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# Public Participation in Disaster-Prone Watersheds. Time for Multi-Stakeholder Platforms?

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# Contents

# 1 Introduction - scope of the paper[1]

Early 2001, three years after hurricane Mitch and after three years of learning lessons in mitigation and prevention, El Salvador suffered two severe earthquakes. Approx. 1,160 people were killed and 8,120 injured. 150,000 houses were destroyed, infrastructure (including health services) damaged and the total economic loss is estimated at $1.25 billion. Wisner (2001) states that this number could have been lower if the government would have opted for more serious attention to the inclusion of civil society in management, instead of simply decentralising. This example does not stand alone. Participation of civil society in disaster management has often been disregarded as impractical, inefficient or unnecessary. In this paper we shall argue why participation is important and what will be the conditions under which participatory risk and disaster management could develop.

Water-related disasters continuously appear on our television screens and in our newspapers. Reports on floods, hurricanes, tsunamis and tornadoes show us devastation and loss of lives and livelihoods. On the other side of the hydrological spectrum we find the creeping and silent droughts, not as destructive as floods, but killing even more people. All too often disaster management is rather ad-hoc relief after a disaster event. Prevention of loss and mitigation of disaster are challenges that people are facing everywhere. An integrated, participatorily developed vision of disaster management may be more sustainable and effective.

It is against this background a workshop on “MSPs for disaster preparedness” was organised on 29 June 2002 by the Disaster Studies group and the Irrigation and Water Engineering Group of Wageningen University. The present paper reflects and builds on the ideas mooted at this workshop, which was attended by participants of the ICRC conference on Disaster Preparedness[2]. It intends to give an overview of the merging fields of disaster management, water management and risk management. It aims to present current debates and propose directions for the future and focuses on water-related disasters in a river basin context, and thus mainly on floods and droughts. First, we will introduce the concepts and paradigms of disasters and disaster and risk management and point at current trends in thinking on risk and disaster. Secondly we will discuss the possibilities and pitfalls participation in the context of disaster response; draw empirical lessons, and go on to argue that multi-stakeholder platforms can be a response to the demands of a complex environment.

Disaster definitions

The World Disaster Report displays a growing trend in the number of disasters caused by natural hazards. With 156 floods and 46 droughts/famines the year 2001 saw significantly more disasters than a decade earlier. In 2001 alone floods killed 4,680 people and affected 1,2 billion people, causing total damage of 192 million US dollars (IFRC-RCS, 2002). While this article was written, the images of Lake Dong-Ting and the Elbe River just disappeared from the television screens.

According to the World Meteorological Organisation floods alone have caused hardship for more than 17 million people in over 80 countries in the first eight months of 2002. The general expectancy, though not uncontroversial, is that the frequency and intensity of natural hazards will increase, in part due to climate

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[1] This paper was commissioned by the Dialogue on Water and Climate. The authors are all connected to Wageningen University and Research Centre. Dr Thea Hilhorst lectures at Disaster Studies, Drs Jeroen Warner at the chair group of Irrigation and Water Engineering, where Peter Waalewijn is an MSc student who researched Multi-Stakeholder Platforms in South Africa. The authors wish to acknowledge Henk van Schaik, Molly Helmuth and Madeleen Helmer for their inputs in the drafting of the paper.

[2] International Conference on Climate Change and Disaster Preparedness
June 26-28, 2002 in The Hague, The Netherlands

change[3]. Climate change is expected to increase the variability, frequency and intensity of rainfall patterns, in so doing aggravating the intensity of droughts and floods. Moreover, effects of El Niño are expected to increase[4].

Talking of disasters, are we sure we are referring to the same thing? The definition of natural disasters is notoriously problematic, and there has been considerable debate on the concepts and definitions. In fact, concepts such as natural disaster, vulnerability and hazard lack fixed definitions and are used by different actors in the field with varying objectives and perceptions (Alexander, 1997)[5]. This debate is triggered by both the internal complexity of the phenomenon and the diversity of the disciplines and actors active in the field of disasters. We don't intend to develop a new definition of these concepts and accept blurred boundaries between the concepts. For the moment, let us concentrate on floods and droughts.

Floods can be rapid (flash floods) causing loss of lives and massive destruction of infrastructure, buildings and communications and services. In gradual and long-term immersion infrastructure and buildings will also be damaged, drinking water supplies may become contaminated and health risks occur. Harvests and livestock may be lost and community resilience might be affected by loss of implements, communication, labour and supplies. Floods can be triggered by heavy rains (e.g. hurricanes), snow melt and not unimportant, can also be caused, aggravated or mitigated by manmade (and managed) obstructions in the flow path, be it houses, embankments, hydropower dams or rice-bunds. Often, they are caused by a number of these factors aggravating upon each other.

Droughts seem to be harder to define. They are generally defined more on the basis of the effects than upon the atmospheric causes, which are not well understood (Frerks *et al*., 1999) The impacts of droughts are often difficult to distinguish. They can result in famine and desertification, but these are creeping processes often in already vulnerable areas. That is, if droughts are natural at all, in many cases water scarcity is induced by human and social factors. Technical scarcity, organisational scarcity and political scarcity are more to do with society than with nature (Mehta, 2000, see also Turton and Warner 2002).

Floods and droughts are not linear opposites. The impacts are very different in terms of time frame, triggers and loss of lives and livelihoods. Yet, as we will analyse in this article, with respect to the human causes they might not be that different at all. Furthermore, disasters caused by natural hazards are often compounded by conflict and may also result in conflict. There is a only a blurred distinction between disasters caused by natural hazards and man-made disaster. Some researchers and international press have argued that there is a growing risk of water wars (Gleick, 1998, Shiva, 2002). Although this does not seem likely on an international scale, conflict intensity grows when scale diminishes. At the local level conflicts on water (scarcity/insecurity, flood risk) tend to be open and often violent[6]. A specific element in disaster-prone watersheds is the spatial and organisational dimension. The space where the risk originates and the areas where loss is suffered are often not the same (Lavell, forthcoming). First, decisions made upstream in the watershed can severely impact those living downstream. Thus, where disasters might be experienced only at local levels, the structural problems present themselves at basin-wide level. Those can be the operations of major infrastructure, mismanagement of the environment (deforestation, human-induced

[3] See for example: IPCC (2002), ministerial declaration on the World Summit in Johannesburg (2002); First "White" (positioning) Paper of the Dialogue on Water and Climate (2002).

[4] First "White" Positioning Paper of the Dialogue on Water and Climate (2002)

[5] See for more discussion Quarantelli, (1998); Hewitt (1995) or Al-Madhari and Keller (1997) who enumerate 27 different definitions of disaster.

[6] For a discussion on water and conflict, see for example Meissner (2000) and Wolf (1997)

erosion causing floods and sediment disasters, (cf. Joshi *et al.*, 1998) or in the case of droughts/scarcity the depletion or pollution of the water sources upstream. Second, there is more to this than a simple upstream/downstream division as sub-basins may compound each other and powerful downstream users can have a considerable impact on upstream users. All in all, it can be concluded that the interconnectedness of actors in a river basin context is high and that there is great diversity between different users. Farmers, fishermen, NGOs, ordinary citizens requiring drinking water, local and national governments all have different and conflicting interests. These might be interlinked too, because individuals can have multiple economic identities.

A further point is that water management in river basins tends to be defined more in terms of quantity and quality than in terms of timing and impacts (Warner 2001). Water management has usually aimed to tame river systems, probably dammed, where river flows can be regulated and uncertainty reduced. Increasingly, however, we are facing the limitations of control and even see that our control aspirations contribute to the progression of disaster. Large dam projects can solve many water management problems, but also have the potential to trigger disasters and cause conflict. Interesting in this regard is the report of the World Commission on Dams (2000), stressing the importance of stakeholder inclusion and participation in all phases of the dam project cycles.

A final note is that disasters bring opportunities, too. People have displayed a whole array of differentiated action with regard to disaster, based on individual strategising or formal and informal reliance on their social networks. Those coping strategies are based on human agency, the ability of persons to cope with disaster, adapt to their environment and strategise.

Policy shift: preparedness and participation

Disasters have featured high on the agenda of the international community for some decades now. A multitude of UN organisations deals with disasters caused by natural hazards or their side effects. The 1990's were proclaimed the International Decade for Natural Disaster Reduction (IDNDR). The concerted efforts resulted in the International Strategy for Disaster Reduction (ISDR). Another global policy stream is the sustainability and climate dialogue, getting substance in the United Nations Conference on the Human Environment, Stockholm (1972), the famous UNCED "Earth Summit" (1992), at which the Commission on Sustainable Development[7] was established and which was recently followed up with the World Summit on Sustainable Development (2002). Policy on climate change took shape within the UNFCCC[8] and in the Kyoto Protocol (1992) and the IPCC[9]. Recently, more attention has been given specifically to floods[10] (cf. 2nd World Water Forum, 2002). These organisations have started global discussions on their subjective issues, inviting governments but also the private sector and civil society to participate. Within these large organisations there has in recent years been a policy shift towards disaster preparedness and public participation. The awareness amongst policy makers that all calamity can not be averted has led to an increased focus on risk management (World Bank, 2000 (Voices of the poor, Narayan), UNISDR, 2002).

Moreover, it is increasingly realised that the complexity and diversity of users, uses and value systems should be managed by including the people in this risk management (Warner, 1999). The UN now seeks to implement the International

[7] The CSD was installed to ensure follow-up of the UNCED conference and monitor its implementation.

[8] United Nations Framework Convention on Climate Change

[9] Intergovernmental Panel on Climate Change

[10] In 1996 the World Water Council was established as a global umbrella organisation, mainly equipped with awareness raising and raising political commitment.

Strategy for Disaster Reduction through national platforms in order to grasp the inter-disciplinarity and the multi-sectoral characteristics of disasters (ISDR web site) and in a global review (UNISDR, 2002) public and stakeholder participation and local action are deemed necessary for the new focus on risk reduction, institutional reform and capacity building.[11] This emphasis on preparedness and stakeholder inclusion is a new paradigm in a changing field, as we shall see in Chapter 2.

[11] The DWC White Paper mentions public and stakeholder participation as integral elements of policy making, and deliberates on polycentric policymaking. Other major conferences COP-6 and the Johannesburg Summit on Sustainable Development all emphasize the need for public and stakeholder participation in risk reduction.

# 2 Four disaster paradigms

A discussion of participation in disasters starts with identifying different paradigms in which participation is embedded. The present chapter proposes a categorisation of existing disaster paradigms, including a newly emerging complexity paradigm. Paradigms are sets of references that frame the way in which science, management and people understand and act upon the world around them. Hence, paradigms on disasters denote trends that partly co-exist. They are not mutually exclusive, and many organisations hold more than one view. Partly, they have been sequential in dominating disaster studies and management through time. Public participation, as will be elaborated in the next chapter, acquires distinct meanings in each paradigm and in spite of a shared vocabulary a range of different expectations, roles and rights are understood.

a. The technocratic paradigm

In some regions water management has a millennial history. Although there have been centuries of management of water-related disasters, in pre-modern times, most rivers went untamed and people adjusted to disasters (Fagan, 2000; Chan, 1997). One had to live with floods and droughts. In the 20th century optimistic modernism led to the 'hydraulic mission' (Turton and Ohlsson, 1999). The state controlled water resources and 'developed' the basin with mega-structures for flood protection and water retention. Exploitation of the basin's water became the backbone for economic development and state legitimacy. The technocratic paradigm resulted in top-down controlled projects for disaster prevention. Based on the (modernist) paradigm that natural hazards cause disasters, there has been a large focus on technological and scientific solutions. Disaster studies were the domain of geologists, seismologists and hydrologists. Embankments and barriers were built in order to tame the rivers and safeguard life and livelihoods of the population behind the dikes (Smith and Ward, 1998). The system reached its economic limits, however, and furthermore, there was growing awareness that one cannot protect oneself against all floods (a residual risk remains).

b. The behavioural paradigm

The behavioural paradigm sought to eradicate disaster by changing the behaviour of the people living in the flood plains (cf. Burton *et al.*, 1978). Living in the floodplain is undesirable for disaster mitigation, and dams and dikes do not bring the solution, so people should be facilitated to move out of the risk areas. The behavioural paradigm can be said to be based on two premises. First people have agency and choice. They live in the floodplain because risk brings opportunity, so they may find it worth their while to court risk.[12] The amenity value of the waterfront, accessibility, fertile soils and level relief are among the attractions of living by the river. People are more capable of determining risk and strategising their living patterns than sometimes thought. Secondly, people can be persuaded to make more 'responsible' settlement decisions, for example through zoning or insurance programs, but also by extension and education moving out of risk areas can be actively promoted. White (1960) proposed that people should be given a greater range of options, which would make them consider leaving or avoiding high-risk areas. Education programs were set up and early warning systems developed for flood-prone areas. Mitigating the impacts of disasters is pursued through insurance, calamity funds and financial assistance to build up people's assets (World Bank, 2000).

The main criticism levelled at this paradigm is that it neglects the structural relations that caused people to move to these areas. People often move to those

[12] For floodplains in particular some of the advantages are fertile soils, level lands, easy transportation. In many instances the very rich live next to the river, because of the favourable location.

areas because of the pressures of the political economy and not only out of choice (Blaikie *et al,* 1994). Through unbalanced power relations the poor have often been forced to encroach on the floodplains near big cities (Hewitt 1983). The resulting vulnerability, not only to flood risk but also to all kinds of everyday insecurities, is the focus of the 'vulnerability' paradigm discussed below.

c. The vulnerability or structural paradigm

The vulnerability paradigm places emphasis on the political "root causes" of disasters. Societal structures result in differential impact of disasters on communities. Disaster risk can be defined as the interplay of natural hazard on one side and vulnerability on the other. The structuralist view of disaster was that economical and political power differentials led to unequal distribution of vulnerability and thus risk and thus disaster impacts. Great emphasis was placed on social, political and economic exclusion of the poor and powerless. This is the view advocated by Hewitt (1983) and others[13]. The solution would be the transformation of social and political structures that breed poverty and the social dynamics that serve to perpetuate it (Heijmans and Victoria, 2001). International relations may affect the degree of local vulnerability. Hamza and Zetter reason for example that structural adjustment policies shaped situations of mass urbanisation, which negatively affected the environment and caused migrants to settle on unstable and unsafe locations or caused them to create disaster situations through environmental degradation (Hamza and Zetter, 1998). This makes it a highly political concept. Disaster management in this field would need to focus on political and social changes in the local, national and international levels (Christoplos *et al*., 2001). The vulnerability paradigm has been widely adopted and co-opted by the expert community, without, however, addressing these structural causes of vulnerability. Vulnerability then remains as a property, not an outcome of social relations (cf. Bankoff, 2001). Power differentials disappear from the recognised causes. Instead, the emphasis shifts to the sustainability of interventions and structural problems receive main attention in this paradigm (Smith and Ward, 1998). Vulnerability is seen as a combination of external hazards and insufficient financial capacity. The classical approach is that regions are protected and equipped with technological solutions as dams and dykes, meteorological forecasting systems and early warning systems, and financial assistance schemes, e.g. flood damage insurance. Social aspects include training of local relief organisations, awareness raising and are regarded the 'soft' aspects of this approach, which is regarded apolitical[14].

While a very necessary counterpoint, and the first to seriously look at stakeholder involvement in addressing disaster, the structural vulnerability paradigm has considerable limitations, too. Vulnerability cannot only be defined in terms of power relations and the structuralist view of hazard compounding vulnerability into disaster does not adequately describe reality. It deprives people of agency and veers towards determinism.

d. The complexity paradigm

More and more attention is given to the mutual constitution of society and environment and their complex interplay[15]. The contours of a new paradigm are beginning to take shape, which has been labelled the complexity paradigm (Hilhorst, forthcoming). The new paradigm finds its origin in a growing understanding of the complex interrelationships of ecology and society. Recently, climate change, the overburdening of ecosystems and the depletion of natural resources have triggered a reconsideration of the relationships of humans and the environment. Ecological boundaries have come to the fore and integrated water

[13] A.o. Blaikie *et al*. (1994), Anderson and Woodrow (1989), Watts and Bohle (1993) and Cuny (1983).
[14] Martin and Lafond (1988), UNDP (1991), Annan (1999).
[15] cf. Comfort *et al*. (1999), Oliver-Smith (1999), Hoffman (1999) and Allen (2001)

resource management is pursued in combination with demand management and environmental protection (Newson, 1992). People, in this view, are not just vulnerable to hazards, but hazards are increasingly the result of human activity. Oliver-Smith (1999), from a anthropological viewpoint, concludes that "disasters are as deeply embedded in the social structure and culture of a society as they are in an environment". Disasters are increasingly seen as a process, blurring the distinction between disasters and 'normal' situations. In large parts of the world people live in situations that can be considered chronic emergency situations (Frerks, 1994).

The complexity of holistic[16] paradigm, based in the complexity of interactions between society and nature, is a new paradigm and not just an elaboration of the structuralism, because it rests (explicitly or implicitly) on different notions of causal effects, social change and possible responses to disaster vulnerability. Some of the signals marking the advent of this complexity paradigm in water-related disasters and its associated forms of management are:

- *A shift to 'living with the floods' as a counterpoint to 'flood control'*

- *An emphasis on the interconnectedness, spatially and through different knowledge systems, of all use(r)s of the common pool resource in river basins, as well as the non-linearity, non-predictability and non-proportionality of disaster responses (Korten, in Mosse et al 1998).*

- *A shift in focus from managing risk to living with uncertainty. Uncertainty goes beyond risk, which was the constructed outcome of vulnerability and hazard, and could be calculated within reasonable boundaries. Uncertainty regarding water–related hazards stems from the combined effects of variability in the availability of water (cf. Reice 2001, vd Linde 2001); livelihoods affected by floods and droughts, and uncertainties flowing from different perspectives on water (Mehta 2000).*

- *Increased attention to risks created by control-oriented risk management regimes (Beck, 1993)*

- *A shift from top-down interventionist forms of governance to governance as a quality of interacting social-political systems, such as international communities, national states, cities and localities, as well as in sectors such as agriculture, fisheries and domestic use (Kooiman; 1997). This has led to co-governance arrangements such as public-private-NGO water partnerships, as actively promoted during the WSSD Johannesburg 2002, among others by the European Union in its EU Water Initiative.*[17]

- *A shift to adaptive management. The interrelatedness of problems, through competition over water, high levels of uncertainty and a diversity of competing values and decision stakes (Ackoff, 1974; Rittel and Webber, 1973), makes it unfeasible for problems to be solved by a single actor or organisation*[18]*. Adaptive management includes the integration of the multitude of users and uses and needs to be based on a negotiated shared value system and on different knowledge domains. In practice, stakeholders would pool these*

[16] see: Green and Warner (1999)

17 See: (http://europa.eu.int/comm/environment/wssd/water_en.html).

18 The combined impact of individual uncoordinated actions causes 'turbulence' in the resource domain (Gray, 1985). See also: Waalewijn, Wester and van Straaten (forthcoming).

*resources and appreciations in the process of problem solving and co-ordinated management.*

- *Recognition of different forms of disaster response as complementary, without relying solely on science. Increasingly, disaster studies combine the development of better tools to measure and mitigate disaster with critical policy reviews, searching for new forms of governance, and the support of social movements (Hilhorst and Bankoff, forthcoming).*

A problem with the complexity paradigm is that it is obfuscates the problem of power, apparent in the vulnerability paradigm. Most complexity theory also tends to assume that society and environment consists of rather egalitarian systems. Complexity, in these theories, is the intermediate between order and chaos. There is enough order so that systems can grow and prosper and there is enough chaos for them to need adaptation (Langton *et al.,* 1992 in Geldof, 1994). This complex systems theory does not leave space for human agency, differential value systems and thus diversity within systems. People do not merely react to what happens around them, they have the capacity to process social experience and respond accordingly (Long, 1992), making them more than parts of a system. A more actor-oriented branch of complexity theory portrays disasters as the interplay of various *domains* of interference[19], in which discourses and narratives are negotiated. Hilhorst identifies three main domains of disaster and risk response. Although the domains have fluid borders and individuals can take part in more than one domain, there are specific characteristics of the three domains[20].

| **Disaster Paradigm** | **Period** | **Implications for management** | **Implications for participation** |
|---|---|---|---|
| Technocratic paradigm | Pre-1960 | Top-down control; embankments, physical protection from floods | None |
| Behavioural paradigm | 1960-1970s | Early warning systems, flood zoning, change people's behaviour (through education) | Education and training, utilitarian perspective. |
| Vulnerability paradigm | 1980-1990s | Overall development, countering root causes of vulnerability (through revolutionary change) | Empowerment of the vulnerable, capacity building. |
| Complexity paradigm | Present | Adaptive management of society and environment, collaborative self-organisation. | Polycentric stakeholder inclusion, negotiation, social learning. |

*Table 1: Four disaster paradigms at a glance*

19 Social domains are areas of social life that are organised by reference to a series of interlocking practises and vaues (Villareal 1994, 58-63).

20 For a more detailed description see Hilhorst (forthcoming)

# 3 Participation and disaster management

Due to a widely perceived failure of state-only and market-only approaches, we have seen in recent decades an almost voguish emphasis on participation in the governance of common-pool resources (water, forests, coastal resources, fisheries). This chapter assesses the up- and downsides of participation, culminating in a discussion of a special form of participation: Multi-Stakeholder Platforms.

Sound reasons for participation

Public participation in its broadest sense concerns the inclusion of the people who have a stake in disaster management. The fact is that participation is all too often neglected. Affected populations are persistently portrayed as victims[21], which has several misconceptions. First of all, it adds to the connotation of dependency of affected people. As a consequence, people's own capacities and coping strategies are being overlooked. The concept of vulnerability can also contribute to this image, as people are seen as helpless (Morrow, 1999). Secondly, it invites thinking in terms of two homogeneous categories of victims and non-victims. Bhatt (1998) observed that relief workers tend to perpetuate distorted 'myths of reality' and maintain what he calls the 'illusion of homogeneity'. They are unable to see diversity neither within their own group, nor within the affected population, where in fact the impact on and responses of the affected population are highly differentiated. The remaining image of the Mozambique floods of 2000 might well be that all people did was waiting to be picked out of trees, whereas in fact most of the people escaped the floods on time and many were rescued by local self-help (Christie and Hanlon, 2001). Rahman (1996) points at the lack of knowledge about response mechanisms at all levels of society. About the situation in Bangladesh he concludes "Mainstream development thinking has been too much bogged down by eye-catching investments which tend to emphasise structural solutions over more grass-roots types of coping." (cf. Wood, 1999). In the interactions between actors and between actors and the environment vulnerabilities and coping capacities are shaped. Especially in disaster-prone watersheds, local inhabitants are likely to have their own ideas and practices of preparing for and mitigating disaster. The fact that disasters are not counteracted may lie in asymmetric power relationships, defective knowledge interfaces, increasing risk by destabilising both society and environment, and not in lack of local coping capacities. Those coping capacities are not only individual, but societies also have social and organisational capacities (Anderson and Woodrow, 1993). Moreover, coping capacities are not static and predictable, and especially in disaster situations social relations are reshaped at different levels and people improvise in this new situation. Coping strategies may be preventive, e.g. avoiding flood-prone locations for housing; impact minimising often through diversification, or post-event activities or distress coping. Societal coping is shaped through social networks and local institutions. People gain access to resources after a disaster by relying on network relationships or self-organisation in Community Based Organisations, women groups, churches, etc.

There are several reasons to elicit participation. They are related to the respective paradigms described above, but are overlapping. One rationale places emphasis on action of the local coping in mitigation and preparedness. It is regarded impossible for a government to be as effective as self-organising communities[22]. This rationale sees participation as instrumental to more effectiveness. This accounts for preparedness, mitigation, but also in relief and

21 This is especially the case during disaster relief. But in general sense one can state that the technocratic paradigm viewed people as victims of natural hazards, and the vulnerability paradigm saw them as victims of the political economy. Victimisation was not so much in focus in the behavioural paradigm.

22 See (UNCRD (1991), Mulwanda (1991), Haque (2000).

rehabilitation. It is more and more accepted that the affected and vulnerable people do have own strategies to cope with shocks and this resource should be used[23]. Participation thus comes with a shift in general practice from post-disaster relief towards mitigation and preparedness.

A second rationale is that top-down approaches fail to deliver well co-ordinated and embedded management. Participation, it is hoped, increases the success of policy and management, because it is inclusive. Participation is a necessity for appropriate management. From a holistic viewpoint due heed should be given to the different interests, knowledges, values and perceptions involved in enhancing preparedness and providing relief. The determination of 'acceptable and unacceptable risk' is based on perceptions and the overall context, so that involvement of the stakeholder views is obligatory to implement relevant risk reduction strategies (Lavell, forthcoming).

A third rationale is that participation in disaster management is an inalienable human right. This view is mainly advocated by activist community-based organisations and has been quite successful in gaining ground. People have the right to participate because their lives and/or livelihoods are affected. One cannot be developed by someone else (Anderson and Woodrow, 1989). People at risk are powerful claimants with rights, rather than poor victims or passive recipients (Heijmans, forthcoming) Participation should enhance equity, and has the potential to empower. Participation is not seen as a means to an end, but an end in itself.[24] The utilitarian and empowerment perspectives are not to be seen as a dichotomy, but as the extremes of a continuum (Pelling, 1998)[25]. Edwards and Hulme (1997) conclude that utilitarian views are more prominent and the basis for donor funding of participation.

Summarising and extending the above, sound reasons to facilitate participation are:

- *Participation leads to more efficient and effective management. Interventions will be more carefully planned and executed if the people are involved.*

- *Interventions will be more sustainable in the long term if the people who have to sustain them are involved and have participated to come to needed and appropriate interventions.*

- *Participation is an effective tool of tapping capacities of local participants. Those are local knowledge and useful skills that can make the management more effective. Local coping can be integrated in disaster management.*

- *Participation raises the legitimisation of necessary interventions and adaptive processes. If people's concerns and opinions are taken into account and the problem appreciation is shared widely adaptive interventions will receive more legitimacy.*

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23 A main exponent is the Sustainable Livelihoods concept, used by DFID: Ashley and Carney (1999), The World Bank , UNDP Scoones (1998). See: Christoplos *et al*. (2001)

24 See Oakley *et al*., 1991, Friedmann, 1992 in Pelling, 1998

25 Boelens (2002) mentions nine different perspectives legitimising public participation. Those range from the domestication perspective, in which people's behaviour is to be controlled through participation to the empowerment perspective, which seeks to enable participants to defend their interests in the political dimensions of disaster management.

- *Participation will be cost-effective in the sense that in the early stages of a process it tempers institutional optimism and thus reduces costs incurred in irrelevant or unaccepted interventions.*

- *Participatory management creates ownership over decision-making and daily management practices. Participants will gain ownership over the process, outcomes and eventual structural interventions. As a result, management will be more sustainable.*

  *Participation is necessary to obtain an holistic picture of the many interrelations of uses and users, and of the diversity of opinions and appreciations of the problems. People in similar situations may have different ways of coping and of formulating the problems.*

- *Participation can be a form of conflict management. It exposes hidden conflict in society and can bring about social change. Of course this is not always the case, and situations exist in which 'conventional participation' will contribute to escalation rather than solution.*

- *Participation can be a vehicle of empowerment. Through participation in management vulnerable groups of society can be emancipated to speak up and be heard. Participation is a goal in itself.*

- *Participation leads to social learning (cf. Röling and Maarleveld, 1999). Through discussions and negotiations people shift in their labelling and giving meaning to situations and social structures and develop a shared appreciation of the basin's problems.*

A brief history and typology of participation

Participation as a concept has flourished for some forty years in the field of development assistance (Frerks, 1994). The concept is much older, however and difficult to point down[26]. Early advocates of participation were the Greek philosophers, and it was later associated with revolutions in countries like France and the United States (Dusseldorp 1981 in Frerks, 1994). Participation can be viewed as a policy tool or much more broadly as social action. There is also the divide between normative literature, describing what participation should be and the more descriptive-empirical literature researching the pros and cons of participation in practice.

Different forms of participation have elicited virulent criticism. Long (1977) and Robertson (1984) criticised the community development approach, because it was conducted on the premise of homogeneity so that power differences went unnoticed and inequitable relations were enforced. Criticism of participation in development projects has been levelled by Uphoff and Cohen (1997), Oakley and Marsden (1984) and Chambers (1985).

In her ladder of participation Arnstein distinguishes 8 different levels of public participation. A version of this ladder is presented in Table 4 below[27]. Pretty (1993) concludes that "participation is necessary to seek multiple perspectives of the various stakeholders, encourage involvement and action and resolve conflicts for the common and future good. (…) change cannot be effected without the full involvement of all stakeholders and the adequate representation of their views and perspectives." (Pretty, 1993). The first five types of participation, then, are not likely

26 Some authors argue that definition is impossible (Oakley *et al*. 1991), or strategically undefined by some powerful actors (Stiefel and Wolfe, 1994).

27 Source: Wilcox (http://www.partnerships.org.uk/guide/ideas.htm). Pretty (1993) devised a similar 'typology of participation'.

to have a meaningful impact on people's lives and if sustainable management, based on people's perceptions, is required then one should opt at least for functional participation. Participation in resource management became mainstream when international conferences stressed the importance of management that is carried by the population.[28] A result of frustration with top-down interventions and deals fuelled the fire, see for example the revolts around the Narmada, Arun and Pergau dams, which were top-down controlled[29].

| | | |
|---|---|---|
| **8 Citizen Control** | Have-nots handle the entire job of planning, policymaking and managing a programme. | Varying degrees of citizen power |
| **7 Delegated Power** | Citizens holding a clear majority of seats on committees with delegated powers to make decisions. Public now has the power to assure accountability of the programme to them. | |
| **6 Partnership** | Power is in fact redistributed through negotiation between citizens and power holders. Planning and decision-making responsibilities are shared e.g. through joint committees. | |
| **5 Placation** | For example, co-option of handpicked 'worthies' onto committees. It allows citizens to advise or plan ad infinitum but retains for power holders the right to judge the legitimacy or feasibility of the advice. | Varying degrees of tokenism |
| **4 Consultation** | Again a legitimate step - attitude surveys, neighbourhood meetings and public enquiries. But Arnstein still feels this is just a window dressing ritual. | |
| **3 Informing** | A most important first step to legitimate participation. But too frequently the emphasis is on a one way flow of information. No channel for feedback. | |
| **2 Therapy** | Both are non-participatory. The aim is to cure or educate the participants. The proposed plan is best and the job of participation is to achieve public support by public relations. | Non-participation |
| **1 Manipulation** | | |

*Table 2: Ladder of participation*

'Democratisation' of water management and empowerment of the disenfranchised and unprivileged was mainstreamed during the World Water Forum in The Hague (WWF, 2000). This tries to mainstream participation in international processes. The two international dialogues (on Water and Climate and on Water, Food and Environment) which seek inter-sectoral participation around water, climate change, food and environmental issues are themselves evidence of the recognition of multi-sector stakeholder involvement. During the Johannesburg summit Multi-Stakeholder Dialogues and partnerships were advocated as

28 United Nations Conference on the Human Environment, Stockholm (1972), UNCED "Earth Summit" (1992).

29 Heijmans (forthcoming) describes the scenario in which a government pursues development through a high-modern ideology with excessive optimism and self-confidence, willing to use power to implement its plans. This 'development aggression' is more difficult to cope with for the community than the natural hazards it tries to thwart. In this case effective participation becomes advocacy. This can be both to mainstream alternative approaches as to organise confrontational mass mobilisation to counter threats from inappropriate development (Luna, 2001; Heijmans and Victoria, 2001)

appropriate structures for adaptive management and social learning. Table 5 below sums up the major points of the analysis.

Note, however, that participation can also be viewed as any strategies employed by actors who thereby alternate the social domain. In this view one cannot 'do' participation, because individuals *always* participate in the social domain (Long 2001). Seen thus, participatory development is a pleonasm, since even if there is no provision for participation in policy, the actors will react and influence final decision-making in one way or another. This sociological view of participation poses new challenges to the policy maker, since participation as policy will be placed within the wider range of political action. The perspective from which participation is illuminated and pursued (cf. Boelens, 2002) determines if and how policy makers can contextualise their policy.

| | **Likely participants** | **Issues** | **Constraints** |
|---|---|---|---|
| **Local** | Local government, local population, local NGOs, local industries, farms, water services providers, police, fire fighters, etc. | Flood protection, relief organisation, local self-help, structural adjustments. | Many solutions are beyond the scope of the local community. These might become depoliticised (cf. Allen, 2001). Conflict may weaken response. |
| **Basin level** | Agricultural, industrial, and other relevant economic sectors, city councils, regional NGOs, regional government, water services providers, aid organisations, local communities, hydrological agency, | Basin strategy, both for risk management as for disaster relief management. Address the basin's vulnerability overall and to specific groups. Co-ordination of interrelated activities. | Basin scale might be too high for local communities to become involved in addressing the problems they face. Everything depends of the characteristics of the basin if management resembles local or national management. |
| **Natio-Nal** | Basin representatives, national representative of relevant economic sectors, hydrologists, national government, INGOs | National disaster preparedness and mitigation network and strategy, to be translated into action at basin and local level. | Institutional change will be necessary first to endorse public participation at national level. |
| **Inter-Natio-Nal** | Public, Private sectors and representatives of civil society (from CBO to INGO). | Capture directions and lessons from over the world into a global network. | International participation can very likely miss the link with the local level and have little impact on actual Management |

*Table 3: Multi-level participation*

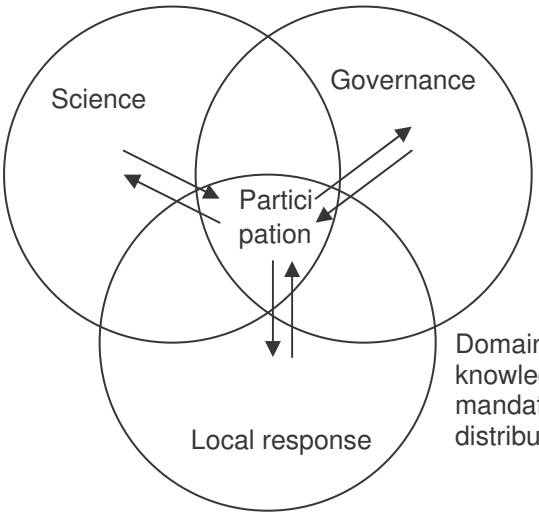
Problem fields

Now that participation has been mainstreamed, voices of discontent are cropping up, deploring the so-called "Tyranny of Participation" (Cooke and Kothari, 2002). There are several problem fields associated with participation:

- *Power politics. Disaster situations can be viewed as arenas of negotiation over resources and power. A disaster does not hit an idyllic, egalitarian dream society, but one with power differentials, and unequal access to resources and information. Vulnerabilities and coping capacities are shaped in interactions between actors within and outside communities. Ineffective disaster response may be more caused by asymmetric power relationships, and not in lack of local coping capacities. Therefore, the impacts can be much harder on more vulnerable parts of society (Anderson and Woodrow, 1989; 1993). Disaster situations are an opportunity for some to change or reinforce the power*

*balance. Participation has to take place in this highly polarised and politicised domain. Participation should regard power complexities and not to be abused by old and new powers. Participation is often manipulated by powerful actors, thereby reinforcing the status quo (Frerks; 1991, 1994). Politicians judge their rate of survival before deciding upon participatory development (cf. Mulwanda, 1993)*

- *Perception and knowledge. Local people's ideas and practices used to be relegated to the domain of superstition, or plain stupidity[30]. Elites or powerful actors tend to neglect local knowledge and perceptions. This might be changing of late, with the recognition of "local disaster cultures" that bring along locally appropriate behavioural patterns regarding precautions and warnings (Dombrowsky, 1990). Wood, however, warns against the 'populist notion' that indigenous knowledge is sufficient, arguing for participation as a two-way street (Wood, 1999). Moreover, local knowledge may be over-localised and neglect the larger issues at basin levels, or bounded by interests and thus deliberately euphemistic about the basin's issues (Wood, 1999).*




Domains contribute domain-specific knowledge. In proper participation mandates and responsibilities are re-distributed.

*Figure 1: Participation in domain interaction*

- *Institutionalisation. Many authors express the view that public participation will not be successful if it is not linked to changes in the (higher-level) institutional set-up (Lavell, forthcoming; Wisner, 2001; Mulwanda, 1992; Christoplos et al., 2001). The institutional set-up is often fragmented, too rigid and gives low priority to co-ordinating disaster management Chan (1997). Apart from being ineffective, institutional arrangements cause disasters, too. Institutions define the domain and who is included and excluded from participating in shaping the domain (Davies and Hossain, 1997). Wisner observes that lessons from the hurricane Mitch did not reduce vulnerability to two severe earthquakes three years later. He attributes this to the neo-liberal approach of decentralising development plans (cf. Rocha and Christoplos, 2001)[31]. Apart from a rethinking*

30 As Blaikie puts it: "Often formal information and knowledge of technical, managerial and political elites has been viewed as superior to the local time-place knowledge of grassroots actors which has legitimated the exclusion of this group from decision-making" (Blaikie, 1995 in Pelling, 1998).

31 Rocha and Christoplos argue that the narrative that disasters are a sign of underdevelopment is used as an excuse to promote a broad and diffuse economic development agenda instead of institutional and political change (Rocha and Christoplos, 2001). In the rush for rehabilitation insufficient money and time for analysis of the situation is taken and this leads to re-investments in high-risk activities and areas (Charvériat, 2000; Fruhling in Christoplos *et al.*, 2001). Capacitated

*of the relationship between civil society and state, Wisner argues for greater co-ordination and unity between institutions of civil society and the introduction of a legislative framework for disaster reduction. It is important to find new roles for both civil society and governments. Civil society can find a new role in growing ownership and self-regulation (Luna, 2001; Matin and Taher, 2001).*[32]

- *Conflict. Participatory processes can be a powerful element in facilitating alternative dispute resolution. However, they can mercilessly expose conflicts in society. Especially with regard to disaster, in which a 'shock' can bring about a total rethinking of the social domain (Röling and Maarleveld, 1999). Disasters can cause or compound conflicts and open conflict can induce disaster. The wisdom of participatory processes in conflict would have to be seriously assessed, and there is a point where participation is not feasible, because of lack of trust and stability (cf. Maxwell, 1999).*

- *Opportunity costs. Participation has the potential to delay or even obstruct execution of policy. From the viewpoint of managers participation may make the process complex and unpredictable, which is often institutionally unacceptable. Participation comes with considerable costs for the participants, too. From the viewpoint of participants, participation is a time-consuming business and has opportunity costs. Transport may cost both time and money, while daily tasks await. Those opportunity costs especially hamper participation of the weaker and more remote parts of society.*

- *Capacity. Community-based risk assessments depend on the ability of the different actors to speak up and organise to claim their position*[33]*. Much of the disaster management is done by local, national or international NGOs. It therefore warrants looking at their relationship with the community. The IFRC recognises that often aid is more about teaching than about learning. Structures are established (buildings erected) after which the community is invited to become involved. Insufficient attention is being paid to how such strategies may or may not be relevant. Agencies often lack skills and institutional organisation that enables them to learn from local communities and how they cope and what they perceive as needed assistance (IFRC in Christoplos et al., 2001). Donors may have other priorities or there may be insufficient communication between the development and the relief branch of an organisation. Organisations often tend to focus more on physical outputs, than on meeting underlying objectives (Allen, 2001). In such cases participation can easily become manipulative.*

- *Representation/mandate. Political change of institutions must be looked at carefully. Who becomes included or excluded in participatory schemes, who will*

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stakeholders' involvement and the recognition of local rights in relief are one side of institutional reform (Reddy, 2000)

[32] Luna describes how participatory approaches and decentralisation have changed the role of NGOs in the Philippines. These roles range from community-based disaster management and projects to reduce people's vulnerability to institutionalising disaster management through local government and advocacy and even mass mobilisation and confrontational advocacy (Luna, 2001). Though not writing about water-related disaster but about the earthquake in Turkey, Jalali (2002) analyses two types of relationships between NGOs and governments. She argues that an ideal response system that fully addresses the needs of the affected population must be based on both relationships.

[33] For example, in describing community-based disaster management during 1997 floods in Canada Buckland and Rahman conclude that human, social and economic capital are important determinants of effective community based disaster management. Yet, since disaster management needs efficiency in decision-making and implementation, participatory disaster management can become bogged down by discussions on conflicting views, etc. (Buckland and Rahman, 1999).

*be able to articulate private interests as public concerns? (cf. Mosse et al., 1998). Especially in participation at higher levels where participation includes representation dilemma's of identity and power become elements of the discussion. Participation can be a form of populism. The 'majority rule' principle (50%+1) might not always lead to the best result. Mandate is a very important element of participation. Participation can be forced upon people in various formats, without reaching significant outcome (cf. Cleaver, 2000). People might not want to participate, because they do not feel the salience of the issue or do not see that their voice is taken seriously. If participation goes without mandate, the level interest of participants will soon dwindle (cf. Warner, forthcoming).*

- *Focus. Lavell (forthcoming) argues that reducing the vulnerability to every-day risk in chronic disaster situations*[34] *will inevitably reduce overall risk, since the dangers of natural hazards will be reduced if people do not have to rely on wood chopping, mangrove cutting or ploughing unstable slopes. Some authors argue that poverty reduction will reduce vulnerability (Winchester 2000). Christoplos et al. (2001) conclude that livelihood strategies of poor people are often more about addressing vulnerability and handling shocks, than about poverty reduction, per se. A participation program must take into account that the agendas of the vulnerable might be thoroughly different than those of aid providers or politicians. With regard to disasters caused by natural hazards there seems to be insufficient appreciation of risk management at the interplay of sustainable development and humanitarian aid.*

While the need for participation is clear, the problem fields are thus many. From this impressive list of problems it appears that meaningful participation is not easy to achieve. Anticipating the conclusions of the paper, we may say that in order to become successful, participation needs to be carefully organised requiring substantial resources. Before going into this, we shall introduce the recently popularised concept of Multi-Stakeholders Platforms as a particular form of participation that, more than others, may be compatible with the challenges of complexity.

[34] He refers to the structural living conditions of poor populations that constitute a permanent threat to their security, as health problems, malnutrition, unemployment and income deficits (Lavell, forthcoming)

# 4 Look before you leap: Options for Multi-Stakeholder Platforms

A multi-stakeholder platform is where the different actors that have a stake in the management of a common-pool resource come together and discuss issues of mutual concern. The term "Multi-Stakeholder Platform" was coined by Niels Röling in 1994. The plurality/ multiplicity of stakeholders in resource management would ideally come together on a platform, a level playing field. The plurality is usually identified according to the economic background of participants, sometimes recognising special vulnerable groups (women, ethnic minorities). The platform intends to bring together all actors depending on or taking an interest in the resource. Government, civil society and community are grouped together in the pursuit of a common strategy[35].

Spotlight on MSPs[36]

MSPs are advocated as institutional formats geared towards adaptive management (Röling and Maarleveld, 1999). In the scientific world, the focus on platforms for multiple-use common pool resource management has boomed in the last 10 years. Moving beyond the now tired "tragedy of the commons" metaphor, researchers have explored the possibilities for and existence of collaborative and adaptive management on stakeholder forums. (Cf. Steins and Edwards, 1999; Ravnborg and del Pilar Guerrero, 1999; Dangbégnon, 1998). It is envisaged that including a multiplicity of voices leads to more democratic, integrated forms of resource management. The issue is receiving more and more attention and dialogues, platforms, partnerships, are new buzzwords among policy-makers.

Platforms can be established through external facilitation or imposition, or as grass-roots processes. Spontaneous platforms sometimes occur in the wake of disasters. The shocks leading to organisation do not have to be natural hazards, however. A big dam project or resisted development can also cause the emergence of platforms at which actors convene and deliberate on social action. High salience of the issue is crucial to arousing the interest of stakeholders. Furthermore, political regime changes may trigger local actors' interests in management issues and the spontaneous formation of MSPs (MSP-ICM starting conference Wageningen, 2-5 October 2001.) Let us first explore the concepts underlying MSPs.

Conceptualisation of Multi-Stakeholder Platforms

Multi-Stakeholder Platforms are grounded in belief in the power of dialogue and consensus building, breaking down institutional and power barriers, and the ability of people at local level to take the lead in managing local resources. In this respect it ties in with traditions of social negotiation and subsidiarity found in North European countries. They would be learning institutions, probably equipped with co-governance or conflict resolution. Complexity and diversity should not be viewed as threats to governance, but a resource that can be used in making management fore adaptive (Geldof, 1994).

Of course, there are different rationales for establishing MSPs. Some see the MSP as the locality where social learning takes place, others see it as the arena of negotiation and conflict management, or the space where co-governance is pursued by value-sharing and consensus building on management strategies. Still others attribute an emancipatory, empowering capacity to it.

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[35] The philosophy underlying MSP thinking revolves around the concept of communicative rationality.

[36] This section draws among others from ongoing research of Wageningen UR researchers involved in the current Sustainability of Multi-Stakeholder Platforms for Integrated Catchment Management (MSP-ICM) project, funded by the Dutch Ministry for Agriculture, nature Conservation and Fisheries (LNV). These are Maria Teresa Oré, Shriprakashsingh Rajput, Eliab Simpungwe, Annemiek Verhallen, and Jeroen Warner (co-ordinator).

In practice, MSPs may incorporate elements of the different approaches. The nature of the MSP will depend where it features on the continua given below in Table 6:

| | | | |
|---|---|---|---|
| Provenance | Imposed | ⟷ | Home-grown |
| No. of identities | 1 | ⟷ | Multiple |
| No. of levels involved | 1 | ⟷ | Multiple |
| Dominant actor | Absent | ⟷ | Involved |
| Institutions & legislation | Limiting | ⟷ | Enabling |
| Autonomy | Low | ⟷ | High |
| MSP Mandate | None | ⟷ | Maximum |
| MSP resources | Deficient | ⟷ | Self-supporting |
| MSP actions | None | ⟷ | Plenty/significant |
| Longevity | On-off | ⟷ | Durable |

*Table 4: A set of continua and criteria along which a MSP can be identified (source: Warner, forthcoming)*

The more they are found on the right-hand side on these continua, the more a process could be labelled a proper 'MSP'.[37] As we see it, a proper MSP includes most (ideally: all) stakeholder groups at different levels from community, civil society and the public sector, also the dominant stakeholders in order to attain political weight and coherence of solutions. In order to be effective and assure interest of stakeholders, an MSP must have relative autonomy, a clear mandate and resources to implement decisions. If an MSP is not to become a teatime chat circle, the relevance of the MSP will have to be judged on its outputs. Those can be directly implemented by the MSP or through increased co-operation and social learning from individual stakeholders. An MSP does not have to be a formalised structural organisation. It can be an independent organisation with offices and staff, but it could also be only a meeting of the stakeholders where the basin's polycentric management is being discussed (cf. Schlager and Blomquist, 1998).

An MSP can have opposite influences on the role of politics in management. On the one hand they can be seen as de-politicising. The consensus-seeking discourse may obscure power differentials. MSPs can fail to gain a meaningful mandate and can be used as window dressing. Serious attention should be given to avoid disinterest, rent seeking, token inclusiveness and power play when implementing MSPs as policy. On the other hand MSPs have the potential to mobilise grassroots, raise awareness and can empower disadvantaged stakeholders to participate in water management. In that sense, MSPs are politicising. The different characters seem to be highly coinciding with the fact whether or not the MSP was home-grown. Externally pushed MSPs seem to be prone to a lack of recognition of shared interdependence or discussions on salient issues. Home-grown MSPs, however, might lack the support of the government, which may feel threatened by the existence of a widely supported political body in water management[38].

[37] For a more elaborate discussion see Warner, forthcoming.
[38] For further reading we refer to (Warner, forthcoming; Hemmati, 2001)

Edmunds and Wollenberg (2001) argue that neutrality and objectivity in MSPs cannot be expected because of differential access to decision-making structures and power differentials. Rather than eliminating or neutralising political differences to achieve broad agreement, "practitioners should use negotiations to build alliances, gather information and test ideas strategically, with the explicit goal of increasing the decision-making of disadvantaged groups" (Edmunds and Wollenberg, 2001).

Possible roles for MSPs in risk management

Provided the attributed benefits are being realised (empowerment, conflict management, learning, more integrated management) MSPs could play a significant role in risk management. If vulnerable stakeholders are capacitated to voice their interests at the platforms, they will have an important portal towards the public and private sector, aid organisations and other organisations of civil society. For this to happen, the goals and the mandates should be clearly defined and people should be willing to learn from different perceptions on the common problem. The social learning process can lead to better understanding of geophysical conditions and social vulnerabilities. A thorough process would not only lead to consensus, but also to an overview of possible alternatives to management (McDaniels *et al*., 1999). This social learning can be followed by dissemination of information on risks in the basin and the development of a joint vision for risk reduction based on a balanced action program. As such, MSP can bring in the requisite degree of complexity in management. The governing system should reflect the complexity of the system to be governed – "no simple solutions for complex problems" (cf. Ashby, 1956).

One important aspect in this regard is the integration of different *disciplines* in an MSP.[39] While in its common conceptualisation, the multiplicity of stakeholders refers to economic identity groups with stakes in water management, there is no reason why other differences should by definition be neglected – in strongly divided countries, ethnic, cultural and linguistic identity group may be as relevant as economic identities to realising productive dialogues (Warner and Simpungwe, 2003). In the context of risk management, the role of knowledge is crucial. Water management, risk management and climate studies are highly specialised fields. There is little contact between different professional cultures and people tend to stick to the own management tier or scientific life-world. For adaptive and integrated management interlinkages and interdisciplinary communication will be needed more than ongoing specialisation. The integration of disciplines is just as important as the integration of grassroots up to the international level. For example, the ICRC organised a workshop last June in which both 'water' and 'climate' people were invited[40]. It turned out that people had little idea about the developments in the 'other camp' (Helmer, pers. comm.).

A properly functioning MSP could also take up a co-ordinating role during and after floods or during drought periods. In these (often hectic) times co-ordination of aid is necessary. This is not only facilitating the process, but also involves decisions on prioritising relief and adjusting aid provision to local coping. It is doubtful if the contingency management during a disaster situation can, and should be executed by the MSP. Quick response will often shore up regular democratic and competitive process to cope with an existential state of emergency. The MSP could, however, agree on a contingency plan with specific roles and procedures to be executed during disaster, and play a role in the dissemination of appropriate and accessible information, thus enhancing hazard preparedness.

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[39] For a vulnerability assessment (but also for drafting contingency plans) one could think of looking further than relief managers and water managers, and include health services providers as well.

[40] International Conference on Climate Change and Disaster Preparedness
June 26-28, 2002 in The Hague, The Netherlands

After a major disaster the MSP can play a role in exploiting the "window of opportunity", which as we saw often remains closed as management becomes bogged down in old patterns. If the MSP is able to develop a common vision on the river basin and is able to translate this in a working program the radical changes in the basin's situation can be a challenge to steer management in the desired direction and in practice to use rehabilitation in risk reduction. Mitigation in the post-disaster situation then becomes an option. The major role of a MSP would be in steering the adaptive management process, based on social learning and negotiation. This means the focus of the MSP should be process-oriented, rather than setting end-goals and bureaucratic rules. The latter should only be relative and working towards adaptive and flexible management.

A major question of course is who should be invited on the platform. In order to represent the broad diversity of stakeholders, participants should be invited from the public and private sectors and civil society. The government should be represented by its different spheres, as far as relevant in the specific basin context. Municipal councils of large cities should also be incorporated in the MSP. If the basin is shared by more countries, due attention should be paid to the integration of different county perspectives. This might be realised through nesting MSP at different tiers. Also in a national river basin the different interests between upstream and downstream users should be well represented, as not all farmers or fishermen have the same interests.

Below, we shall outline two early experiments with multi-stakeholder participation in flood-prone areas.

A view from Bangladesh[41]

Bangladesh is situated in the river delta of three major rivers: the Brahmaputra/Jamuna, Ganges and Padma. All three drain in the Bay of Bengal and are unstable, causing regular floods in the flat floodplain. Regular human suffering has led to strong impetus for flood management initiatives. The different paradigms of disaster management all passed by Bangladesh. Large structural works banning the floods were followed by smaller works and more focus on adjustment of human behaviour. In 1987 and 1988 the country suffered severe floods. The Bangladesh Water Development Board released an internal report that suggested more attention should be given to existing knowledge. International donors felt something should be done and engaged in an endeavour to free Bangladesh once and for all from the floods. A flood action plan (FAP) was proposed and taken over by the democratic government in the early 1990's. One of 26 international donor projects was FAP-20 in Tangail, 80 kms off Dhaka. It was a compartmentalisation project, an intermediate between structural solutions (embankment) and non-structural (behavioural) solutions to the monsoon floods that often submerge over a third of the country.

In itself, the project was innovative in introducing a system for participatory decision-making on when to dispose of the flood water at the (sub)compartmental level. Participation started by consulting farmers and "taking into account" other interests (Dutch Ministry of Foreign Affairs/IOV, 1993 in Warner, forthcoming) loosely based on the Dutch Water board system relying on consensual inclusive participation. After local and international protests, however, the participation set-up was thoroughly restructured. The committees became more inclusive, forming what would now be called a Multi-Stakeholder Platform, representing different social and economic groups: notably farmers, fishers, women and landless people[42].

[41] The case presented here is taken largely from ongoing PhD research by Warner, funded by the Flood Hazard Research Centre, Middlesex University, United Kingdom.

[42] Apart from this degree of self-government (giving the committees a mandate to open or close sluice gates) 'participation' also referred user involvement (building embankments through user groups) although the latter, realistically, gave people an income rather than a voice.

Despite all good intentions, it soon turned out that participation had not really been an integral part in the project's terms of reference and the project went ahead regardless of the effectiveness of consultation. In 1991 the FAP-20 consultant started a large consultation process, focussing on water problems and possible solutions. However, insufficient time was taken to realistically take account of the people's voice, as it slowed the construction project down too much. A serious impediment to the success of participation was the lack of enthusiasm in the water bureaucracy, which at the time did not believe in listening to people's preferences. Instead, the most popular and least intrusive ('do-nothing') option was vetoed out of hand by the Bangladesh Water Development Board. The frequently heard local preference for an emphasis on better drainage and groundwater development for the winter crop was largely unanswered.

As for the committees, while curious participants engaged in the process but soon realised that the committees on which they were represented had little mandate and no budget. The most important decisions on the intervention were not open to democratic control and had been 'securitised' as national interest. But did not heed for local conflict resolution mechanisms and marked power differences within communities. Many (often violent) conflicts arose between opponents and proponents of the FAP-20, and between inside (protected) actors and outsiders, who feared being worse off. With the compartmentalisation some *beels* (lake depressions) were drained for agricultural purposes, leading to protests of landless and fishermen, since they did not profit from the new situation. Amidst this polarised and violent conflict stakeholder representation is somewhat cumbersome.

FAP-20 created a new participatory structure that was fuzzy and easily manipulated by local leaders and strongmen. Participation failed to take root in the environment, and did not take enough heed of local politics and power differentials and was not embraced enthusiastically by policy-makers as useful. As a result it did not sufficiently foster accountability, legitimacy and effective and inclusive water and disaster management.

While FAP-20 was in no way a large project, it became exemplary of the way in which participation can be misunderstood. As happens all too often, participation to many initiators seemed a means to sell an infrastructural project to the community. Still, FAP-20 was a start, and however flawed, Bangladesh has pressed on with democratising its water management in its National Water Management Plan (2001). Since, Bangladesh has joined the dialogue on water and climate change.

A view from Mozambique and South Africa

In early 2000 severe floods struck southern Mozambique. The Limpopo and Inkomati Rivers rapidly expanded beyond their normal borders. Flooding is a normal aspect of the ecosystem, but these floods were the severest ever recorded. Images of the ensuing disaster dominated the international media. 700 people died and hundreds of thousands had to flee the waters. International aid was mobilised, as well as ten air forces, Mozambique's government and local NGOs. Most people were rescued by local help, however (Christie and Hanlon, 2001). In what way can a participatory and integrating approach contribute to effective disaster management and what are the institutions equipped with this task at present? The material for this paragraph is derived from the factual description of Christie and Hanlon (2001) and mostly from the research analysis of Chin-A-Fo (2002). These sources will not be referenced throughout the text.

In the forest of disaster-related institutions two types of bodies are platform-like. One is the National Institute for Calamity Management (INGC), founded in 1999. It was established to be a pro-active organisation, focusing on prevention and preparedness. The main task is co-ordinating the institutions involved in disaster management. It has to co-ordinate and regulate operations of all sectors, from national ministries to local leaders. The others are the Comités de Bacia

(Catchment Committees) of the regional water resource management authority (ARA-Sul). This decentralised public service has to manage the water according to the Water Law of 1991 and the National Water Policy of 1995). It is the prime water management authority, responsible for all aspects of water management. One of the four South Mozambican basin level platforms is the committee of the Limpopo river (CBL). The committee is 'an organ of co-ordination between the users of a basin, managing entities of irrigation networks and other institutions related to the use and profit of soil and water, with the objective to bundle forces in order to optimise water use, minimise risks of harm and conserve environmental balance' (Internal Regulation CBL in Chin-A-Fo, 2002). The CBL consists of thirteen members: public service, the executive water management institution, provincial rural extension service, irrigation associations, water users, agricultural companies, irrigation managing entities, district representatives. The CBL meets twice a year and is equipped with IWRM, but also with the competency to propose measures for droughts and floods.

Both organisations have the task to integrate and co-ordinate, the first in the field of calamities and the latter in the field of IWRM. The INGC is not really a platform organisation, because it does not have representation within its organisation. The CBL, however, seems to fit the requirements of an MSP. Participatory water management in Mozambique was pursued in combination with decentralisation of a highly bureaucratised command-and-control framework. Participation is viewed as increasing effectiveness or resource use.

Although Christie and Hanlon describe the disaster response as a success story of international aid, there is a lot to improve in response mechanisms and co-ordination. The INGC felt surpassed by INGOs 'doing their thing' without co-ordinating the need and local capacities. INGOs felt that the INGC was not capacitated for effective disaster management and transparency. In the complex situation NGOs were seen to be very much occupied with living up to donors' standards, which promote quick and efficient result over process-oriented results, local cultures and habits were often overlooked and aid went unadjusted. The co-operation between local NGOs and INGOs was troublesome. Especially after the first hectic period was over, co-ordination was little and organisations returned to their own agenda's (Christie and Hanlon, 2002). Successful co-ordination seemed to have been largely based on personalities, rather than structures (ibid., 2002)

The INGC failed in co-ordinating the interrelated activities of the basin's actors and the only real platform organisation CBL was not at all involved in disaster response, nor mitigation or rehabilitation. The INGC is not represented at the CBL, nor are the INGOs, which are important players in the field. Moreover, the CBL does not have a mandate, the representatives of water users do not feel to represent their constituencies and social learning through discussion and negotiation does not take place, as contributions are mainly speeches in which organisations share their information and strategies. The Committee has not made any decision or lent advice. The CBL, therefore, is a very weak form of multi-stakeholder platform as participation is limited and the mandate is absent. Integrating the INGC in the CBL would bring disasters into the field of integrated water management and would strengthen the competence of both entities. If more attention is given to inclusion of vulnerable groups, floodplain inhabitants, issues of representation and capacity building the CBL can have a transforming and emancipatory effect and receive a larger mandate to induce changes in the domain. At the CBL level water management can be geared towards risk reduction, and thus the division between disaster management and IWRM, which does not exist at the local level can be eliminated at policy level, too. More effort should be put into the politicisation of risk and water management. A clearer mandate should be given to the CBL and the capacity should be raised.

Probably, in time transformation of the INGC into a platform organisation - where flood response co-ordination takes place at the interface of public, private and civil society (including INGOs) - would be efficient in addressing the acute problems of disaster reduction and response. This platform should develop a vision for disaster management and develop proposals for risk reduction, co-operation during relief, and options for exploiting the window of opportunity. This will not happen as long as the discourses at local level, political level and foreign donor level do not match and stakeholders do not develop a discourse of participation and collaboration. Participation then easily becomes a paper-word, an add-on written automatically by government officials, arouses donors and never reaches the population.

At the international level of the country's basins, not much of a platform exists. In South Africa Catchment Management Agencies (CMA) are in the process of establishment, with their own set of problems. The proposal for establishment of the CMA of the Inkomati River mentions floods and droughts only in a participant's comment that the CMA ought to look at this in future, too. The only other occurrence of floods in the proposal is that the meeting of the 9th of February 2000 suffered from low attendance because of the floods. Although the floods also caused considerable damage in South Africa, the issue is certainly not as salient as in Mozambique and the Mozambican situation causes concern but does not lead to management decisions. An international MSP does not exist and co-ordination is between governments. In future the co-operation will be taken over, at least in South Africa, by the CMA. A whole new dimension arises then, but it is too early to judge the results of this shift in governance.

These cases point at problems besetting unreflective establishment of MSPs. We will inventory them below, after which we seek to point a way forward.

Problem fields for Multi-Stakeholder Platforms

While enthusiastic reports have been written on MSPs, still relatively little is known about the effectiveness of the MSP approach. Watson (2001) strongly warns that the stakeholders involved must have compatible motives for collaboration. The development of a common vision is not enhanced if the perceived problem is different for the stakeholders. Some of the problems of participation described above will be solved, others will remain and new problems will arise. Below we sum up main issues that an MSP will encounter.

- *Institutionalisation. The MSP must have an impact on the surrounding institutions and must show tangible outcomes in water and risk management. Without demonstrated impacts on salient impacts, the platform can lose legitimacy and political and financial support will dwindle. As gleaned from the South Africa study, in disaster-prone areas 'regular' water management should be integrated with disaster management in order to be adaptive in daily risk management and not to have bifurcating paths of development. The manner in which the MSP nests itself within the institutional framework is highly conducive to the effectiveness of an MSP. After all, new institutions do not arise in a tabula rasa situation. Often formal or informal structures governing water and disaster are already in place when an MSP comes into being. Bhalla warns for incomplete transfers of power and overlooking of important but unorganised stakeholders (Bhalla, 2001).*

- *Agenda setting. Where diversity in knowledge is pursued in MSPs, many policy issues have become ever more technical, precisely because processes are poorly understood. (Wood, 1999, Warner, 2001) Laymen's knowledge is rarely considered where even scientists don't have an answer (yet). This leads to participation as promotion and co-optation of pre-designed policy. If the MSP would act in similar ways, commitment and involvement of stakeholders is likely*

*to be low, unless issues are salient and become politicised bottom-up. MSPs should promote participation in processes and agenda setting, not only consult or be consulted as add-ons in separate management endeavours (Sherwill and Rogers, 2001). People should be involved in the whole trajectory of risk management and not only work on separate projects.*

- *Problem of participation, representation and power. There are several options why stakeholders would not want to participate in MSPs. Community Based Organisations for example run the risk of being seen as part of the technocratic elite and lose their legitimacy. It might be much more advantageous to them to pressurise the process from the outside and maintain their autonomy (Schönwälder, 1997). The core weakness of the MSP-discourse is the problem of power. If there is no fair balance of representation and power among participants the credibility and legitimacy of the MSP are in danger (Watson, 2001) and the danger of co-optation of vulnerable groups is high (Edmunds and Wollenberg, 2001).*

- *MSPs in river basins. There are some specific problems with regard to MSPs for disaster reduction in a river basin context. First of all, the interest groups may be different for water management and disaster management. Inhabitants of the flood-plain are probably only interested in risk reduction activities and farmers on higher fields might not be interested so much in flood reduction. Disaster may have far wider origins and far more localised consequences, and it is questionable if these hydrological units make good management units*[43]*. Against the many pro's, there are some important con's, concerning problems of scale and participation. In river-basin wide negotiation, stakeholder groups that are not familiar with high-level negotiations as for example the landless may drop out (cf. Wood, 1999; Waalewijn, 2002, van Koppen et al. 2002)*[44]*.*

- *Platform dynamics. A next point with respect to MSPs comes from behavioural science and deals with the internal dynamics of platform processes. Social learning does not only lead to more relevant information to more participants, it also involves personal transformation. Participants can frequently be seen to change in their subjective understandings of mutual relationships and the collaborative action (Poncelet, 2001). Against this rather positive element, McDaniels et al have more reservations towards social action and state that group processes that are not facilitated are easily manipulated or loose track (McDaniels et al., 1999). Based upon research in Kyrgyzstan, Wegerich concludes that institutional changes at higher levels do not necessarily bring about real changes at lower levels (Wegerich, 2002). The field of behavioural science has to contribute much to the understanding of the processes that surround multi-stakeholder dialogues. MSP are built on the premise of the desirability of mutual learning, to which many institutional environments are not conducive, in which cases the MSP model might well prove to work out disastrously.*

- *Capacitation and complexity. Finally, care should be taken not to impose concepts that are not developing locally, or for which local capacity is lacking.*

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[43] For critics on the usefulness of river basins as management units read Verhallen *et al* (2001)

[44] Ravnborg and Del Pilar Guerrero (1999) suggest that there should be multiple platforms at the different scales. It is questionable if this will solve the problems entirely. The formation of a platform is a crucial stage in which decisions must be taken whether or not to build on existing structures. Using existing platforms or institutions involves inheriting biases and prejudices (Meinzen-Dick and Jackson in Steins and Edwards, 1999; Waalewijn, 2002) while successful implementation is likely to be based on linkages to present structures (Maarleveld and Dangbégnon, 1999).

*While IWRM and participation is actively promoted by donor countries, officials and participants in Mozambique don't feel equipped enough to take over water management (Chin-a-Fo, 2002). The story is similar for Bangladesh. MSPs and integrated catchment management introduce a level of complexity in decision-making and management that may seem bewildering to under-resourced countries. Donors and NGOs should therefore aim at facilitation without paternalism.*

Good reasons to form MSPs

Everything taken together, Multi Stakeholder Platforms hold some promising prospects. The main strengths of MSPs lie in the institutionalisation of participation and the potential capacity to use complexity and diversity in a productive manner. MSP however is a new concept and a lot of myths surround it. It will be very important to invest in development of MSPs to ensure its locally and substantively appropriate design. There is a serious danger of co-optation and falling back into old mistakes.

Above, we have listed the major rationales for creating MSPs, despite the many pitfalls that can be identified. It is important to notice that the good reasons to participate apply for the MSPs, too. Those listed below are additional and specific for MSPs:

- *An MSP institutionalises participation. The major pitfall of participatory management is that the participants do not receive mandate, nor is their voice taken seriously at higher levels. An important element of an MSP is that it IS the institution and results from negotiation and discussion will have to be followed up.*
- *MSPs are specifically geared towards diversity. Participatory approaches often failed to address the diversity of the social domain. With an MSP this is not warranted either, but the specific aim makes the endeavour more accountable to attaining diversity, and thus a more holistic view of the basin.*
- *An MSP can bridge the gap between grass-roots action and top-down policy, by enrolling the first into the latter. We described many of the pitfalls, and it is important to realise the importance of dualism, but eventually the MSP holds a strong emancipatory potential and the potential that people really collaborate in a joint effort for common goals.*
- *The MSP is geared toward social justice and democracy. Because the intention is to include the wide variety of users, and not just the powerful, or the have-nots, the platform can potentially strengthen the search for equity and democracy.*

# 5 Lessons learned: conclusions and recommendations

The article has tried to give a state of the art of issues of participation in disaster management, and in particular has tried to contribute to the discussion on the feasibility and desirability of MSPs. Participation or stakeholder inclusion, we conclude, is indispensable for dealing with complexity. MSPs form a promising new development that can eradicate many of past failures of participation. It is by no means a panacea, however. Below we will outline the major lessons that can be drawn about participation on basis of literature and the cases.

- *Participation needs attention. Often participation is used to fill the gap left by a withdrawing government. Within neo-liberal thought, participation is seen as a cost-effective alternative to state control. Participatory approaches that are effective and ensure efficient and equitable management need serious attention. But they are unlikely to work as austerity measures. Participation takes time, money and energy, and must not be regarded a retrenchment of government spending (or for that matter INGOs or NGO spending).*

- *Intentions/support/outcome. The motivations for participation should match the support given. If the intention is to have an empowered and capacitated society, able to handle shocks and cope with disaster, one cannot suffice with a program in which participation is merely seen as the provision of cheap labour. Participation is a container-concept to which almost everybody connotes positive value and in which many different ideas can nestle. One should always be critical to intentions or perspectives: Why does a government or organisation advocate participation? Furthermore, one should carefully look at the way the process is structured. Is appropriate support given to the process, in terms of finance, mandate, capacity building, teaching and learning. And finally, one should be critical to the expected outcomes. How will the results of participatory approaches be incorporated in policy or contingency plans? What are the outcomes expected and does the process seem fit? What are outcomes and in what do they differ from expected outcomes and what might be the reason? Participation is adaptive management and the process should be continuously monitored and steered towards explicit goals.*

- *Participation is listening. It seems very obvious that participation involves listening to people. All too often, however, participation is being imposed and opinions are dragged out of people's mouths (e.g. by using questionnaires or quick surveys, not leaving open alternative problem formulations. Often empowerment is read as "educating the illiterate/non-professionals". Real empowerment should however include a fair share of expert un-learning, i.e. de-emphasising biased worldviews (technocratic, modernistic, rationalistic) in order to be able to understand alternative contributions (cf. Warner and Simpungwe, 2003). That participation is listening to people is often neglected. Tiered participation or representation is not a replacement for direct participation. Governments or NGOs participating in global partnerships have different agendas to people living in a floodplain. There is a problem field of direct vs. indirect participation. The relevant structuring will have to be based on the motivations and hoped-for outcomes of participation.*

- *Participation should address the complex reality. Everyday life and disaster are better characterised by continuity then by discontinuity. There is need for focus on complexity and uncertainty and the mutual relationship of society and environment. There should be understanding that complexity cannot be entirely*

*'tamed' by science and technology, and risk management should be exploited for the benefit of users and environment. Participation is of utmost importance for capturing the diversity of perceptions, resources and problem definitions. If participation is mandated management can be made more effective, conflicts can be outspoken and perhaps solved and there can arise a basis for social learning. There is a need however for capacity building and genuine partnership (Smillie, 2001). Institutional change and organisational capacity building alone will not be sufficient.*

- *MSPs is a promising form of participation as it provides the link between institutional reform and public participation. At present there is a lot of goodwill surrounding MSPs, but it is too early to draw hard and fast conclusions about their effectiveness in water and disaster management. One should be aware that an MSP faces many of the same difficulties as 'regular' participation. Due heed should be given to the complex interplay within society and between society and environment in disaster situations. Furthermore the MSP must be flexible and adaptive to changes in the environment. MSP management is necessarily difficult, as it accommodates complexity and uncertainty by nature. The difficulty is the strength and weakness of the institution (Allen, 2001). MSPs may take up the role of risk manager if the platform functions well. This means that all stakeholders are empowered to co-operate, that the platform receives serious mandate and resources, that it integrates users and uses of water with environmental management and finally that water issues are not depoliticised or remain hidden behind a veil of consensus.*

In sum, we feel it will pay off to investigate the possibilities of creating MSP-like participatory co-ordinating structures to enhance disaster preparedness and adaptation to change ('No adaptation without participation'), and build a case study base to analyse lessons learnt and incorporating these lessons. Because of its international network and multi-disciplinary and hands-on focus, the ICRC is well placed to take on or facilitate this task.

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