Research proposal for INREF Seed Money

1. Title: Exploring and advancing water justice in South Asia

2. Applicants:

Applicant groups: Law and Governance (LAW) and Irrigation and Water Engineering (IWE)
Research school: Wageningen School of Social Sciences (WASS), Hollandseweg 1, 6706 KN Wageningen.
WU coordinator: Dr. Dik Roth, assistant professor Law and Governance Group, WASS
Address: Hollandseweg 1, 6706 KN Wageningen. Tel. 0317-484689; e-mail: dik.roth@wur.nl

3. Project description

a) The proposed project

Building on earlier work and existing networks, this project is the starting point for the creation of a space for research, exchange, capacity building and policy advice about access to water and water rights from perspectives of equity and justice in the context of a variety of pressing water problems in South Asia. By bringing together key researchers and other critical actors in water, the project aims to facilitate the building of a systematic base of knowledge and concerted action. We hope to contribute to the development and articulation of visions and actions on water rights and water justice in cooperation with regional partners (water professionals, academics, NGOs etc.), and to making such visions relevant for practices of water management and governance in the region.

Although a lot is going on in terms of research on water in South Asia, much of it is directly servicing policies and projects with a narrow focus on technical and financial efficiency and effectiveness of delivery. Less attention (effort and money) goes to attempts to understand how water relates to larger questions of development, (access to) water or the ability to cope with water-related problems (floods, pollution) as an increasingly important determinant of wealth and social power. Yet, the need to do so is urgent. Liberalization, urbanization and ambitions of modernization have rapidly changed developmental choices and priorities in the region. The flipside of an emerging global economy is widespread poverty and growing inequalities. Growing pressures on water have turned it into an increasingly contested resource, control of which is crucial for one's possibilities to make a living and accumulate wealth and power. However, there is little critical research to understand such wider connections between water and development. Support to, and revitalization of, work that critically looks at - and questions - the distribution of costs and benefits of using water, and of the abilities to cope with and respond to water-related hazards, is therefore more important now than ever before.

The specific focus on water rights and access to water, equity and justice developed in this proposal reflects an explicit choice for scientific approaches that cross the disciplinary boundaries of water engineering, hydrology, law, anthropology of law, philosophy, political science, sociology and development studies. It is also a conscious choice to explore the political dimensions of water policies, to expose the power relationships involved in established uses and forms of water control and distribution, paying specific attention to the differences of class, caste, gender, and (ethnic) identity. Further details will be worked out under 'project description'.

The current proposal partly has its conceptual and methodological roots in earlier work on water rights in South Asia (see below) and in the current 'Justicia Hidrica' Project (2008-2015), a project of research and action consisting of a network of critical scholars and activists who have joined their efforts to build a knowledge base on historical patterns of water appropriation and conflicts, on the basis of which more effective actions can be developed to combat water-related injustices. Though thematically related, the latter project focuses exclusively on Andean Latin America. It pays specific attention to water used in agriculture, in a socio-political context of rural populations with a strong 'indigenous' identity confronted with external water interventions driven by the political-economic agendas of neo-liberalism. 'Exploring and advancing water justice in South Asia' will, instead, be tuned to those water questions most relevant for South Asia - including pressing questions around

flood protection and problems related to falling groundwater levels. It is a new activity to be developed in cooperation with new partners. At a more theoretical and conceptual level, however, we envisage exchanges with the Justicia Hídrica project, as these can contribute to South-South comparison and further development of comparative research.

Earlier cooperation between the applicant WUR groups and in the region:
The Irrigation and Water Engineering Group (IWE) and the Law and Governance Group (LAW) of Wageningen University have a long history of cooperation on water issues like irrigation, water rights and legal pluralism, and the role of technology and institutions in irrigated agriculture (see Roth et al. 2005; Boelens et al. 2010). The interdisciplinary research programme 'Matching Technologies and Institutions in Land and Water Management' supported by Ford Foundation and jointly implemented by IWE and LAW (1999 - 2007), yielded several successfully finalized PhD research projects in India and Nepal. It has greatly contributed to strengthening the capacity for interdisciplinary water research. Several PhD graduates of this research programme are now in positions in which they use and spread their interdisciplinary orientation through the world of water professionals. IWE is currently involved in the 'Crossing Boundaries' (CB) programme (2004-2011), also focusing on South Asia. Crossing Boundaries is a partnership-based programme (involving universities and teaching institutes in Sri Lanka, India (2), Bangladesh, Pakistan, Nepal and Bhutan) for capacity building of water professionals on Integrated Water Resources Management (IWRM) and 'gender & water' through higher education, innovation and social learning focused research ('research with an impact'), knowledge base development and networking (see http://www.saciwaters.org/ CB/cbhome.asp).

b) State of the art

Water problems in a changing South Asian context
There are several reasons for focusing on South Asia, related to the prominence and specific manifestations of water problems in this region. First, South Asia faces daunting water-related challenges caused by rapid socio-economic transformations. While old water-related problems (e.g. in irrigated agriculture) remain unsolved, new problems are emerging. The symptoms of the dire situation of water governance and management in the region are many; we mention just a few here: growing water scarcity, even leading to the 'closure' of a growing number of river basins (Shivakoti et al. 2005); degradation of water resources due to various forms of pollution - the Ganges is one of the most polluted rivers in the world;conflicts related to large infrastructural projects (Ballabh 2008); operation and maintenance problems of large surface irrigation systems under conditions of state withdrawal (Shivakoti et al. 2005); increased use and rapid depletion of groundwater (Iyer 2009; Shah 2009); growing unpredictability of the flows of major rivers (e.g. Indus, Ganges, and Brahmaputra), prompting the need for devising new ways of dealing with flooding, flood risk and flood protection. These are not politically neutral 'natural' processes, but socio-ecological problems crucially related to how political choices are made and problems and solutions defined.

Second, effectively dealing with such problems requires awareness and knowledge of existing practices and institutions. South Asia has a long history of organized water use and control for irrigation and domestic purposes, well embedded in and adapted to various climatic and agro-ecological settings (Shivakoti et al. 2005). A wide variety of water harvesting, river diversion, and water lifting technologies made human life under sometimes harsh conditions possible. This diversity of locally adapted water histories, cultures and local uses testifies to the existence of a large body of water knowledge and arrangements for management and governance. Greater knowledge of these is necessary for understanding water problems and crafting effective solutions (Bruns et al. 2005). In the planning of large-scale infrastructural works like dams, storage reservoirs, and river linkage schemes, water traditions also form an important point of reference for the formulation of alternatives, with debates often contrasting the mega solutions of the state's hydraulic mission with the (often idealized) knowledge and technologies of 'traditional' communities (Singh 2002; Shah 2003).

Third, large sections of the population in South Asian countries continue to depend on irrigated agriculture. Irrigation is crucial to the livelihoods of rural populations and the provision of staple foods to rapidly growing urban populations, and will continue to be so (Molden 2007). In India, considerations of national food security and self-sufficiency are an important ingredient of the national

food policy, stressing the importance of production increases (Gupta and Deshpande 2004). Recent food price hikes and trends of growing global demand for food, feed and fuel crops only reinforce this. Yet, irrigation-based livelihoods have increasingly come under threat. Farmers of irrigated crops often do not have the voice and rights to effectively protect their water against new and more powerful claimants. Thus agriculture risks becoming a major victim of future water transfers to other sectors and uses. These difficult and often conflictive allocational questions (Bruns et al. 2005) require much more attention and study from a justice perspective than they receive at present.

Three depoliticizing trends and influences

Much that is problematic about water has to do with politics and power. Yet, this is not how water problems are normally framed and perceived. At least three important conditions and processes work together to depoliticize and naturalize water problems, making them appear as mere technical problems, management of which is a question of consensual expertise. Together, these act as forces under the influence of which water issues and solutions come to be seen as 'natural', uncontested and politically neutral.

First, incorporation of the region into a global capitalist system with its logic of accumulation (Harvey 2003) has an enormous impact on water resources. India, for instance, shows rapid economic growth with a booming middle class exerting skyrocketing demand for food, consumer products and services. Yet, privatization, open markets, and a choice in favour of urbanization and industrialization, have also marginalized large sections of the population and left them without secure means to sustain their livelihoods. Growing gaps between the rich and the poor are even major threats to India's development (Guha 2007). South Asian researchers and activists have played a crucial role in showing that interventions to deal with water scarcity (large dams, water transfer linkages) or flooding (levees, policies for floodplains) are social and political expressions of specific societal values. However, these voices are increasingly muted in the new political landscape of liberalization, and therefore fail to dent the repeating cycle of water development interventions.

Globalization and transnational relationships also influence the articulation of water problems. Models for water governance and policy are increasingly shaped by global discourses. Thus Pahl-Wostl et al. (2008) stress the need for 'global water governance' for the 'global water system'. Such approaches deny that water management and control are always specific to local ecological and social contexts and histories (Donahue and Johnston 1998; Lahiri-Dutt and Wasson 2008). Policy concepts like IWRM tend to simplify complex problems into manageable chunks, focusing on the consensual (e.g. multi-stakeholder approaches) rather than on conflict, and reinforcing the role of specific forms of water expertise and interventions at the expense of others. Such concepts obscure the political nature of water management (Molle 2008). Similar globalizing trends can be seen in the debates about water rights, with pleas for uniformization of titles and registration. Although promoted to strengthen access for the poor, formal registration of rights may in fact increase tenure insecurity by turning water into a transferable commodity. Globalization and transnationalization in the domain of law also lead to the production of new norms, standards and laws (see F. von Benda-Beckmann et al. 2009) that may have considerable impact upon local resource use and management.

Second, climate change has a distinct impact on how water problems are perceived. As Swyngedouw (2010) argues, a new 'post-political' consensus seems to take shape around climate issues, in which 'sustainability' becomes the one and only policy concern. This focus also shapes the framings of water problems and solutions in a specific way. Whole societies are now 'adapting' and nations are being 'climate-proofed', with 'people' labelled as the victim and 'nature' as the common enemy. Attention to conflicts gets replaced by a consensual discourse in which there is little allowance for political debates about the distribution of burdens and benefits, about winners and losers. Crucial questions about rights, legitimacy and justice, therefore, remain unasked and unanswered.

Third, water bureaucracies and expertise tend to be deeply entrenched in society and often have vested interests in solutions which involve large civil engineering and construction programmes. Thus, growing water demand and water scarcity are dealt with by new forms of 'water resources development' through large hydraulic infrastructural works. The response to increased risks of floods is likewise often sought in the construction of more dikes, dams and levees. The multitude of plans in the region for large dams and water transfer canals testify to the continued importance of this 'hydraulic mission' (Molle et al. 2009). The engineering and construction answers to problems of

scarcity and insecurity hide the fact that such problems are often caused by particular historical patterns of resource capture. More structural solutions would therefore have to address underlying structures of water access and appropriation, and the ways these are legitimized in laws and policies.

The price paid for such neutralizing and depoliticizing approaches is, first, a neglect of the linkages between water and poverty and, more general, an ignorance of how water policies and projects work to re-distribute wealth and power, often along prevailing axes of social difference such as class, caste, gender, or ethnicity. Second, it leads to a downplaying of social conflict and the (either positive or negative) political role of conflicts about access and risk, water rights and other resource rights, and issues of legitimacy and justice in creating water 'solutions'.

A focus on interdisciplinarity and water justice

This project explicitly recognizes that the socio-economic, hydrological, cultural, legal and political aspects of water are strongly interconnected. It views plurality and complexity as fundamental characteristics of water societies. Its interdisciplinarity cuts across the boundaries of the natural and social sciences, simultaneously analyzing the technical/ecological and the social. Sociotechnical approaches regard water technologies as deeply social in their shaping, uses and social consequences (e.g. Mollinga 2003). Technologies also contain a normative script: division works or the principles on which they are based, for instance, reflect notions of the 'right' allocation based on a variety of values and principles. These may be contested by different groups of users claiming water on the basis different and often conflicting constructions of rights and conceptions of equitable and just allocation of resources. Here we enter the domain of plural definitions of water rights – legal pluralism (Roth et al. 2005). The great challenge of relating socio-technical and legal pluralism approaches to the issue of justice is to find ways of basing conceptualizations of justice in the domain of water not so much on generalized conceptions of rights but on a basic awareness of the situatedness and embeddedness of both water resources and conceptions of what is equitable and just (see e.g. Sen 2009).

c) Project objectives

The specific objectives of the proposed project are:

1) To further develop the theme of water rights and justice empirically, theoretically and methodologically;
2) To develop and consolidate a strong partner network in South Asia on the basis of a common interest in joint interdisciplinary research on water rights, water conflicts and water justice. Partners will include academic researchers with a background in various disciplines and a genuine interest in interdisciplinary work, action researchers, water professionals, and NGOs;
3) To explore, in cooperation with partner institutions, the options and possibilities for a follow-up initiative to contribute to increasing awareness of the importance of water justice among policy-makers, donors, water professionals, and civil society organizations, as well as to improve water policies;
4) To develop a proposal for a follow-up programme that will fulfil the major requirements of INREF (interdisciplinary, comparative).

d) Project activities

To realize the objectives mentioned above, we intend to develop the following activities:

Re objective 1:

To realize this objective, all prospective network partners will be invited to write a paper in which they further develop the theme of water justice empirically, conceptually and theoretically, and link it to earlier or ongoing activities. An important aspect of this activity is also the development of possible topics and domains on which comparison is of special relevance, and the development of criteria, levels and dimensions of comparison. Such comparative work could both entail regional comparisons (in South Asia) as well as comparisons with countries outside the region (such as in Latin American countries, through exchange with the Water Justice project).

Re objective 2:
To realize this objective the partners will, in close cooperation with their existing network in the region, further identify relevant academic institutions and researchers, actions researchers or research institutions, water professionals and NGOs in South Asia for collaborating in future work. Important initial partners for this will be found in the existing networks of SACI Waters and the participants in the Crossing Boundaries programme. We attach high importance to the following:

- The inventory should cover at least three countries in the region that make relevant comparison possible;
- The inventory should not only focus on partnerships with institutions that do already work on water justice issues, but also, and even primarily, on institutions that do not yet pay attention to it but have the ambition to start working on the theme;
- The inventory should cover a variety of water issues and domains, both related to quality and quantity issues, to scarcity as well as flooding.

WUR partners will also explore possibilities for further intra-WUR cooperation. In addition, the WUR partners will explore the possibilities for forms of cooperation with Dutch academic institutions, NGOs and water professionals.

Re objective 3:
Core activity to realize the objectives mentioned under 2) will be the organization of a workshop in the region, for which existing and possible new partners will be invited. One option for shaping this workshop is to ask all partners to present a document in which they explain their academic and / or other interest in the theme of water rights and justice, to define core domains for which a justice framework is most relevant in their view, what they would expect a water justice network to contribute, and what they could and would be willing to contribute to such a network.

The workshop should at least yield a common vision on and objectives of a water justice network, a clear focus and possible activities of such a network, and jointly developed ideas for writing a follow-up proposal and related activities.

Re objective 4:
The workshop will also play an important role here. Related to activities mentioned above, special attention should be given to the question how a water justice network and follow-up programme(s) can be made relevant to the world of water action, water professionals, policies and interventions. Possibilities are interdisciplinary research, action research, training components for scientific institutions and water professionals.

e) Expected outputs

We expect the following outputs of this seed money project:

1) A position paper on water justice that can be used to further develop the theme in follow-up activities; the paper will deal with issues of theory, method, and comparative aspects of water justice research, but pay specific attention to ways of making these issues relevant for the non-academic actors (NGOs, water professionals etc.);
2) A detailed report and proceedings on the workshop in South Asia, which will be published in a South Asian journal or book;
3) An inventory of academic and other institutions that are interested in cooperation in the framework of a water justice initiative; this will be a combination of scientific (action-)research institutions, water professional institutions and NGOs. The inventory will especially give details about the kind of topics these institutions are focusing on and activities they are involved in, and the degree to which interdisciplinarity and attention to water rights and justice play a role in their activities (we also seek cooperation with institutions that want to develop these orientations!);

4) A provisional selection of water issues and countries that will become the focus of a follow-up activity;
5) A provisional selection of research, training and other follow-up activities that will be developed;
6) A draft proposal to be used for raising funding for a follow-up initiative.

4. Partners

The seed-money requested for through this proposal will be used to set up and consolidate a committed network of scholars and activists in the region. The regional network will maintain strong linkages with global water justice networks and scholars – see below – and with other regional networks, such as the mentioned Water Justice network in the Andean countries. Apart from the participating scholars and their academic institutions, the network aims to set up a strong alliance with partner networks of activists, grassroots organizations and policymakers at different water governance scales.

5. Follow-up

a) Expected follow-up activities

The proposed project will be used for planning and generating funding sources for continuation / follow-up activities. For a follow-up we envisage the following objectives, activities, and outputs (which will fulfil the INREF criteria of problem-oriented, interdisciplinary, innovative research based on / expanding partnerships, and focusing on institutional capacity building in the South):

b) Objectives, activities and outputs

Objectives:
Final and more specific objectives will be determined in cooperation with academic and other partners. The main objective of the project is to contribute to more water justice – in the form of democratic water policies and sustainable development practices that support an equitable distribution of water. Specific objectives are:

- *Development:* To influence debate and encourage action among law- and policy-makers; and to support civil society strategies for more democratic water management policies, better water conflict resolution mechanisms, and a more even and just distribution of water resources.
- *Knowledge, research and innovation*: To conduct comparative research and stimulate interactive learning processes through a multi-actor research and action network in partnership with activist and water user organizations in concrete water management settings, to acquire deeper knowledge about: (i), the dynamics and mechanisms of historical processes of distribution of water and water rights and risks, including impacts on class, gender and ethnicity; (ii), the contents, dynamic nature and structural contradictions of the resulting conflicts; and (iii), the content of apt strategies by grassroots and civil society actors to confront water injustice and solve water conflicts.
- *Capacity development*: To train and consolidate a gender-balanced, critical mass of water professionals enabling them to identify, understand and confront processes of water (rights and risks) distribution and conflict, supporting them in the design of water development strategies that support politically and economically vulnerable user groups.

Activities:
The future activities of the project will consist of comparative case studies in the various South Asian member countries, findings of which will also be compared to similar studies done in the Andean countries and in Europe (Spain), the USA and Africa (Mozambique). Further activities will be defined in collaboration with network partners, but our ideas include the integration of the

research with the training of young professionals in water management through the organization of courses. We aim to strategically intertwine the research and training components with knowledge dissemination and policy advocacy within communities of water users, through action research, mass media activities for popularizing findings, round table debates with policy-makers, and international and national public conferences.

Important activities will likely include:

- Training and development of analytical skills in the domain of water rights, water conflict, and water justice for water professionals, policy makers, academic staff, and NGO staff;
- Jointly devising solutions to water rights and water justice issues in the region;
- Further strengthening and expansion of our network, and institutionalizing it in the region;
- Research (MSc / PhD) on the various dimensions of water justice by students from countries in the region and WUR students;
- Publication and dissemination, both through scientific publications in relevant journals, through books (preferably for the Asian market), and through more policy-oriented and popularizing work.

Outputs:

- (see above): institutionalized partnerships and networks, increased knowledge about water rights and justice issues disseminated through various kinds of publications and other forms of dissemination, tangible development of analytical skills and knowledge through e.g. MSc and PhD research projects.

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