores*), and distribute water to the fields *de canto*, that is, sequentially from 'one end to the other', ignoring the dual classification of the plots found in the local model.

A whole series of cultural norms that accompany the state model of distribution are different from those of the local model. The controllers, for example, do not receive coca and liquor from the irrigators as the water mayors do. Rather, they receive money. They are not fulfilling a major *cargo,* as are the water mayors, but rather a minor civic duty. Instead of a snake-headed staff to legitimate

their authority, the controllers have an official decree from the local Irrigators Commission. They neither perform elaborate rituals nor sponsor large social events, as do the water mayors.

The de canto model, which is the official model imposed throughout the Peruvian highlands, is supposedly more rational and efficient since it avoids the loss of water that occurs when one water mayor has to irrigate a few plots of his *saya's* land in fields predominantly classified as belonging to the other saya and which the opposing water mayor has already irrigated. People admit that water is lost in the saya system and it sometimes causes damages. However, the general sentiment is that these inconveniences are made up for by the competition between the two water mayors and the well-established anansaya/urinsaya dual circuit that water follows. As one man put it,

'They [the official controllers] don't give a damn, they don't care if the water moves along as long as they get paid. They'll even slow it down to collect more money, and they leave their posts without a thought'. Moreover, the dual model provides a cognitive map and fixed sequence of distribution not found in the de canto state model; local elites can easily manipulate the latter to irrigate unauthorized fields.

Today and over the last 50 years, there have been attempts by local elites and state officials to supplant completely the local model of distribution with that of the state. This 'inclusion-oriented' strategy, whereby local production is 'rationalized' in terms of the state's universal model, would in fact reinforce the political power of local elites and serve the extraction purposes of both state and private interest sectors. However, the power of the local model, and its capacity for resisting and absorbing the state model, is remarkable (Gelles, 2000).

We see that state and local models of irrigation represent two extremely different ways of conceptualizing and implementing water management. One is focused on ritual assurance, and views water as part of a larger social and symbolic universe, while the other takes a secular and bureaucratic view of water management. The latter has recently received greater impetus from the neo-liberal water policy initiatives that are currently sweeping the Andean nations. In this sense, the imposed state model represents the cultural interests and power not only of local elites, but also those of the dominant coast-based *criollo* society and international power holders. This is recognized by the townspeople of Cabanaconde and partially explains why it is that, although the state model has gained ground over the years, key elements of the local model remain firmly entrenched. In sum, the 'state' model of yesteryear, based originally on Inka and Spanish appropriations of local forms of dual organization, has become a 'local' model of cultural resistance today.

3.6 Conclusions

This article began with a consideration of key issues in the history and contemporary cultural politics of Andean irrigation. We examined how local forms and rules of water control have been appropriated and affected by colonial and postcolonial State policies. Both the classic 'exclusion-oriented' policies of earlier states and the 'inclusion-oriented' policies of contemporary nation-states have been used to extract surpluses from communities and to legitimate State authority. Against this backdrop, we then used the case studies from Licto, Ecuador and Cabanaconde, Peru, to illustrate the reactions of local communities to these imperial power plays and to the contemporary politics of development.

As this article has demonstrated, the top-down, secular, bureaucratic, monetary, and supposedly more rational and efficient state models of water management claim to provide universal benefits, while in fact extending state control and the cultural orientations of national and international power holders. In the last several years, neo-liberal policies, sustained by national and international institutions and power groups, have joined the battlefield, reinforcing market rules and imposing the privatization of water rights on the communities, thereby attempting to externalize water control and shape the internal 'needs' that counteract collective action and community survival. Implicit in these ideologies of development is the assumption that indigenous peoples must renounce their cultural orientations, identities and communal forms of organization to progress.

The perspective advanced here challenges this assumption and the trivialization of indigenous ways of life; at the same time, it problematizes indigenous irrigation beliefs, norms, and practices in

Andean communities by examining their production and reproduction in relation to larger political and economic forces. The production and reproduction of local water-management rules, forms of user organizations and water related cultural identities in the Andes served the extractive and hegemonic purposes of imperial and postcolonial states. Ironically, many of these same norms and organizational forms are today being strategically reappropriated and adjusted by local communities to resist control and surplus extraction by the state and 'outside' interest groups. Indeed, as demonstrated in both Licto and Cabanaconde, international and national imports have a hard time displacing local models of irrigation and community action.

In the case of Licto, we saw that indigenous communities reappropriated fundamental water-control norms in their struggle against domination by elites and against the external control of local water management. By creating infrastructure, the water users establish their water rights and create their 'hydraulic property', a common ownership of the system which bonds irrigators together and is the motor of their collective action (Coward, 1986). The creation and maintenance of collective hydraulic property, grounded in shared history, customs, rituals and struggles, links family and collective rights to their collective 'hydraulic identity'. This process also guarantees that local collective bodies have effective control over the development and application of their own norms; it also establishes their right to dispute the very legitimacy of the normative systems and authorities imposed by external political forces. Clearly, then, the collective management of water resources in Andean communities, and the struggle to obtain, reclaim and defend both water access and water rights is a powerful means to give shape and meaning to local processes of identity formation.

In the case of Cabanaconde, we see once again that the State imposes a universal irrigation model, one that is supposedly more rational and efficient than local indigenous practices. But, as with Licto, the community of Cabanaconde disputed and resisted the State's control over 'its' water. Alternating water mayors and dual divisions, timeworn vestiges of Inka and Spanish state hegemony, today constitute the local 'indigenous' model of irrigation. As we saw earlier in the article, dualism and a diverse complex of pre-Inka cultural frameworks gained further impetus through Inka domination and were used as an ideological tool to naturalize state control over local resources and labor; this continued throughout the Spanish colonial, as well as much of the Republican, period. But it is the cultural staying power of duality and mountain ritual – that is, the instrumental meanings and ritual efficacy of the local model of irrigation – that today has transformed dual organization into a form of resistance against interference by local elites and the contemporary Peruvian state.

The materials from both Licto and Cabanaconde clearly show the problematic and damaging nature of instrumental thinking, practiced by 'experts' in 'social and legal engineering' (Long and van der Ploeg, 1989; von Benda-Beckmann, von Benda- Beckmann and Spiertz, 1998; Bruns and Meinzen-Dick, 2000; Vincent, 2001). Instead of trying to formulate and implement 'the best universal rules, rights and procedures' as state agents and development officials would have it, it is essential to understand the locally based process of creating water-control norms; we must focus on the nature of rules in social action (Schaffer and Lamb, 1981; Cleaver 2000; Boelens and Doornbos, 2001). As both of our case studies show, different social groups confront each other not to only establish rules and water rights, but also to define the legitimate framework by which they will be applied.

In conclusion, this article has studied why it is that in many Andean communities today, indigenous peasant irrigators claim both the right to equality and the right to be different. On the one hand, there is a general demand for greater justice and equality regarding the unequal distribution of decision-making power, water and other benefits in Andean society. On the other, there are demands for internal distribution to be based on autonomous decisions, locally established rights and principles and indigenous cultural frameworks that reflect the diverse strategies and identities found in Andean communities today. As the materials presented here clearly show, these demands are not to be taken lightly.

Bibliography

Achterhuis, H.
1988 "Het rijk van de Schaarste. Van Thomas Hobbes tot Michel Foucault". Ambo: Baarn.
Andaluz, A. and Valdez, W.
1987 "Derecho ecológico peruano: inventario normative". Editorial Gredes: Lima.
Anderson, B.
1983 "Imagined communities: reflections on the origin and spread of nationalism". Verso: London.
Arce, A. and Long, N. (eds)
1999 "Anthropology, development and modernities: exploring discourses, counter-tendencies, and violence". Routledge: London.
Arroyo, A. and Boelens, R.
1997 "Mujer campesina e intervención en el riego andino. Sistemas de riego y relaciones de género, caso Licto, Ecuador". CAMAREN: Quito.

Baud, M.
1997 "In de Schaduw van de Bosrand". Leiden: Rijksuniversiteit Leiden.
Baud, M., Konings, K., Oostindie, G., Ouweneel, A. and Silva, P.
1996 "Etnicidad como estrategia en América Latina y el Caribe". Abya Yala: Quito.
Bauer, C.
1997 "Bringing water markets down to earth: the political economy of water rights in Chile, 1976–1995". In *World Development* 25(5): 639–656.
Benda-Beckmann, von, F., von Benda-Beckmann, K. and Spiertz, J.
1998 "Equity and legal pluralism: taking customary law into account in natural resource policies". In *Searching for equity.* R. Boelens and G. Dávila, eds., pp. 57–69. Van Gorcum: Assen.
Boelens, R.
2003 "Local rights and legal recognition. The indigenous struggle for water rights and the politics of participation". Paper presented at the Third World Water Forum, March 2003, Japan. WALIR-UNESCO: Kyoto.
Boelens, R. and Dávila, G. (eds)
1998 "Searching for equity. Conceptions of justice and equity in peasant irrigation". Van Gorcum: Assen.
Boelens, R. and Doornbos, B.
2001 "The battlefield of water rights. Rule making amidst conflicting normative frameworks in the Ecuadorian highlands". In *Human Organization* 60(4): 343–355.
Boelens, R. and Hoogendam, P. (eds)
2002 "Water rights and empowerment". Van Gorcum: Assen.
Boelens, R. and Zwarteveen, M.
2002 "Gender dimensions of water control in Andean irrigation". In *Water rights and empowerment.* Boelens and Hoogendam, eds., (2002): 75–109.
Boelens, R. and Zwarteveen, M.
2003 "The politics of Andean water policy reforms. Local and indigenous rights in the context of privatization policies". In *Austrian Journal of Development Studies* 19(4): 56–75.
Bolin, I.
1990 "Upsetting the power balance: cooperation, competition and conflict along an Andean irrigation system". In *Human Organization* 49(2): 140–148.
Bruns, B. R. and Meinzen-Dick, R. S. (eds)
2000 "Negotiating water rights". Vistaar Publications: New Delhi and IT Publications: London.

Cleaver, F.
2000 "Moral ecological rationality, institutions and the management of common property resources". In *Development and Change* 31(2): 361–383.
Coward, W. E.
1986 "State and locality in Asian irrigation development. The property factor". In *Irrigation management in developing countries. Studies in Water Policy and Management 9.* K. Nobe and R. K. Sampath, eds., pp. 491–508. Westview Press: Boulder, CO.

De la Cruz, R.
1993 "Aportes del Derecho Consuetudinario a la reforma jurídico del Estado". In *Derecho, pueblos indigenas y reforma del Estado.* J.C. Ribadeneira ed., pp. 71–96. Abya-Yala: Quito.

Diemer, G. and Slabbers, J.
1992 "Irrigators and engineers". Thesis Publishers: Amsterdam.

Escobar, A.
1995 "Encountering development. The making and unmaking of the third world". Princeton University Press, Princeton, NJ.

Fanon, F.
1963 "The wretched of the earth". Grove Press: New York.
Flores Galindo, A.
1988 "Buscando un Inca. Identidad y utopía en los Andes". Editorial Horizonte: Lima.
Foucault, M.
1980 "Power / Knowledge: selected interviews and other writings 1972 – 1978", edited by Colin Gordon. New York: Pantheon Books
Foucault, M. [1977]
1995 "Discipline and punish. The birth of the prison". Vintage Books:New York.

Gelles, P. H.
1995 "Equilibrium and extraction: dual organization in the Andes". In *American Ethnologist* 22(4): 710–742.
Gelles, P. H.
2000 "Water and power in highland Peru: the cultural politics of irrigation and development". Rutgers University Press: New Brunswick, NJ.
Gelles, P. H. and Martínez, W.
1993 "Transnational fiesta: 1992". Center for Media and Independent Learning: Berkeley.
Guevara, A.
1993 "Propiedad agraria y derecho colonial". Pontífica Universidad Católica del Perú: Lima.

Herzfeld, M.
1992 "The social production of indifference: exploring the symbolic roots of western bureaucracy". University of Chicago Press: Chicago, IL.

IUAES-CFLLP
2000 "Derecho consuetudinario y pluralismo legal: desafíos del Tercer Milenio". International Congress on Legal Pluralism, Marine 2000. International Union of Anthropological and Ethnological Sciences & Commission on Folk Law and Legal Pluralism: Arica, Chile.

Long, N. and van der Ploeg, J. D.
1989 "Demythologizing planned intervention: an actor perspective". In *Sociologia Ruralis* 29(3/4): 226–249.
Lynch, B.
1988 "The bureaucratic transition: Peruvian government intervention in sierra small scale irrigation". PhD Dissertation. Cornell University.
Lynch, B.
1993 "The bureaucratic tradition and women's invisibility in irrigation". Proceedings of the 24th Chacmool Conference, pp. 333–342. University of Calgary Archeological Association: Alberta.

Maybury-Lewis, D.
1982 "Living in leviathan: ethnic groups and the state". In *The prospects for plural societies*. D. Maybury-Lewis ed., pp. 220–232. American Ethnological Society: Washington.
Maybury-Lewis, D.
1989 "The quest for harmony". In *The attraction of opposites: thought and society in the dualistic mode.* D. Maybury-Lewis and U. Almagor, eds., University of Michigan Press: Ann Arbor, MI.
Mayer, E.
2002 "The articulated peasant. Household economies in the Andes". Westview Press: Boulder.
Mitchell, W. P. and Guillet, D., eds.
1994 "Irrigation at high altitudes: the social organization of water control systems in the Andes". Society for Latin American Anthropology, Publication Series, V.12. American Anthropological Association: Washington, DC.

Pacari, N.
1998 "Ecuadorian water legislation and policy analysed from the indigenous peasant point of view". In *Searching for equity*. R. Boelens and G. Dávila, eds., pp. 279–287. Van Gorcum: Assen.

Platt, T.
1982 "Estado Boliviano y ayllu andino". Tierra y tributo en el norte de Potosí. IEP: Lima.
van der Ploeg, J. D.
1998 "Peasants and power". In *Searching for equity*. R. Boelens and G. Dávila, eds., , pp. 39–45. Van Gorcum: Assen.
van der Ploeg, J. D. and Long, A., eds.
1994 "Born from within: practice and perspectives of endogenous development". Van Gorcum: Assen.

Salman, T. and Zoomers, A., eds.
2003 "Imaging the Andes: shifting margins of a marginal world". CEDLA Latin America Studies 91. Aksant/CEDLA: Amsterdam.
Schaffer, B. and Lamb, G.
1981 "Can equity be organized? Equity, development analysis and planning". Institute of Development Studies, Sussex University: Brighton.
Scott, J.
1990 "Domination and the arts of resistance hidden transcripts". Yale University Press: New Haven.
Sherbondy, J.
1982 "El regadío, los lagos y los mitos de origin". Allpanchis 17(20): 3–32.
Sherbondy, J.
1998 "Andean irrigation in history". In *Searching for equity*. R. Boelens and G. Dávila, eds., pp. 210–215. Van Gorcum: Assen.
Stavenhagen, R. and Iturralde, D., eds.
1990 "Entre la ley y la costumbre. El derecho consuetudinario indígena en América Latina". Instituto Indigenista Interamericano & Instituto Interamericano de Derechos Humanos: Mexico City.

Trawick, P.
2003 "The struggle for water in Peru: comedy and tragedy in the Andean commons". Stanford University Press: Stanford.

de Ulloa Mogollón, J. [1586]
1965 "Relación de la Provincia de los Collaguas para la discrepción de las Indias que su majestad manda hacer". In *Relaciones geográficas de indias*. M. Jiménez de la Espada, ed., Vol. 1, pp. 326–333. Biblioteca de Autores Españoles: Madrid.
Urton, G.
1990 "The history of a myth: Paqaritambo and the origin of the Inkas". University of Texas Press: Austin.

Vincent, L.
2001 "Water and rural livelihoods". In *Overcoming water scarcity and quality constraints, 2020 focus, Vol. 9*. R. Meinzen-Dick and M. Rosegrant, eds. IFPRI: Washington.

Zuidema, T. R.
1990 "Inca civilization in Cuzco" (Trans.: J. J. Decoster). University of Texas Press: Austin.
Zwarteveen, M.
1997 "Water: from basic need to commodity: a discussion on gender and water rights in the context of irrigation". In *World Development* 28(8): 1335–1349. Cultural Politics of Andean Irrigation

4 Prices and Politics in Andean Water Reforms[49]

RUTGERD BOELENS and MARGREET ZWARTEVEEN[50]

Water rights are best understood as politically contested and culturally embedded relationships among different social actors. In the Andean region, existing rights of irrigators' collectives often embody historical struggles over resources, rules, authorities and identities. This article argues, first, that the neo-liberal language that is increasingly used in water policies is ill-suited for recognizing and dealing with these social, cultural and political dimensions of water distribution. Local water rules and rights, their dynamics, and the way they are linked to power relations, local identities and contextualized constructions of legitimacy, remain invisible in neo-liberal policy discourse. Second, this same discourse actively destroys these local rights systems and presents itself as the only viable cure to the problems it generates. The ways in which local irrigators' collectives attempt to protect their water security raise questions about the fundaments and effects of neo-liberal water reforms, but these questions are neglected or poorly understood. This article proposes a more situated, layered and contextualized approach to Andean water questions, not just to improve representational accuracy but also to increase political visibility and legitimacy of peasant and indigenous water claims. What is needed is not just a new 'typology' or 'taxonomy' of water rights, but an alternative 'water rights ontology' that understands locally existing norms and water control practices, and the power relations that inform and surround them, as deeply constitutive of water rights.

4.1 Introduction

As in many others regions of the world, most water policy proposals in the Andean countries tend to focus on preventing future water shortages and solving current water problems by following global neo-liberal recipes. The three basic ingredients of these recipes are decentralized decision-making, private property rights, and markets. In the Andes, most actors involved in water policy and management agree on the need for improving water control. Most would even agree that such a change should take the form of decentralization. The reasons for wanting change, however, vary widely between different actors. Indigenous and peasant groups perceive decentralization as a means to redress their historical exclusion from decisions about water allocation. They demand a fair and adequate representation in water policy-making processes in the hope of (better) securing their own water rights. They depend on water for irrigating their crops and demand rights that enable continued livelihood security and survival as communities. International lending institutions, often together with national governments, see decentralization and privatization of water management as a means to both reduce government spending on water and to increase the efficiency of water use. State agencies hope to mobilize more tax revenues, and improve jurisdiction over water. Commercial water companies, in their turn, hope to be allowed to exploit existing and new water infrastructures in ways that will bring them economic profits.

Given this diversity of interests, it is hardly surprising that water reforms are contested, and form the topic of much debate and political struggle. Water is a finite resource, and the proposed water reforms unquestionably imply changes in access to and control of this resource. Since the option of expanding supplies seems to have reached its limits, those who receive more do so at the expense of others who receive less. Yet, the terminology that is increasingly used (by all parties) for articulating water problems and solutions is the terminology of neo-liberalism, which does not allow the recognition of power and politics as constitutive of water realities. Although the proposed measures differ, current water reforms share a problem analysis strongly influenced by privatization models, new institutionalism and rational choice theory (Gleick et al., 2002; Mollinga, 2001; Moore, 1989; Zwarteveen, 1998). Water bureaucracies are understood through the prism of rent-seeking, and the debate about water markets and tradable water rights is largely framed in the language and tools of neo-liberal thinking (Briscoe, 1996; Perry et al., 1997), while the organizational dynamics of local level farmer organizations are seen in terms of new institutionalist concepts (see, for example, Baland and Platteau, 1996; Ostrom, 1990, 1992).

[49] Published in *Development and Change 36(4):* 735–758 (2005)

[50] Researcher and lecturer at the Department of Environmental Sciences / IWE, Wageningen University, Wageningen, The Netherlands.

This tendency is understandable: neo-classical and new institutionalist formulae are attractive for their clarity and for the efficiency with which they simplify complex realities and behaviors. Neo-liberalist concepts sit easily with the mindsets of water-professionals, characterized by a preference for large-scale standard policy initiatives and a predilection for 'design principles' — universally valid sets of factors, conditions or principles that can be applied to design a particular institutional transformation (see FAO, 1996; Ostrom, 1992; Plusquellec et al., 1994). The beliefs that flows of money and water follow universal scientific laws, and that human beings roughly follow the same rational, utility-maximizing aspirations everywhere are important sources of consolation and relief for policy-makers who are confronted with increasingly complex, seemingly chaotic, and highly dynamic water situations.

Yet, and as many before us have argued, the fact that neo-liberalism makes it possible to divide the water world into bite-size pieces which policy-makers can chew on, should not be mistaken for representational accuracy (Cleaver, 2000; Goldman, 1998; Mosse, 1997; van der Ploeg, 2003). Neo-liberalism is a strongly positivistic scientific and universalizing language. It presents choices that are deeply political and concerned with distributional questions, as neutral, scientific or technical. While some aspects of reality (those that can be influenced through policy interventions) and some causal mechanisms (prices and finances, markets, formal laws and institutional frameworks) can be expressed in neo-liberal terms, there are many elements of reality and many causal mechanisms that escape their notice.

In this respect, it is worrisome that many studies on the impacts and effects of neo-liberal water reforms consist of comparing the normative water reality as assumed in the policy model with what happens 'on the ground' using the deductive method, and without questioning or empirically validating the behavioral and institutional assumptions employed. This typically leads to accounts of reality in terms of 'gaps', or of how the actual situation diverges from the desired situation as described in the policy model. It also leads to recommendations of interventions aimed at closing these gaps, rather than to proposals to re-assess the model. In this article, we argue that it is precisely such a re-assessment that is required. Actual water management rules and practices differ from what the models predict because they are embedded in, and importantly constituted by, existing social and political relations and hierarchies, cultural values, patterns and criteria of legitimacy, and locally specific ecological conditions. What water rights and management forms *are*, ontologically, and how they function can therefore not be understood or even described in isolation from the actual political and social context in which they are used and discussed.

Neo-liberalism is not just one of several alternative ways of simplifying the world; it also entails a pro-active and interventionist agenda for change. Through powerful laws and rules, the neo-liberal model of the water world is (often forcefully) turned into reality. Those realities that do not fit the model are either transformed or destroyed. Consequently, the dominance of neo-liberal representations of water problems threatens to destroy those realities, not just ontologically, but also materially. They can no longer be talked about or referred to in official water negotiations; they disappear from water policy agendas; and they do not count in measuring the success of policy measures. Most critical writings on water privatization are about the brutal and spectacular entrance of large international drinking water companies onto local scenes, and the dangers of such capitalist expansion for poor people's access to affordable and good quality drinking water. In this article we want to demand attention for a different water reality that is under threat because of neo-liberalism: that of existing indigenous and collective irrigation management institutions. We fear that realizing the neo-liberal water dream may come at a high, though not easily quantifiable, price: the violation or even obliteration of existing water tenure arrangements and collective forms of water management. This price is high not so much because of a conservationist attribution of intrinsic values to traditions and cultural heritage[51] although these also play a role, but especially because of the implied threats to water and livelihood securities and to existing ways of living and being of marginalized groups in Andean countries. It is also high because of the risks to the very objectives of water reform programs, of using water more effectively and efficiently.

To prevent these threats from occurring, a critique of neo-liberal interpretations of reality is required. Concerted efforts to show the politics of policy choices that are presented as scientific, objective or purely economic are an important first step in decreasing the legitimacy of current

[51] Neo-liberalist discourse and policies do in fact allow specific cultural rights to indigenous people (Hale, 2002), based on a rather essentialized conceptualization of 'indigenous identity', and mostly focusing on typical liberal individualized rights (Stavenhagen, 1994).

water reforms. The fact that not all values of water can be easily expressed in market terms, if only because attribution of values does not just happen in the market, must be constantly reiterated. This article emphasizes the need to place a contextualized understanding of water rights at the centre of the analysis. We contend that the most important question in relation to water is not whether to price, privatize, sell or purchase, but rather who owns water access and controls rights? What are the contents of these rights? Which acquisition mechanisms are deemed valid, and who has legitimate authority to defend, enforce and sanction these water rights? Water reforms, just like land reforms, are about changing entitlements to a crucial productive resource. Rights to water cannot be thought of as simply following from centrally ordained laws and policies; they have emerged historically through negotiations and often embody years of labor investments and struggles. In the Andes, water rights are also closely associated with cultural meanings and identities. We suggest, in short, replacing the current emphasis on institutional mechanisms of water management with a focus on the actual functioning and outcomes of water rights and laws, and on the norms and rules surrounding the distribution of water. In our view, such a focus provides a much more promising and fruitful entry-point for critical thinking and action in water management issues.

In the following section, we critically analyze neo-liberal water rights rationality and suggest an alternative conceptualization that invites investigation of the logic and dynamics of water rights realities in the terms employed by those who directly use and manage water. In some respects, this conceptualization builds on attempts by irrigation management scholars in the 1980s who were concerned with finding ways of fostering the participation of farmers and understanding and strengthening locally existing forms of water rights and organization[52] It aims to provide a new and better understanding of what water rights are, ontologically and in practice. Using this understanding, we then describe a number of cases which illustrate how irrigation collectives react to water reforms. Many existing water rights communities do not silently accept usurpation by states and markets, but resist and fight against water reform proposals. These struggles are expressions of fear for the destruction of existing livelihoods, local domains of agricultural production and identity. As such, they challenge the new water resources distribution, the new water rules, and the new water language and discourse. We end the article with a reasoned plea for a contextualized and historicized understanding of water rights and water reforms, which explicitly acknowledges the politics and power of water and which allows for culture and identity as determinants of water realities.

4.2 *Divergent conceptualizations of water rights*

Water Rights in Neo-Liberal Thinking

Current thinking about water rights is intimately tied up with the privatization discussion, and emerges from the widely-held insight that states have done a poor job in managing and allocating water in cost-effective and efficient ways (Merrey, 1996; Ostrom, 1990, 1992; Vermillion, 1991). The central privatization argument is that water needs to be transferable and marketable for it to be used in an economically efficient way, producing the highest possible marginal returns. For water market transactions to succeed, clearly defined and enforceable water rights need to be in place. Private water rights are thus a crucial condition for water markets to emerge (Ringler et al., 2000; Rosegrant and Binswanger, 1994; Rosegrant and Gazmuri, 1994; World Bank, 1996). In neo-liberal thinking, water rights, by defining rules for the allocation and use of water resources, are seen to provide the means for describing and accounting for committed water uses. Water rights allow water to be priced per unit consumed, encouraging a reduction in wasting water. In addition, water rights provide a good basis for allocating maintenance responsibilities among beneficiaries. They also provide security of tenure to users, thus establishing incentives for investments in infrastructure.

This approach is right in assuming that most of the anticipated benefits of water markets will not be achieved unless substantial efforts are made to establish and protect security of tenure in water. Yet, it wrongly conveys the impression that water rights and water markets are inseparable. In fact, most of the benefits attributed to water markets would be achieved through the provision of

[52] These include Chambers (1988); Coward (1986); Levine (1980); Nobe and Sampath (1986); Uphoff (1986).

security of tenure alone, irrespective of whether water rights are traded or otherwise transferred (Bauer, 1997). While neo-liberal thinking

> suggests that the lack of (incentives for) transferring or marketing of water is the root cause of current water problems, a more accurate problem description would be that water management is such a complicated matter precisely because of the difficulties inherent in establishing an effective and enforceable system of water allocation and distribution (Seckler, 1993: 6). The assumption that security of water tenure can only be achieved by means of private water rights does not hold true, at least for the Andes and probably for many other places. In the Andean history of diverse property regimes, tenure of water was typically most insecure for large sections of the population in those periods characterized by privatized regimes.

This shifts the question from whether and what to privatize, to how to distribute water according to agreed objectives and values. In other words, the question that lies at the heart of many water problems (and reforms) is how to create the infrastructure, laws and institutions that allow security of water tenure, rather than how and whether to privatize and trade water. To address this question, we need a more complex and layered understanding of water rights than the current prescriptive instrumental and legalistic notion of water rights that prevails in neo-liberal water accounts (see also Boelens et al., 2002). In this improved understanding, it is particularly important to realize that what a right is, ontologically, cannot simply be 'read' from legal texts and written laws. Instead, rights obtain their meaning in the particular contexts in which they are discussed, used and applied.

Dimensions and Contents of Water Rights

What, then, is a water right? When referring to irrigation, it is useful to think about a water right as the right that provides its holder with the authorization to take water from a particular source, including the particular social privileges and obligations that are associated with such authorization (Beccar et al., 2002). A water right encompasses three dimensions: socio-legal, technical and organizational. Socio-legally, a water right is an expression of agreement about the legitimacy of the right-holder's claim to water: such agreement must exist within the group of claimants, but it is equally important that rights over a resource be recognized by those who are excluded from its use. Agreement about the legitimacy of right-holders' claims to water is intimately linked to social relations of authority and power, and can be based on a variety of grounds: it can be based on state legislation, water laws and regulations, but it can also be based on local rules established and authorized by traditions and community organizations[53]

However, having the legal possibility (and social power) to take water is meaningless without the two other dimensions of water control. First, the means (infrastructure, technology, and technical skills) to actually take water from a source and convey it to fields — the technical dimension — must be present. Second, it is necessary to organize and manage not just water allocation and the operation of infrastructure, but also the mobilization of resources and decision-making processes around these issues — the organizational dimension. Responsibility for these management tasks may lie with government or non-government agencies, with private companies, or community organizations, or with a combination of these. Many irrigators' organizations in the Andes are community-type organizations, although some are set up or supported by governments or NGOs. Having a right to water often goes hand in hand with the right to participate in systems operation and management, but also with a number of duties and obligations, such as the requirement to contribute cash or labor to the operation, maintenance and management of an irrigation system. Failure to comply with those duties often leads to sanctions such as exclusion from one or more water turns or the payment of fines (Boelens and Zwarteveen, 2003; Gerbrandy and Hoogendam, 1998).

Rights in Action

The distribution of water is much less straightforward than that of many other resources: because of the variable availability and fluid characteristics of water, and because of the difficulties of rigorously monitoring and controlling water flows, there is much scope for users at different

[53] We have further elaborated this conceptualization elsewhere: see, for instance, Boelens and Zwarteveen (2003) and Roth et al. (2005). For similar conceptualizations of (water) rights, see Benda-Beckmann et al. (1998); Bruns and Meinzen-Dick (2000); Gelles and Boelens (2003); Zwarteveen (1997); Zwarteveen and Meinzen-Dick (1998).

levels to act in ways that diverge from distributional agreements as stipulated in state laws, regulations, infrastructural lay-outs and technologies. This explains why water distribution is typically subject to continuous bargaining and negotiation. Such bargaining may involve the technical characteristics of the irrigation infrastructure, the operation of that infrastructure, or the very contents of the water right. Water distribution and control, therefore, cannot be understood by simply looking at the legal status of right-holders, nor can it be deduced from statutory law. An understanding of actual water use and distribution practices is also required, including the different norms and discourses that groups of users refer to when claiming access to, or simply taking, water.

To allow for such differentiation, and thus to capture the difference between 'rights on paper' and actual water control and distribution, we suggest the following distinction of categories of rights: reference rights, activated rights and materialized rights. This distinction should not be read in the evolutionary sense of expressing increased levels of specification, or as a typology or taxonomy distinguishing different types of water rights. Instead, it aims to capture the fact that the precise meaning of rights changes depending on the context in which it is used. These categories can be seen as different manifestations of rights.

Reference rights can be derived from broader principles, rules and ideologies that embody notions of fairness and justice (Boelens and Dávila, 1998); they may be based on national law or on locally formalized water regulations, such as communities' irrigator regulations. Reference rights specify, in general terms, the powers of right-holders — in terms of access related, operational, and decision-making privileges and choices — and also define the characteristics of right-holders, for instance by specifying that water right-holders should be landowners, community members, men or heads of households (F. and K. von Benda-Beckmann, 2000). Reference rights matter, for instance, in discussions between state agencies and user groups about water allocation priorities, or in negotiations about national or regional water policies and plans.

Activated rights (or 'rights in action') refer to the operationalization of reference rights. In irrigation systems, they often consist of rules and procedures for water distribution, and of rules about participation and voting in meetings of water users' organizations. Seasonal water delivery plans and water rotation schedules are clear expressions of activated rights. These usually come about in pre-season meetings among (representatives of) irrigators, which may or may not involve representatives of state water agencies. Assessments of actual water availability to decide on quantities of water to distribute often matter here, as do records of the behavior of right-holders in previous seasons — did they contribute the stipulated amount of labor or cash; did they take more water than agreed, and so on.

Materialized rights refer to actual water use and distribution practices, and to the decision-making processes about these practices. Materialized rights are often not written down, but are authorized by routine or are unspoken or informal agreements. Both the definition of the contents of each of these rights and the links of transformation from one right to the other are subject to negotiations and struggle. The social and political domains in which such negotiations and struggles occur are likely to be different for each type of right, although they may overlap. Inclusion in such domains is thus important in terms of the protection of one's water security.

Legal Pluralism and Embeddedness

In most Andean irrigation systems water rights exist in conditions of legal pluralism where rules and principles of different origin and legitimization co-exist in the same locality. The question of which rules and principles are to be considered (most) legitimate is therefore often an intrinsic part of struggles over water in the Andes, including the current ones surrounding the privatization of water. State laws are often challenged by representatives of local communities by referring to 'their own' traditional socio-legal systems. There may also be a diversity of mechanisms for acquiring water rights, and the mechanisms considered legitimate by water users' communities are not necessarily those adhered to by legislative authorities at national levels. In many cases, the very existence of detailed local water rights and laws only comes to the attention of legislators at national level through the resistance of local communities against proposals for water reforms. Water legislation as formulated at national levels in countries like Ecuador, Peru and Chile does not recognize existing diverse and dynamic water rights and distribution practices, but often does include very specific and precise rules and prescriptions about how water users should behave and

organize, and about how water should be distributed (Bustamante, 2002; Gentes, 2002; Guevara et al., 2002; Pacari, 1998; Palacios, 2002).

Apart from territorial rights claims and outcomes based on historical struggles and negotiations, the prevalent way in which local Andean communities have obtained ownership of water, now and historically, is through investments of often tremendous amounts of labor and other resources in the construction of irrigation infrastructure. Labor investments also served as a way to decide who within the community could use water and have decision-making rights: investments in collective property construction, therefore, led to the 'construction' not only of the infrastructure but also of individual or household rights to access water and to its management. Two different types of rights were thus established: the collective rights that refer to the claim of the group of users of one irrigation system (or sometimes a series of water-use systems) vis-à-vis third parties; and individual (or household level) rights that refer to the rights of water users within one irrigation system and specify their claims vis-à-vis each other. This process of acquiring ownership of water lies behind Coward's notion of hydraulic property, developed to express the fact that investment processes in irrigation not only establish people's relation to the irrigation system, but also their relation to each other. Such relationships constitute the social basis for collective action in various irrigation tasks. Thus, labor contributions to maintenance of irrigation systems serve not only the upkeep of the system, but also the actualization of property rights (Coward, 1986). In many Andean irrigation systems, rights embody years of accumulated labor investments and simultaneously form expressions of social relations among irrigator households. In the current context of privatization discussions, it is important to emphasize that water rights of individuals exist within (and because of) collective agreements and are enforced by and through local, collectively legitimated authorities. As such, they are radically different from the 'privatized water rights' referred to in neo-liberal water policies (Beccar et al., 2002; Boelens and Doornbos, 2001).

The rules, rights and duties attached to water are, in many Andean communities, closely linked to all kinds of non-water related rights and duties and are closely intertwined with economic and non-economic institutions and networks of social and political relations. In other words, as Peters observes, definitions of rules, rights and obligations, of appropriate uses and users, and the ways in which these definitions are to be materialized, are closely embedded in specific historical sets of political and economic structures as well as in cultural systems of meanings, symbols and values (Peters, 1987; see also Gelles, 1998; McCay and Jentoft, 1998). The transfer of water rights, for instance, happens in a social context in which locally-specific exchange relations function as important mechanisms to maintain networks of friends and relatives. In some communities, people's sense of community identity is strongly linked to having a shared history of struggling against landlords or mining companies for water and land rights. Importantly, current resistance is also a way to express and reinforce community values.

Ironically, although privatization aims at deregulating bureaucratic water management through the delegation of decisions to the lowest possible level, actual water reforms in the Andes threaten to destroy existing local and indigenous water rights systems. Local communities and actors are only granted decision-making powers when they accept the terms and conditions specified by higher-level laws and rules. Co-existence of a great diversity of rules, rights and obligations is actively discouraged, since such diversity is seen as potentially obstructing inter-regional and international transfers and trades; locally-specific rules and rights that tie water to a geographical area or to a community may get in the way of investments and profits. Moreover, recognition of a diversity of local water authorities is sometimes interpreted as a threat to the power and rule-making capacity of national bureaucrats.

4.3 *Prices and politics: evidence of neo-liberal water reforms*

Neo-Liberal Claims and Counterclaims

Expectations about the benefits of neo-liberal water reforms are high. Proponents claim that such reforms will result in water savings, greater water-use efficiencies, more private investments in water infrastructure and maintenance, less government spending on water management, and higher economic returns to investments. In addition, they claim that water reforms will be accompanied by democratization of water decision-making. However, a growing number of case studies have produced evidence that casts doubt on whether these claims are realized, or whether

they are even realistic. Hendriks (1998) shows how water distribution, water-use efficiency and agricultural productivity in several Chilean irrigation systems are worsening instead of improving as a result of water rights privatization. Trawick (2003) describes the causal link between privatization of water rights and the decline of water-use efficiency and productivity in collective irrigation systems in Peru. Hendriks (1998) and Oré (1998) describe cases where water rights privatization discouraged investments in local irrigation systems. Dourojeanni and Jouravlev (1999) and Bauer (1997, 1998) show how the Chilean privatization model in practice worked towards the monopolization of water rights in the hands of elites and a few powerful companies, instead of enabling a multitude of competitors to interact in an open market atmosphere. Whereas water markets were supposed to stimulate allocation of water to the economically most beneficial and valuable uses, examples from Chile show that one effect of privatization may actually be non-productive speculation with water rights (Solanes, 2002). There is not necessarily any positive correlation between how much people are willing to pay for water and their eagerness to use it efficiently. All the above studies raise doubts about whether neo-liberal water policies meet their own expectations, measured against their own goals and indicators for success. Our argument here is that many of these cases of failure can be interpreted in terms of the incommensurability of existing irrigation realities with the policy model: existing realities cannot be described and represented in neo-liberal terms, and they do not 'behave' as predicted by the model.

There are an increasing number of documented instances of farmer organizations fiercely standing up against privatization efforts and neo-liberal water reform programs. This resistance shows that 'not fitting the model' is often a conscious choice, and not — as privatization proponents would have it—a result of traditionalism or stubbornness. Describing and understanding this opposition using the conceptualization of rights proposed in the previous section leads to a different interpretation of the determinants of water-use efficiencies, and points to the need for re-assessing water allocation priorities. The struggles can be read as a critique of the very rationality of the reforms, and actively question their claims to neutrality and objectivity. Peasant irrigator communities do not just demand alternative, more equitable ways to distribute water rights among stakeholder groups in society; they also demand new ways to think and talk about water.

Large-scale water conflicts and related social differentiation processes under private water property regimes are by no means new to the Andes. In Peru and Ecuador, for instance, private property regimes prevailed before the establishment of the Water Laws (of 1969 and 1972, respectively) which nationalized property rights. The private property regimes were the cause of much violent struggle between large hacienda owners and indigenous communities[54] These struggles form an important part of the political and social history of many communities, which partly self-identify through the collective memory of these important water rights battles. However, many of those battles were won by the large landowners, and the resulting problems of water scarcity are still fresh in the minds of many communities. The new proposals for privatization thus ring some familiar bells. Many communities and indigenous organizations perceive the new water plans as yet another in a sequence of attempts to take away resources that historically belong to them and that form the basis of their livelihoods. In Peru, Bolivia and Ecuador massive nationwide uprisings have effectively resulted in a standstill or change in the implementation of the new water policies and laws. The rest of this section provides some illustrations of such struggles, and uses the contextualized rights' framework presented above to begin interpreting them.

Establishing Water Allocation Priorities

In order to promote possibilities for free trade in water rights and to allow water to be allocated to its most profitable uses, Chilean neo-liberal water policy states that water rights allocation should follow market principles. Chilean legislation, therefore, does not establish access priorities or preferences for particular uses (such as drinking water for human consumption above industrial use), nor does it express norms to protect particularly vulnerable groups, the environment or, ultimately, water quality (CEPAL, 1998; Dourojeanni and Jouravlev, 1999). Peasant and indigenous organizations in the other Andean countries that were to adopt Chile's water legislation have strongly objected to this lack of prioritization in water allocation. For example, CONAIE — the

[54] See, for example, Boelens and Da' vila (1998); Gelles (2000); Mayer (2002); Ore' (1998); Pacari (1998); Peña (2004); Ruf (2001); Vos (2002).

Federation of Indigenous Nationalities in Ecuador — defended a water allocation principle in their Water Law proposal that prioritizes water for human and domestic use and for subsistence agriculture above water for commercial agriculture. Commercial agriculture, in turn, gets a higher priority as compared to industrial, mining and power generation activities (CONAIE, 1996). In Bolivia, peasant and indigenous organizations fiercely protested against market allocation principles which would, in their opinion, endanger water access to the economically less powerful (Bustamante, 2002; WALIR, 2002).

Throughout the Andes, peasant irrigators thus challenge the reference rights and allocation priorities as stipulated in existing laws and new neo-liberal reform proposals. Often, struggles are also about the right to be included in the social arenas in which reference rights are determined. Along with the mechanisms of water allocation, the underlying values on which allocation is based are questioned. Although the struggles are primarily about demands for alternative legal priority orders that are based on greater social justice and local embedded ness, they also illustrate that changing water realities is not just a matter of changing legal reference rights. It is simultaneously a quest for activating and materializing alternative rights orders 'in the field' and changing the actually existing water allocation priorities as they are embedded in unequal power relationships in society.

'Unused' Rights Accumulation

In Chile, when the new Water Code was enforced in 1981, most indigenous communities were unaware of the need to officially register their century-old customary rights. In the words of a Mapuche leader: 'The big landowners here in the area have registered the water rights in their names, and the Mapuches, for not knowing about the laws of the Chilean State, were left without possibilities to claim theirs' (quoted in Solón, 2003). Water rights that were not formally registered were neutrally labeled 'unused rights', and were allocated to those who presented official requests — powerful commercial companies, especially mining and power generation enterprises, and landlords. Mapuche communities are furious about this. The Mapuche leader expressed his anger:

> The water sources that originate in the communities here have 98% of their trajectory on Mapuche territory, but the owner of the water is a landlord who lives in the city. He bought the water from the State, and nobody can use it. We cannot use it for irrigation, not even for drinking water, because the water has been bought. But the water was born in and flows through Mapuche communities, and no one of the Mapuches was aware of the need for official recognition when this person registered the water rights on his name. No one of us was consulted and no Mapuche ever knew of the existence of this law. (Quoted in Solón, 2003)

It is not only the neo-liberal assumption that (market) information is freely available to everyone that is challenged here, but also the very basis for rights claims. Mapuche communities feel strongly that the water is theirs, because they have been using it for centuries and because it flows through their territory, whereas the Water Code demands official registration as a first basis for rights allocation (see also Gentes, 2000, 2002; van Kessel, 1992). This case illustrates that there are different social domains in which water rights are negotiated and contested, and that indigenous communities may not be well-positioned to be included and represented in the domains that officially matter. It also illustrates that legal reference rights often do not express the historical and social realities of the Mapuches, pointing to a serious lack of social legitimacy and applicability of the new water policy.

Companies versus Communities

Mining companies based in Chile have already appropriated a large part of the historical water rights of Atacameño and Aymara indigenous communities in northern Chile. The same mining companies are now trying to get authorization for the appropriation of Bolivian water, which is currently collectively owned by indigenous communities. The legalization of certain rights — in this case, the right of the Bolivian government to sell and export privatized water rights — automatically implies the illegalization of all existing rights, such as ancestral and socio-territorial rights. Bolivian indigenous communities struggle against this neo-liberal policy. In the words of one user: 'They want to export 3000 to 6000 liters per second to Chile. We are talking about subterranean water resources. What the government wants to do is to make a law to export water and favor the big

Chilean enterprises such as Chuquicamata, Inés de Collahuasi and Escondida. This is our great preoccupation'. Another indigenous irrigation leader in Bolivia commented on this water power play: 'Behind the back of our communities, the Bolivian government wanted to enforce a new law to legalize water export to Chile. The communities never were consulted or knew about this law, which was handled in secret . . . Rainfall in this Southern Altiplano region is extremely limited, only 100 mm/year. And in the Eduardo Abaroa reserve it's even less, 60 mm/year. . . . I think that to defend our water is a matter of life and death' (both quoted in Solón, 2003). This case is another example of how current water reforms inherently evoke struggles about water tenure, and shows that they are not neutral programs fostering more efficiency. Indigenous communities are not recognized as water right-holders, in spite of their long history of using water and of investing in infrastructure to make such use possible. They are not offered the choice of how to control what they consider as their water, but are simply disregarded as right-holders.

Democratizing Decision-Making?

In most communal water systems in Peru, Bolivia and Ecuador, the one person, one vote' rule applies, implying that each right-holder has one decision-making vote in the users' organization. In contrast, World Bank and Inter American Development Bank proposals for new water legislation in Peru and Ecuador stipulated that voting rights should be made proportional to the quantity of water-use rights each user holds, like shareholders in a joint-stock company (see World Bank, 1995, 1996). The Chilean Water Code sets the example for these proposals. Hendriks (1998) gives an example of how such a re-definition of voting rights may shape local political economy and power relations. In Belén, Precordillera Comuna de Putre, the great majority of irrigators — smallholders who depend on agriculture for their livelihoods — called for changes to the irrigation schedule in order to intensify their agriculture and save water. They wanted to have more frequent irrigation turns with smaller flows, a decision ratified in several community assemblies. But in Belén, a majority of water shares is owned by a small group of wealthy absentee landholders who live in the city of Arica and make their money from other economic activities. They only go to the irrigation system when necessary, for example when they have their water turns. Obviously, they have no interest in increasing irrigation frequency, for it would mean more time and travel costs. This group's voting weight and related decision-making power prevents the majority of smallholders, who depend on agriculture, from improving their irrigation system and increasing economic productivity. As Hendriks (1998: 306) remarks:

> When users with abundant water and less need for careful use of available water have more weight in decision-making it affects the rationality of the system's collective operation. This problem of resistance to change, by the people who migrate to the city and own a relatively heavy weight of water shares, is recurrent in many remote locations in the north of Chile.

Similar cases have been reported in Peru after the neo-liberal government of Fujimori changed the regulations of water-user associations, concentrating decision-making rights and voting rights in the hands of a powerful minority of large water right-holders (Oré , 1998; Vos, 2002).

Generally, both legal and local reference water rights include specifications of how water control decisions are to be made and who is allowed to join this process. As this example illustrates, neo-liberal reference norms concerning control over decision-making seriously endanger the possibilities for marginalized water-user groups to activate their water access rights, to improve system efficiency, and to materialize traditionally existing collective choice rights.

Another example of this kind of struggle comes from Bolivia. The main water users of the Central Valley of Cochabamba, Bolivia, are peasant and indigenous irrigator communities, who for decades have organized access to and distribution of water according to their 'uses and customs'. They engaged in a major conflict when, in 1997, the Cochabamba drinking water company started to drill wells in the Central Valley, affecting their already over-extracted ground water resources. In 2000, the Valley again became a violent battlefield when indigenous and peasant communities together with urban water users protested against the state's plans to privatize the drinking water sector. The government signed a contract with a large foreign consortium, and enacted a privatization support law that allowed the international company to have exclusive water rights over all waters in the district, including those of smaller systems in the metropolitan area and rights to exploit the aquifers. Another law was rushed through the parliament so that the company could

capture new water resources, and even charge water fees for co-operative wells that were to be expropriated. Directly after privatization, the international company raised water fees substantially, without any system improvement. Urban and rural water users formed an alliance of opposition: the citizens protested against rising water rates, while the rural municipalities and indigenous communities protested against the new law, because it affected their rights and could expose them to new encroachments of their water sources. Violent confrontations with the army were the result. At the end of this 'water war', the government had to retract its decision and commit to amending all of the articles in the proposed law to which the popular alliance objected (Boelens and Hoogendam, 2002; Bustamante, 2002; Laurie et al., 2002). These water struggles originate from the co-existence of different sources of legitimation for rights' claims. Peasant communities demand that their history of use of and investment in water is accepted as a legitimate claim to water, and that their 'uses and customs' are accepted as a rightful framework of reference for water management.

Decentralized User Negotiations

Bottom-up and democratic watershed platforms are central to user-oriented water management policies. Inclusion and participation in such decision-making platforms by local and indigenous communities is regarded as a means to ensure that they can voice their concerns and secure their interests. In Chile, success with such platforms is mixed. The influence that local communities can exert in platform meetings is limited, partly because negotiations are dominated by the rich and powerful. Indeed, water rights negotiations do not happen in isolation from economic power relations. Bauer, for instance, shows how, in multiple-sector conflicts in Chile, the bigger and more powerful water users have little incentive to negotiate water allocation and settle conflicts in platforms, precisely because their private rights are so strong relative to the regulatory authority of the state or any possible platform: 'The task of coordinating different water uses at the level of river basins is left mainly to voluntary bargaining among private rights holders and their organizations. Because state administrative intervention is so limited, when bargaining fails the conflicts are supposed to be settled by the ordinary civil courts, which have expanded powers' (Bauer, 1998: 149).

In the case of the Maule River, local irrigators for many years confronted the power generation company, which cut off their water upriver to store it during the season of maximum agricultural demand. The company also often interrupted the flow and released water in irregular amounts and unforeseeable timing, making it unusable for farmers. Before the company was privatized, there were ways to solve such conflicts in terms of public interests, but now the two parties face off as two private entities in court. After many years of legal battle, the Supreme Court backed the company, but found no solutions for the thousands of local farmers affected. The courts made decisions solely on the basis of legalistic prescriptions, closing their eyes to the social and productive consequences. Meanwhile, several other hydropower plants have been built in the watershed, reinforcing the sector's growing power and allowing it to consolidate its rights. Similarly, Bauer reports on the construction of the Pangue dam on the Bío Bío River, which would reduce down-river flow and concentrate pollutants. Affected indigenous, environmental and irrigators' organizations joined in an action platform and went to court. At first, the court ruled in favor of the dam opponents, asking the dam project to make a compromise with the affected users before continuing construction. However, the Supreme Court overruled that decision and gave the project its blessing, without considering possible alternative solutions that would be less harmful to the indigenous communities, the farmers and the environment. Instead of insisting on a platform compromise, the court worsened the conflict by ruling in favor of power generation: 'The Pangue decision resulted in a major transfer of wealth from farmers and the agricultural sector to power companies: a political decision with significant distributional consequences' (Bauer, 1998: 142). As Bauer explains, in Chile's legalistic private-ownership system, other multi-sectoral watershed management issues are even more troublesome, with all problems to be settled through ordinary civil law courts, between private and privatized players of unequal power. Even when economically less powerful user groups do have legal reference rights to access and control water, the neo-liberal model makes it difficult for them to solve disputes and activate and materialize their rights through local negotiation and platform collaboration.

These examples show, firstly, that the presumably objective and efficient restructuring of water entitlements and water rules implied by neo-liberal water reforms does not go uncontested.

Secondly, different actors engage in these contestations on very unequal terms. The formal ability to demand rights to water, in the neo-liberal world, becomes a function of one's ability to enter and bargain in markets and meetings. Neo-liberal political programs simply assume that all water actors are equal in terms of these abilities; markets and meetings only work when all participants can interact 'as equals'. These assumptions, while critical to the very success of the neo-liberal programs, could hardly be more erroneous in the Andean water situation, which is characterized by deep, historically-embedded social differentiations and divisions. Water actors in the Andes are not equal in terms of monetary income; making the ability to pay for water a prime allocation mechanism thus favors private companies and business actors. Also, market prices rarely adequately capture water's marginal value or utility to indigenous communities and are therefore a poor language for expressing this value. Nor are water actors equal in terms of their ability to access and influence decision-making and wield power in platforms and meetings: there are differences in terms of skills, information and education, which are often deeply rooted in historical divides and intertwined with cultural beliefs and biases. Gender, class and ethnicity are three important axes of such divides, and work in complex ways to color and shape an individual's possibilities for political deliberation (cf. Fraser, 1997: 78). Rather than modeling and seeing water actions and decisions of different actors as functions of markets and formalized meeting procedures, they should be seen as the result of continuous processes of networking and negotiations, struggles and social interactions that are permeated by wider social relations of economic and political power.

In the absence of money and influence in formal meetings, local irrigators' communities have to resort to less formal and less lawful ways to defend their water rights and express their water opinions. In the Andes, more than in many other parts of the world, indigenous movements and organizations have actively taken up the issue of water. Through organizations and in demonstrations and public campaigns, they form parallel discursive arenas in which they invent and circulate counter discourses about water, permitting the formulation of oppositional interpretations of their rights, identities and needs. The success of these struggles and actions partly depends on the political willingness of governments to listen and provide space, that is, on the political climate of the particular country. So far, water struggles have hardly led to opening and widening the discursive spaces for discussing new water policies, nor have the terms of the debate significantly altered as a result of protests. Neo-liberalism has not yet been dethroned as the hegemonic water language. It is high time for this to happen. As a first important step, the assumptions of political neutrality and scientific objectivity legitimizing Andean water reforms should be cast aside in favor of conceptualizations and narratives that explicitly show the on-the-ground politics of water policies and their effects, that allow for diversity and historical contextualization, and that acknowledge subjectivity and situatedness. The question of water tenure should be made much more central to attempts to understand water reforms and the reactions they provoke. In all the cases presented here, indigenous communities — rather than just questioning privatization or water pricing and marketing — question the legitimacy of the state in framing water policies. In particular, they question the proposed rules and principles for distributing water rights as well as the state's authority in making such rules and establishing such principles.

4.4 Prices or Politics? Some concluding remarks

We have shown that neo-liberal water reforms in the Andes meet with resistance from different social movements which demand alternative ways of using, owning and managing water. While such movements are motivated by a range of concerns, including social justice, the environment, 'right to livelihood' or ethnic identity, they all make claims for more equitable and just access to water. Logically, they all centre on the question of property rights; whoever controls property rights controls the processes of water allocation, distribution and management. Water reform struggles are also, and importantly, over the right to define what a water right entails, how it can be obtained, and over the power to attribute value to water. The struggle for control over water is a struggle for existence, and a struggle to define what existence means.

We have argued that the language of neo-liberalism is not suited to expressing the political choices and dilemmas that characterize this struggle. Neo-liberal discourse presents water reforms as neutral and technical interventions aimed at assisting central water agencies in controlling and

managing water resources and crises. What this article has shown is that the proposed ways in which water is to be owned, distributed and managed imply fundamental changes, as do the ways in which different water users relate to each other. If the policies are implemented, such relations are increasingly dictated by extra-communal laws, institutions and markets. The proposed water reforms, therefore, are deeply political, in the sense that they actively create and transform (through laws and institutions) the political and social water-world. By asserting that flows of money and water follow universal, scientific laws, and that human beings share the same aspirations and motives everywhere, neo-liberalism establishes a universal rationality and efficiency, based on a 'natural' and 'objective' truth. The policies that are based on new institutional theories, in their turn, establish universal criteria for optimizing water management. Such universalization can be seen as a process of Foucauldian disciplining and normalization, while at the same time actively depoliticizing the water debate by labeling decisions about resource allocation as technical interventions.

Using the terms employed by Bourdieu in another thematic field, neo-liberal policies and the theories underlying them can be typified as 'pure mathematical fictions, based from the outset on a gigantic abstraction'. But, as Bourdieu goes on to explain, 'It has now more than ever the means of making itself true' (Bourdieu, 1998: 94–5). In the current era, which celebrates the death of ideologies and the rise of belief in markets, the power of neo-liberal water policies and discourses is not to be underestimated. However, as we have tried to show, they are not silently accepted. On the contrary, peasant movements and indigenous organizations are actively and vocally standing up for their rights. Understanding such protests requires a more nuanced, contextualized and complex analysis than the one that currently tends to dominate global debates. The current struggles are not, as many observers would have it, a simple battle between public and private water interests; nor are they a conflict between common and private property regimes where the former is associated with tradition and the latter with modernity. It is not simply economic growth versus subsistence, abundance versus scarcity or rationality versus 'local ways of knowing'. The cases we have presented illustrate that Andean irrigators demand that their worlds and livelihoods be recognized and protected. They are not against new water reforms or liberalization per se, but they fear the loss and destruction of their land- and waterscapes. They organize for continued collective control over water, without being solely anti-commodity and pro-subsistence. The struggles over water, over the right to sustenance and livelihood, over the right to healthy and socially just forms of living are also struggles for specificity and contextuality, for own ways to define the language and rules of play, for the right to 'otherness'.

It is time that these demands were taken seriously, also in academic and policy arenas. For this to happen, conceptualizations of water use, distribution and management that take contextualized water tenure as their entry point, and that allow recognition of water as a contested resource, provide a much more dynamic and layered understanding than those of new-institutionalism. Coupled with insights derived from legal pluralism and political economy, such a conceptual language invites investigation of how water rights and policy models become manifest 'in action' in peasant irrigation systems, rather than normatively predicting what should happen according to reference policy models and judging 'unruly' realities against such predictions.

Bibliography

Baland, J. and J. P. Platteau
1996 "Halting Degradation of Natural Resources. Is there a Role for Rural Communities?" Rome: FAO; Oxford: Clarendon Press.

Bauer, C. J.
1997 "Bringing Water Markets Down to Earth: The Political Economy of Water Rights in Chile, 1976–95" in *World Development* 25(5): 639–56.

Bauer, C. J.
1998 "Slippery Property Rights: Multiple Water Uses and the Neo-liberal Model in Chile, 1981–1995" in *Natural Resources Journal* 38: 110–55.

Beccar, L., R. Boelens and P. Hoogendam
2002 "Water Rights and Collective Action in Community Irrigation". In *Water Rights and Empowerment*. R. Boelens and P. Hoogendam, eds., pp. 1–21. Assen, The Netherlands: Van Gorcum.

Benda-Beckmann, F. von and K. von Benda-Beckmann
2000 "Gender and the Multiple Contingencies of Water Rights in Nepal". In *Water, Land and Law*. R. Pradhan, F. von Benda-Beckmann and K. von Benda-Beckmann eds., pp. 17–36. Kathmandu: FREEDEAL; Wageningen: Wageningen Agricultural University; Rotterdam: Erasmus University Rotterdam.

Benda-Beckmann, F. von, K. von Benda-Beckmann and J. Spiertz
1998 "Equity and Legal Pluralism: Taking Customary Law into Account in Natural Resource Policies". In *Searching for Equity*. R. Boelens and G. Dávila, eds., pp. 57–69. Assen, The Netherlands: Van Gorcum.

Boelens, R. and G. Dávila, eds.
1998 "Searching for Equity. Conceptions of Justice and Equity in Peasant Irrigation", Assen, The Netherlands: Van Gorcum.

Boelens, R. and B. Doornbos
2001 "The Battlefield of Water Rights. Rule Making Amidst Conflicting Normative Frameworks in the Ecuadorian Highlands". In *Human Organization* 60(4): 343–55.

Boelens, R. and P. Hoogendam (eds)
2002 "Water Rights and Empowerment", Assen, The Netherlands: Van Gorcum.

Boelens, R., D. Roth and M. Zwarteveen
2002 "Legal Complexity and Irrigation Water Control: Analysis, Recognition and Beyond" paper presented at the XIIIth International Congress on Folk Law and Legal Pluralism, Chiang Mai, Thailand (7–10 April).

Boelens, R. and M. Zwarteveen
2003 "Water, Gender and 'Andeanity': Conflict or Harmony? Gender Dimensions of Water Rights in Diverging Regimes of Representation" In *Imaging the Andes: Shifting Margins of a Marginal World*. T.Salman and A. Zoomers, eds., pp. 146–62. CEDLA Latin America Studies 91. Amsterdam: Aksant; Leiden: CEDLA.

Bourdieu, P.
1998 "Acts of Resistance Against the Tyranny of the Market", New York, NY: The New Press.

Briscoe, J.
1996 "Water as an economic good: the idea and what it means in practice", in Transactions of the 16th Congress on Irrigation and Drainage, Volume 1E, pp. 177–201. New Delhi: International Commission on Irrigation and Drainage.

Bruns, B. R. and R. S. Meinzen-Dick, eds.
2000 "Negotiating Water Rights", New Delhi: Vistaar Publications; London: IT Publications.

Bustamante, R.
2002 "Legislación del Agua en Bolivia", WALIR (Water Law and Indigenous Rights) Working Paper. Cochabamba: Centro AGUA/United Nations/CEPAL; Wageningen: Wageningen University.

CEPAL
1998 "Ordenamiento político-institucional para la gestón del agua" Santiago de Chile: United Nations/CEPAL.

Chambers, R.
1988 "Managing Canal Irrigation. Practical Analysis from South Asia", Cambridge and New York: Cambridge University Press.

Cleaver, F.
2000 "Moral Ecological Rationality, Institutions and the Management of Common Property Resources" in *Development and Change* 31(2): 361–83.
CONAIE
1996 "Propuesta Ley de Aguas". Quito: CONAIE.
Coward, E. W.
1986 "State and Locality in Asian Irrigation Development: The Property Factor". In *Irrigation Management in Developing Countries: Current Issues and Approaches*. K. C. Nobe and R. K. Sampath, eds., pp. 491–508. Boulder, CO and London: Westview Press.

Dourojeanni, A. and A. Jouravlev
1999 "El código de aguas en Chile: entre la ideología y la realidad. Serie Recursos Naturales e " Infraestructura, no 3. Santiago de Chile: CEPAL.

FAO
1996 "Transfer of Irrigation Management Services: Guidelines", FAO Irrigation and Drainage Papers no 58. Rome: FAO.
Fraser, N.
1997 "Rethinking the Public Sphere". In *Justice Interruptus. Critical Reflections on the 'Postsocialist' Condition*. N. Fraser, ed., pp. 69–98. New York and London: Routledge.

Gelles, P. H.
1998 "Competing Cultural Logics: State and 'Indigenous' Models in Conflict". In *Searching for Equity*. R. Boelens and G. Dávila, eds., pp. 256–67. Assen, The Netherlands: Van Gorcum.
Gelles, P. H.
2000 "Water and Power in Highland Peru: The Cultural Politics of Irrigation and Development", New Brunswick, NJ: Rutgers University Press.
Gelles, P. H. and R. Boelens
2003 "Water, Community and Identity: The Politics of Cultural and Agricultural Production in the Andes". In *Imaging the Andes: Shifting Margins of a Marginal World*. T. Salman and A. Zoomers, eds., pp. 123–44. Amsterdam: Aksant; Leiden: CEDLA.
Gentes, I.
2000 "Culturas étnicas en conflicto. El Código de Aguas y las comunidades indígenas en el Norte Grande/Chile". In *Revista Américas* 4(16): 7–49.
Gentes, I.
2002" Estudio de la Legislación Oficial Chilena y del Derecho Indígena a los Recursos Hídricos", WALIR (Water Law and Indigenous Rights) Working Paper. Santiago de Chile: United Nations/CEPAL; Wageningen: Wageningen University.
Gerbrandy, G. and P. Hoogendam
1998 "Aguas y acequias", Cochabamba: PEIRAV–Plural Editores.
Gleick, P., G. Wolf, E. L. Chalecki and R. Reyes
2002 "The New Economy of Water. The Risks and Benefits of Globalization and Privatization of Fresh Water". Oakland, CA: Pacific Institute for Studies in Development, Environment and Security.
Goldman, M., ed.
1998 "Privatizing Nature. Political Struggles for the Global Commons". London: Pluto Press (in association with TNI).
Guevara, A., I. Vera, P. Urteaga and G. Zambrano
2002 "Estudio de la Legislación Oficial Peruana sobre la Gestión Indígena de los Recursos Hídricos". WALIR (Water Law and Indigenous Rights) Working Paper. Lima: United Nations/CEPAL; Wageningen: Wageningen University.

Hale, C. R.
2002 "Does Multiculturalism Menace? Governance, Cultural Rights and the Politics of Identity in Guatemala". In *Journal of Latin America Studies* 34(3): 485–524.
Hendriks, J.
1998 "Water as Private Property. Notes on the Case of Chile" In *Searching for Equity*. R. Boelens and G. Dávila, eds., pp. 297–310. Assen, The Netherlands: Van Gorcum.

Kessel, J. van
1992 "Holocausto al progreso: Los Aymarás de Tarapaca" . La Paz: Hisbol.

Laurie, N., R. Andolina and S. Radcliffe
2002 "New Exclusions: The Consequences of Multicultural Legislation for Water Policies in Bolivia". In *Multiculturalism in Latin America: Indigenous Rights, Diversity and Democracy.* R. Sieder, ed., pp. 252–76. London: Palgrave.
Levine, Gilbert
1980 "The Relationship of Design, Operation and Management" In *Irrigation and Agricultural Development in Asia.* E. W. Coward, Jr., ed., pp. 51–64. Ithaca, NY and London: Cornell University Press.

Mayer, E.
2002 "The Articulated Peasant. Household Economies in the Andes" Boulder, CO and Oxford: Westview Press.
McCay, B. J. and S. Jentoft
1998 "Market or Community Failure? Critical Perspectives on Common Property Research". In *Human Organization* 57(1): 21–9.
Merrey, D. J.
1996 "Institutional Design Principles for Accountability in Large Irrigation Systems" Research Report 8. Colombo: International Water Management Institute.
Mollinga, P.
2001 "Water and Politics: Levels, Rational Choice and South Indian Canal Irrigation". In *Futures* 33: 733–52.
Moore, M.
1989 "The Fruits and Fallacies of Neoliberalism: The Case of Irrigation Policy". In *World Development* 17(11): 1733–50.
Mosse, D.
1997 "The Symbolic Making of a Common Property Resource: History, Ecology and Locality in a Tank-irrigated Landscape in South India". In *Development and Change* 28(3): 467–504.

Nobe, K. C. and R. K. Sampath, eds.
1986 "Irrigation Management in Developing Countries: Current Issues and Approaches" Boulder, CO and London: Westview Press.

Oré , M. T.
1998 "From Agrarian Reform to Privatization of Land and Water: The Case of the Peruvian Coast". In *Searching for Equity.* R. Boelens and G. Dávila, eds., pp. 268–78. Assen, The Netherlands: Van Gorcum.
Ostrom, E.
1990 "Governing the Commons. The Evolution of Institutions for Collective Action". Cambridge: Cambridge University Press.
Ostrom, E.
1992 "Crafting Institutions for Self-Governing Irrigation Systems". San Francisco, CA: Institute for Contemporary Studies Press.

Pacari, N.
1998 "Ecuadorian Water Legislation and Policy Analyzed from the Indigenous-Peasant Point of View". In *Searching for Equity.* R. Boelens and G. Dávila, eds., pp. 279–87. Assen, The Netherlands: Van Gorcum.

Palacios, P.
2002 "Estudio Nacional de la Legislación Oficial y los Marcos Normativos Consuetudinarios referente a la Gestión Indígena de los Recursos Hídricos". WALIR (Water Law and Indigenous Rights) Working Paper. Quito: United Nations/CEPAL; Wageningen: Wageningen University.
Peña, F.
2004 "Los pueblos indígenas y el agua: desafios del siglo XXI". Bogotá: WALIR, IMTA and El Colegio de San Luís; México: Obranegra Editores.
Perry, C. J.,M. Rock and D. Seckler
1997 "Water as an Economic Good: A Solution, or a Problem?" IIMI Research Report 14. Colombo: International Irrigation Management Institute.
Peters, P.
1987 "Embedded Systems and Rooted Models". In *The Question of the Commons.* B. McCay and J. A. Acheson, eds., pp. 171–94. Tucson, AZ: University of Arizona Press.
Ploeg, J. D. van der
2003 "The Virtual Farmer". Assen, The Netherlands: Van Gorcum.

Plusquellec, H., C. Burt and H. W. Wolter
1994 "Modern Water Control in Irrigation. Concepts, Issues, and Applications". World Bank Technical Paper no 246. Washington, DC: The World Bank.

Ringler, C., M. Rosegrant and M. Paisner
2000 "Irrigation and Water Resources in Latin America and the Caribbean". EPTD Discussion Paper no 64. Washington, DC: Environment and Production Technology Division of the International Food Policy Research Institute (IFPRI).

Rosegrant, M. W. and H. Binswanger
1994 "Markets in Tradable Water Rights: Potential for Efficiency Gains in Developing Country Water Resource Allocation" in *World Development* 22(11): 1613–25.

Rosegrant, M. and R. Gazmuri
1994 "Reforming Water Allocation Policy through Markets in Tradable Water Rights: Lessons from Chile, Mexico and California". EPTD Discussion Paper 6. Washington, DC: Environment and Production Technology Division of the International Food Policy Research Institute (IFPRI).

Roth, D., R. Boelens and M. Zwarteveen
2005 "Liquid Relations. Contested Water Rights and Legal Pluralism". New Brunswick, NJ: Rutgers University Press (forthcoming).

Ruf, T.
2001 "Water Disputes in the Ecuadorian Context up to the Third Millennium: No State, No Market, No Common Property. The Transition of Santa Rosa (Tungurahua Province)" in *International Journal of Water* 1(3–4): 250–269.

Seckler, D.
1993 "Privatizing Irrigation Systems". Center for Economic Policy Studies Discussion Paper 12. Morrilton, AR: Winrock International Institute for Agricultural Development.

Solanes, M.
2002 "América Latina: Sin regulación ni competencia?- Impactos sobre la gobernabilidad del agua y sus servicios'. CEPAL Working Paper. Santiago de Chile: United Nations/CEPAL.

Solón, P.
2003 "La Sangre de la Pachamama". Documentary. La Paz: Fundación Solón.

Stavenhagen, R.
1994 "Indigenous Rights: Some Conceptual Problems". In *Indigenous Peoples: Experiences with Self-government.* W. Assies and A. Hoekema, eds., pp. 9–29. Copenhagen: IWGIA; Amsterdam: University of Amsterdam.

Trawick, P.
2003 "Against the Privatization of Water: An Indigenous Model for Improving Existing Laws and Successfully Governing the Commons" in *World Development* 31(6): 977–96.

Uphoff, N.
1986 "Getting the Process Right: Improving Irrigation Management with Farmer Organization and Participation". Boulder, CO and London: Westview Press.

Vermillion, D. L.
1991 "The Turnover and Self Management of Irrigation Institutions in Developing Countries". Discussion Paper. Colombo: International Irrigation Management Institute.

Vos, J.
2002 "Metric Matters. Water Control in Large-scale Irrigation Systems in Peru". PhD dissertation, Wageningen University.

WALIR
2002 "Indigenous Water Rights, Local Water Management and National Legislation". WALIR (Water Law and Indigenous Rights) Studies Volume 2. Wageningen: United Nations/CEPAL and Wageningen University.

World Bank
1995 "Peru: A User-Based Approach to Water Management and Irrigation Development". Report 13642-PE, Latin America and the Caribbean Country Department. Washington, DC: The World Bank.

World Bank
1996 "Tradable Water Rights: A Property Rights Approach to Resolving Water Shortages and Promoting Investment" (Paul Holden and Mateen Thobani). Policy Research Working Paper 1627. Latin America and the Caribbean Technical Department. Washington, DC: The World Bank.

Zwarteveen, M.
1997 "Water: From Basic Need to Commodity. A Discussion on Gender and Water Rights in the Context of Irrigation". In *World Development* 28(8): 1335–49.
Zwarteveen, M.
1998 "Identifying Gender Aspects of New Irrigation Management Policies" In *Agriculture and Human Values* 15: 301–12.
Zwarteveen, M. and R. Meinzen-Dick
1998 "Gender and Property Rights in the Commons. Examples of Water Rights in South Asia" In *Agriculture and Human Values* 18: 11–25.