water and indigenous peoples

Knowledges of Nature 2

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UNESCO – LINKS

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Foreword

By adopting the UNESCO Universal Declaration on Cultural Diversity in 2001, the international community has demonstrated its commitment to recognise the *"contribution of traditional knowledge, particularly with regard to environmental protection and the management of natural resources, and fostering synergies between modern science and local knowledge"* (Action Plan N° 14 of the UNESCO Universal Declaration on Cultural Diversity). Yet in the domain of water, a large gap remains between policy and practice. Indigenous peoples from all corners of the globe continue to struggle for acknowledgement and recognition of their own visions of water, both at home and in national, regional and international forums. Almost without exception, their voices remain obscured by a mainstream discourse rooted in a conception of water as a mere commodity.

This publication brings some of those indigenous voices to the fore. It includes words from some of the most incisive indigenous critics participating in current international debates on water access, use and management, as well as expressions of indigenous knowledge and transdisciplinary insights with a view to proposing remedies for the global water crisis. It also benefits from the contributions of numerous specialists who share expertise and experience in the fields of anthropology, political science and law.

Water and Indigenous Peoples is the second volume in the *Knowledges of Nature* series of UNESCO's Local and Indigenous Knowledge Systems (LINKS) project. This cross-cutting project brings together UNESCO's Sectors for Culture, Natural Sciences, Social and Human Sciences, Education, and Communication and Information. Launched in 2002, the LINKS project works with local knowledge holders to promote recognition of their expertise about the natural environment and to reinforce their contribution to a more equitable governance policy for natural resources.

This volume is based upon the papers delivered during the official sessions on water and indigenous peoples organized on the occasion of the Third World Water Forum held in Kyoto in 2003, with additional contributions from the Second Water Forum in The Hague in 2000. The official session on indigenous peoples at the Second World Forum was convened by UNESCO's cross-cutting LINKS project. At the Third World Water Forum, under the overall theme of Water and Cultural Diversity, UNESCO-LINKS coordinated two official sessions on indigenous peoples in close partnership with: Central America-Global Water Partnership (Costa Rica), Centre for Respect of Life and Environment (CRLE, USA), ECLAC (United Nations Economic Commission for Latin America), Fundación Solón (Bolivia), Tebtebba Foundation (Philippines) and the WALIR program, (coordinated by Wageningen University, the Netherlands and ECLAC). In addition to the official sessions, indigenous participants at the Third World Water Forum organized an indigenous caucus that brought together participants throughout the Forum. They held preparatory meetings and formulated a collective message to decision makers that became the Indigenous Peoples Kyoto Water Declaration, which is presented in the final chapter of this publication.

UNESCO warmly thanks the indigenous participants, advocates and experts from the Second and Third World Water Forums whose contributions have made this publication possible. The Ministry of Foreign Affairs of the Netherlands, the Government of Japan and the Secretariat of the Second and Third World Water Forums generously supported the participants for the water and indigenous peoples sessions. Rutgerd Boelens of Wageningen University deserves special recognition for coordinating the major contribution to this volume from the WALIR (Water Law and Indigenous Rights) Project, for his valued efforts in co-organizing the Kyoto sessions and his advice as co-editor.

Respecting cultural diversity requires us to constantly learn from others and to revise our own paradigms with a degree of humility and objectivity. We hope that this publication will provide food for thought and enrich the on-going debate on cultural pluralism, good governance and sustainable development.

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Introduction

Douglas Nakashima and Moe Chiba
Local and Indigenous Knowledge Systems, UNESCO

Current efforts to rally international support for sustainable development, such as the Millennium Development Goals (MDGs) or the World Water Forums, have left indigenous peoples standing on the sidelines. Already at the Second World Water Forum held in The Hague in 2000, the report from the session organized by UNESCO on Water and Indigenous Peoples concluded:

(…) It is clear that indigenous/tribal peoples, their unique systems of values, knowledge and practices have been overlooked in the world water vision process. (…) there is an urgent need to correct the imbalance of mainstream-thinking by actively integrating indigenous women and men in the subsequent phases starting with the framework for action.
Conference Report, Water Policy 3 (2001), S49-S51.

Yet three years later at the Third World Water Forum in Kyoto in 2003, there was little evidence of change. The UN Permanent Forum on Indigenous Issues, at their Fourth Session held in New York in May 2005, recently came to a similar conclusion with respect to the MDGs. They noted the severe shortcomings of the MDGs, their targets and indicators, as vehicles for addressing the needs and aspirations of indigenous peoples. These shortcomings are multiple, and intervene at several levels.

This discouraging situation persists despite ample data making it clear that indigenous peoples figure prominently among the world's most impoverished. In fact the Inter-Agency Support Group on Indigenous Issues observed that indigenous peoples "rank at the bottom of the social indicators in virtually every respect" (IASG 2005).

Yet the Goal of MDG 1 is to "Eradicate extreme poverty and hunger", while the Target for Goal 7 is to "Halve, by 2015, the proportion of people without sustainable access to safe drinking water". The absence of indigenous peoples from these global development processes has a dual drawback. First, indigenous peoples risk to be left by the wayside despite their very real needs for more secure and sustainable livelihoods. Second, and of greater concern, is that the impoverishment and hardship of indigenous peoples may in fact be exacerbated by this worldwide push to fulfil the MDGs. In response to international pressure, governments may heighten their exploitation of indigenous lands and territories, thus further dispossessing indigenous peoples of the natural resources that they rely upon to fulfil basic needs. Large-scale hydroelectric development projects, for example, often target indigenous lands because they are dismissed as under-populated, under-utilised or even 'wastelands'. Similarly, indigenous communities' water sources that sustain their multiple uses and livelihood strategies are often taken away in order to provide drinking water to urban areas and metropoles. Thus a misguided pursuit of the MDGs could in fact worsen indigenous peoples, matters for ever while national indicators of well-being may improve.

Accordingly, there is a real need to involve indigenous peoples directly in development processes, whether at local, national or global levels. This publication on Water and Indigenous Peoples advocates a revision of international development efforts to fully embrace indigenous peoples' knowledge, values, land tenure, customary management, social arrangements and rights pertaining to water. Contributions cover a wide array of approaches and issues, ranging from 'worldviews' to 'rights-based struggles'.

Janet Armstrong, author and artist of the Okanagan Nation from western Canada, opens the volume with a poem called "Water is Siwlkw". Siwlkw is an Okanagan word meaning medicine, the highest and greatest form of medicine. As Janet herself declared when introducing her poem: "Water is a basic element of life and is therefore sacred, as sacred as life itself. We are all equal in that. Life belongs to all. Water belongs to all. We are water."

Evo Morales, indigenous leader and recently-elected President of Bolivia, begins the publication's first section on 'Struggles for Recognition' with a powerful statement that cuts to the heart of the water issue for many indigenous peoples.

A single homogenising model that advocates water privatisation and free trade has hijacked the global water debate. Other visions of water – its spiritual value, its social meaning, its customary access – have been stifled. Indigenous peoples and the poor, despite the enormity of their numbers and needs, have once more been left by the wayside.

Vicki Tauli-Corpuz, recently elected chair of the UN Permanent Forum on Indigenous Issues, argues for a human rights-based approach to water. She demonstrates that the continuing emphasis at the Second and Third World Water Forums on profit-based water supply and management clashes with the growing international recognition of indigenous peoples and their rights. Indeed, even the dualistic notion of 'public or private' that shapes so many debates about water access, remains inadequate and simplistic in the face of the diversity of indigenous water management forms.

For Pablo Solon, sociologist and indigenous peoples' water advocate, indigenous systems fulfil water needs through community-level social arrangements that are rooted in respect for the interdependence of people and nature. Neither public nor private, they are at odds with the predominant Eurocentric worldview, and merit consideration on their own terms.

Continuing this analysis, Leonidas Iza, President of the Confederation of Indigenous Nationalities of Ecuador, contrasts the dynamic, humanistic and spiritual notions of water shared by the Andean peoples of South America, with the narrowly economic vision espoused by the World Water Vision. Proposals to 'resolve' the water crisis proned by the latter document fail to recognise the real needs and aspirations of the indigenous and rural communities of the Andes, and would place their economic, social and cultural well-being in jeopardy.

Rutgerd Boelens, researcher at Wageningen University, the Netherlands, and coordinator of the international program on Water Law and Indigenous Rights (WALIR), aptly draws this first section to a close with an analysis of how policies that are believed to enhance inclusion can in fact reinforce exclusion. Indigenous and peasant communities may be the main providers of food in Andean countries, but they are the last to benefit from contemporary water development policies. This is doubly ironic given the current discourse on inclusion, equality and participatory management. But as Boelens reveals, the discourse on equality has little to do with equity, and is profoundly averse to sustaining diversity. Following Fanon, he unveils how the western ideology of equality is a thinly veiled vehicle for expressing superiority and imposing assimilation under the guise of advancement and inclusion. The arguments and outcomes are not unlike those proffered by scientists, whose claims to cognitive superiority serve to justify their hegemony over other knowledge systems. They also resonate with the discourse of neo-liberal economists for whom free market economies remain the only viable instrument for poverty eradication.

The book's second section entitled "Worldviews and Water Management" presents a series of case studies that contrasts sharply with the conventional discourse offered by international organizations, governments and the private sector. For indigenous peoples, the wise management of water is not just an economic matter, but one that is first and foremost spiritual and social. Inspired by the example of her own people, the Kankanaeys of Besao in the Philippines, Ellen Bang-oa illustrates how water is a responsibility attended to by all members of society, both individually and collectively. This includes showing respect to the *nakinbaey* spirits who inhabit water sources and ensure their continued replenishment. Things associated with human or animal death must be kept away from water sources, as well as grazing animals such as the water buffalo whose breath and excreta are considered particularly offensive. Recognising the relationship between forest and water, the iBesao also observe rules and regulations governing the use and regeneration of forested lands. Finally, Bang-oa describes the complex water management system itself, demonstrating that water is truly a communal resource with complex rights and responsibilities ensuring its continued flow and equitable distribution.

Titling their paper after two ancestral deities of the Metei people of Manipur in northeast India, Roy Laifungbam and Anna Pinto outline the cen-

tral role played by water, and its harnessing through an ingenious system of canals, dykes and reservoirs, in the emergence of the Metei Nation. Managing water in the Imphal Valley was more than just an engineering tour de force. The wetlands and waterways that were created became channels of exchange and communication between clans and tribes, as well as between human and spirit worlds. With the demise of this system, due to the abolition of the labour system that maintained it, the entire landscape is now under threat from growing population pressures and land reclamation for urban expansion.

Corinne Wacker describes the multiple ways that water is woven into the landscape, ritual life and day-to-day existence of the Tagmachig peoples, who live in a remote mountain oasis in the Ladakh region of the Indian Himalayas. In their cosmology that blends influences from the distant cultural traditions of Iran, India, Tibet and Mongolia, the spiritual forces of water manifest themselves in a multitude of forms: through symbols that appear in the depths of the clear glacier lake, bushes and trees growing by the village springs, lizards emerging from the earth's depths after winter hibernation, and the dark and wild Indus River that carves an untamed course below and beyond the village's perimeter. As testimony to the intimacy of their relationship to water, the Tagmachig declare that it is by maintaining a correct attitude and continuing their labour in the field that people ensure a continuing flow of water from their desert spring to nourish crops and create the oasis upon which their lives depend.

Tshepo Kumbane recalls the autonomy of rural communities that once were able to secure the greater part of their food and water from the land. But under the apartheid government communities in South Africa suffered dispossession. People were displaced from their original settlements, creating dependency and despondency. The Water for Food Movement aims to break this cycle of apathy and helplessness by empowering people to value themselves as well as the nurturing capacity of the land and water of their homesteads.

Joram/Useb from the Hai//om community of Namibia offers a very different perspective on the dynamics of water and territory. For the San, hunter-gatherer peoples of southern Africa, it was the lack of water in the harsh Kalahari desert that served to defend their territory from the incursions of those who did not possess the knowledge to seek out water and survive. But when borehole technology made water easily available from underground aquifers, livestock herders privatised waterholes and totally dispossessed the San of their lands. Nigel Crawhall furthers our understanding of these historical events based upon work being done by the South African San Institute with Khomani San. Ending on a positive note, he describes the successful land claim granted to the Southern Kalahari San and the gradual return to the land of elders and youth alike.

Santos Augusto Norato from the Totonicapan community of western Guatemala provides us with an overview of the Mayan community organizations that guide the use and protection of forest and water resources. Through water committees, the communities define and enforce rights and obligations associated with water use. They coordinate collective labour and develop strategies to deal with the problems stemming from population growth, the advance of the agricultural frontier and increasing pressures on natural resources from trans-national corporations.

Closing this section on Worldviews and Water, David Groenfeldt offers a thoughtful essay on spiritual values in Western and indigenous societies. He notes that mainstream debates with respect to water confront those who see it as an economic good with those who argue for its recognition as a social good or human right. Spiritual perspectives rarely, if ever, receive serious consideration. While it is not uncommon for Western environmental NGOs to abandon rationality in favour of a crusading discourse, such fervour is reserved for emblematic species such as whales, or mythical places such as tropical forests, rather than a substance as ubiquitous as water[1]. The formidable challenge for indigenous peoples is to resist pressures, from without and from within, to align with the Western model and relegate spiritual values to a distant second place behind economic gain.

The final section of the book addresses the issue

of Water Rights and National Legislations. It includes four contributions covering cases in Bolivia, Ecuador, Mexico and Peru, provided by participants in the comparative research and action programme called WALIR – Water Law and Indigenous Rights.

Efforts to recognize indigenous peoples' ownership of ancestral or other territorial lands and collective water resources are a challenge to national legislations, which most often affirm the exclusive territorial right of the State. In the Andean region, despite the fact that most country Constitutions recognize the pluri-ethnicity of their societies, domestic laws related to water generally ignore indigenous peoples' rights in favour of those of the State. Critics observe that during the neo-liberal trend of the 1990's, State authority was often directed toward further strengthening local elites and to enable (national and international) private enterprises to exploit peasant and indigenous owned natural resources through water rights concessions. Given this absence of legal protection, indigenous advocates are increasingly involved in the law reform process in search of pathways to duly recognize forms of legal pluralism.

In Bolivia, the on-going process of reforming water legislation has made some headway but not without conceptual dilemma. Any effort to recognize indigenous peoples' rights in a legal system is confronted with the challenge of defining customary law. The fluidity of the concept makes it difficult for lawyers to determine rights and legitimate rights holders. In summarizing the debates raised during the reform process, Rocio Bustamante presents a critical analysis of the challenges of this legal exercise and its possible adverse consequences for indigenous communities. Bustamante concludes that the issue of legal pluralism raises the challenge of recognising diversity as the basis of development. The success of legal pluralism thus lies in the delicate balance between the right to equity and the right to be different.

Indigenous peoples, peasants, rural communities… many terms have been used to describe Andean reality with varying connotations, each providing justification for diverging political purposes and agendas. For Armando Guevara, transforming the current legislation system calls above all for a dialogue between government and indigenous/rural organizations to bridge the conceptual gap that separates the official view of indigenous issues from local realities. Contributing to this dialogue, Guevara presents a thoughtful review of key concepts such as "indigenous peoples", "rural community", "peasant", "identity" and "multiculturalism" and the meanings attributed to each of these concepts by various stakeholders. Guevara adds that the revision of legislative policy needs to take into account the "social life" of government legislation. As he rightly observes, law is not a rational and immutable system that regulates society impartially. On the contrary, it is a cultural phenomenon and social product that acquires different meanings according to historical and local context. Thus, the important question is not whether laws have been enforced as intended by lawyers, but understanding how they have been enacted within the indigenous/rural community.

The gap between official discourse and reality has indeed often turned out to be dramatic. Francisco Peña offers an overview of the challenge of water management in Mexico by contrasting indigenous management with the current water regulation framework. Between 1920 and 1970, the Mexican federal government achieved the expansion of irrigated land and increase of electric power supply for urban areas. Behind this "success" story, however, lakes and wetlands disappeared, water sources were contaminated and indigenous communities were massively relocated by the creation of reservoirs. Nor have watershed councils, established by the federal government during the 90's to support local water consumers, been successful in responding to indigenous peoples' concerns. Dominated by the federal administration and corporations, the bureaucratic approach taken by these Councils compartmentalizes water management in sectors and fails to take into account the indigenous view of water as an integral part of land and ecosystem management.

To conclude the section, Paulina Palacios profiles several legal texts drafted by the Ecuadorian indigenous movement, thereby providing an overview of the indigenous normative vision.

While customary law is specific to its locality, indigenous communities have been collectively exploring the possibility of drawing up a positive law by identifying their common values, ethics and norms. Palacios stresses that such exercise of "codifying" customary law does not necessarily generate a "static law" that would betray the nature of indigenous peoples' visions. As she demonstrates, the five proposed laws do not dissociate water management from the overall question of land and ecosystem management. Participation in the decision-making process and prior informed consent on matters affecting their territory are also core elements of such laws. For Palacios, this endeavour for common lawmaking by the indigenous community is the key to achieving a pluri-national State.

ENDNOTES

(1) M. Roué (ed advisor), 2003, NGOs in the Governance of Biodiversity, *International Social Science Journal,* N° 178, pp 126.

REFERENCE LIST

Inter-Agency Support Group on Indigenous Issues, 2005, *Technical Position paper on the Millennium Development Goals and indigenous peoples.* Annex to the "Report of the Inter-Agency Support Group on Indigenous Issues on its 2004 session". Permanent Forum on Indigenous Issues, Fourth Session. (E/C.19/2005/2 of 14 February 2005).

Water is Siwlkw

siwlkw she murmured is an emergence the subsequence of all else a completeness of the design transforming to be lapped continuously onto long pink tongues in that same breathing to be the sweet drink coursing to become the body a welling spring eternally renewing a sacred song of the mother vibrating outward from the first minute drop formed of sky earth and light bursting out of the deep quietness *siwlkw* is a song she breathed awakening cells toward this knowing that you are the great River as is the abundant land it brings to carve its banks then spread its fertile plains and deltas and open its basins its great estuaries even to where it finally joins once again the grandmother ocean's vast and liquid peace as are the headwater glaciers of the jagged mountains waiting for the yearly procession of thunder beings bearing the dark cloud's sweep upward as spirits released from green depths cradling whale song dance on wind as are the cold ice springs feeding rushing brooks and willow draped creeks meandering through teeming wetlands to sparkling blue lakes as are the silent underground reservoirs coursing gradually up toward roots reaching down to draw dew upward through countless unfurling into the suns full light as much as the salmon and sleek sturgeon sliding through strong currents even the tall straight reeds cleaning stagnant pools equally are the marsh bogs swarming multitudinous glistening flagella and wings in high country holding dampness for the gradual descent through loam and luxuriant life to drink in silkw she said is to remember this song is the way it is the storm's way driving new wet earth down slippery slopes to make fresh land the river's way heaving its full silt weight crushing solid rock the tide's way smoothing old plates of stone finally deciding for all the way of ice piled blue green layer upon layer over eons sustaining this fragment of now so somewhere on her voluptuous body the rain continues to fall in the right places the mists unceasingly float upward to where they must and the fog forever

ghosts across the land in the cool desert wind where no rain falls and each drop is more precious than blood balancing time in the way of the silvery hoar frost covering tundra where iridescent ice tinkles under the bellies of caribou her song is the sky's way holding the gossamer filaments of rainbow together guarding the silent drift of perfect white flakes where the moose stop momentarily to look upward her song in the forest insuring a leaf shaped just so captures each glistening droplet to celebrate the vast miles of liquid pumping through the veins of the lion parting undulating savannah grasses lifting great Condor wings soaring last circles in the mountains of Chile accumulating in the places it chooses to pool in subterranean caverns moving through porous stone seeping and wetting sand deep inside of her caressing thunder eggs and smooth pebbles at her heart

This song is the way

Jeannette C. Armstrong, February 2003

Jeannette C. Armstrong is a Canadian author and artist. She is Traditional Science Council Member of the Okanagan Nation, international observer to the Continental Coordinating Commission of Indigenous Peoples and Organizations, and executive director of the En'owkin International school of Writing and Arts.

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struggles for recognition

Message on behalf of the Indigenous Peoples at the Third World Water Forum

Ladies and gentlemen, brothers and sisters of water,

I would like to congratulate the organizers of this thematic area for having included indigenous issues in this World Water Forum.

According to the United Nations, indigenous peoples have suffered from a situation of colonization or invasion and currently have a non-dominant status in society. It is true that indigenous peoples have been and are continuing to be subjected to colonization, invasion and exile within our own territories. It is also true that we are not dominant in wielding political power. However, in social weight, in number, I assure you that the groups that are being colonized and subjugated in our own countries comprise over half the world population.

There are two sessions on indigenous issues, among more than 350 sessions in the World Water Forum. And how many indigenous peoples are there? Do you suppose that we are actually only half of one percent of the world population?

World-wide, there are over one billion persons with insufficient or poor quality water. Most of that billion are indigenous. Therefore, I feel that the first action that the organizers of the Third World Water Forum should take is to recognize that indigenous peoples, small farmers and the poor are not sufficiently represented here. We are not going to solve water problems without involving the true stakeholders. Similarly, how many societal, rural and indigenous organizations are on the World Water Council? None. So, if we are going to talk about actions and not just speeches, that will have to change.

I don't know how many of you have read the World Water Vision document approved in The Hague at the second World Water Forum. Well, who approved that document? That vision? The social movements, the participants in the Forum? Or the consultants hired by the World Water Council? We have to abandon the practice of discussing among ourselves, and then having consultants and experts draft the final reports and conclusions.

Water is a human right. No one may be deprived of water. If we agree with this precept, why are mining, logging, electrical and municipal companies plundering the water resources belonging to the rural and indigenous communities throughout this planet? This Forum has to approve a call to the major trans-nationals, companies and mega-farms, to stop looting water from the indigenous peoples. But that is not enough; it is necessary to take advantage of the time during these two sessions on indigenous rights, to discuss how we are going to concretely and effectively

support indigenous movements in defending their water, fighting against pollution and preventing privatisation of water.

We indigenous peoples do not want to be research subjects, but fellow combatants in the struggle against the privatisation and commoditisation of water.

Here, we are all in favour of cultural diversity and the preservation of all forms of water management. But what do we see in practice? There is one model – of privatisation and generalization – that is spreading and pushing out the others. It is imposing itself because loans for the water sector granted by the IMF and the World Bank stipulate that promoting privatisation of the water sector is a necessary condition. So we have to speak clearly: the IMF and the World Bank are against cultural diversity, and are opposing indigenous rights.

The other great danger is that water is being incorporated into free trade treaties. Europe has made a proposal to open its agricultural market to Latin America if, in exchange, we will open up our public water supply services to private European investment. This is also a way of putting an end to cultural diversity.

The World Water Vision from The Hague says that, if we fail to accept privatisation, there will not be the necessary investment to resolve water problems. Excuse me for saying so, but that is a lie. In governments, in the public sector, there is enough money to cover all water needs in today's world and tomorrow's as well. All we have to do is get it out of military budgets and put it into water budgets. Stop spending on war and death and begin investing in water and life.

Evo Morales is the President of Bolivia. At the time of the Third World Water Forum, he was the opposition leader of the Bolivian Congress and President of the Peasant Federation of the Tropics. As an indigenous leader, he is an active defender of indigenous rights, and has served as keynote speaker at a number of world events including the World Social Forum of Porto Alegre.

indigenous peoples and international debates on water: reflections and challenges

When the water industry and its supporters run the World Water Forums, there is a clear disconnect with the assertion of the UN Human Rights bodies, indigenous peoples and civil society that water is a basic human right. Neither indigenous peoples, nor those who are suffering most from the water crisis are represented in the World Water Council or the Global Water Partnership, the two organizations responsible for the Second and Third World Water Forums.

Victoria Tauli Corpuz[1] is Chair of the UN Permanent Forum on Indigenous Issues, as well as a researcher and activist. She is the founder and Executive Director of Tebtebba Foundation and is strongly involved in the field of international indigenous issues, particularly relating to natural resources.

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Introduction

A series of reports came out of the Second and Third World Water Forums. They examined the nature of the global water crisis, drew up visions for the future of the world's water, and designed a framework for action on how to achieve this vision. The World Water Council and the Global Water Partnership were mainly responsible for drawing up these reports. During the forums these bodies and their reports drew much criticism, mainly from civil society participants, on the grounds that they mainly represented the views and interests of rich countries and the water industry. A small group of indigenous peoples took part in both the forums and also helped draw up the reports. We made our own comments and observations and some of these were captured in our statement, the Indigenous Peoples' Kyoto Declaration on Water.

This paper is an attempt to elaborate further on the views presented in our statement. We can not separate our efforts in asserting our rights to water from our general struggle to have our fundamental rights as distinct peoples recognized. Our commitments at the community level up to the national and global levels and back to the grassroots are all interconnected. So I will cite some examples of the nature of the issues we face in relation to water, and our responses to these issues. Emphasis will be on the analysis of outcomes of these processes.

Gains for indigenous peoples in the international arena

Through many years of involvement with various United Nations bodies, agencies, and programmes, including the world conferences in the 1990's, we indigenous peoples have managed to bring our issues to the table. Our involvement with the UN led to the emergence of hard and soft laws that acknowledged our basic rights to our ancestral territories and resources, including water. Some of these laws were:

- ILO Convention 169
- Chapters 18 and 26 of Agenda 21
- Article 8 (j) and Article 10 (c) of the Convention on Biological Diversity
- UN Draft Declaration on the Rights of Indigenous Peoples

The ILO Convention 169[2], which is the only existing legally-binding instrument on Indigenous Peoples up to the present, recognized our territorial rights, particularly in its Article 13 (1), Article 13 (2) and Article 14[3].

Chapter 18 of Agenda 21, on the protection of freshwater resources, recommended the full public participation of indigenous people in integrated water resource management[4].

Article 8 paragraph (j) of the Convention on Biological Diversity refers to the need to respect, preserve and maintain the knowledge, innovations and practices of indigenous peoples on the conservation and sustainable use of biodiversity.

The Draft Declaration on the Rights of Indigenous Peoples, which was adopted by the Sub-Commission on the Protection and Prevention of Discrimination in l994, came about through the active collaboration of indigenous peoples and experts of the UN Working Group of Indigenous Populations. What makes this Draft unique in the history of the UN's efforts to develop standards is that it was created with the active participation of the subjects of those rights. It also acknowledged and developed the concept of collective rights, whereas existing human rights instruments refer to individual rights only. This Draft explicitly recognizes the rights of indigenous peoples to their waters, as seen in articles 25 and 26[5].

While the Draft Declaration remains a draft up to the present, it is already serving as the framework for indigenous peoples' rights. The Indigenous Peoples' Rights Act (1997) of the Philippines used it as a framework when the national law was being drafted. This law came into being because of the highly organized advocacy and lobbying of indigenous peoples in that country. This is a clear case where the gains achieved in the UN were used to influence the struggle at the national level[6].

International processes dealing with water and participation of indigenous peoples

Shortly before the Earth Summit (United Nations Conference on Environment and Development) in 1992, a series of events concerned with water took place. The Brundtland Commission (The World Commission on Environment and Development, 1987) identified water as a key global environmental concern in its report *Our Common Future.* Then a Water and Environment Conference was held in Dublin in 1992. This conference established what are now known as the Four Dublin principles[7]:

- Principle 1: "Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment";
- Principle 2: "Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels";
- Principle 3: "Women play a central part in the provision, management and safeguarding of water";
- Principle 4: "Water has an economic value in all its competing uses and should be recognized as an economic good".

As early as 1992 water was already beginning to be considered as an economic good. The importance of securing freshwater resources was emphasized at the Earth Summit, which resulted in Chapter 18 of Agenda 21. At the 2nd Session of the UN Commission on Sustainable Development (UN-CSD) in 1994, the rapid deterioration of water quality and quantity in many states emerged as a serious concern. A recommendation to have a Comprehensive Assessment of Freshwater Resources of the World was agreed to, and this was subsequently prepared by the joint efforts of UN agencies and programmes[8]. The assessment was presented during the 1997 session of the UN-CSD, which was a Special Session of the UN General Assembly, five years after Rio.

Another recent process was the World Commission on Dams (WCD). Joji Carino of Tebtebba was chosen to be one of the members of the Commission in order to provide a voice for indigenous peoples. She played a major role in ensuring that the experiences and recommendations of indigenous peoples were integrated into the final report of the WCD. Tebtebba was among the co-organizers of the WCD's joint consultation on *Dams, Indigenous Peoples and Ethnic Minorities,* held in Geneva from 31 July to 1 August 1999. The recognition by the WCD of the rights-based approach to development, which includes the right to free, prior and informed consent is a key recommendation which enjoys strong support from indigenous peoples.

This requirement gives indigenous and tribal communities the power to consent to projects and to negotiate the conditions under which they can proceed. The effective implementation of this practice marks a significant step forward in allowing indigenous peoples to assert their right to their territories – which includes their waters –, ensuring their genuine participation in decision-making processes and securing their long-term benefits.

No single UN body or program is responsible for water issues. This may be one reason why most of the international processes on water which came after the Earth Summit were not organized by the UN and did not fall under the leadership of the UN, even if various UN bodies played active roles. However, this situation further reinforced the view that the role of the State is systematically being undermined in favour of the market. There is a fear that, if water ends up in the control of the private sector, and if the role of governments is grossly undermined in terms of ensuring respect for the right to water, then the weak and the poor will suffer. Decisions on how water should be developed are being shifted to global bodies, like the World Trade Organization or the World Bank. Clearly, there is a need for a mechanism that ensures a balance between the roles of the State, the market and local communities in water development.

Collaborative mechanisms and processes that emerged, such as the Global Water Partnership, the World Water Council, the Water Supply and Collaborative Council, and the three World Water Forums, among others, all involved multiple stakeholders. But, as mentioned earlier, the lead actors were global water corporations, the World Bank, donor agencies, professional associations dealing with water and sanitation, academia, research institutions and think-tanks.

Neither indigenous peoples, nor those who are suffering most from the water crisis, are represented in the World Water Council[9] or the Global Water Partnership[10], the two organizations responsible for the Second and Third Word Water Forums. Intergovernmental bodies only play a supporting role, with the exception of the World Bank and the IMF. An important issue to consider is how the participatory processes are decided. At the Second World Water Forum, the World Water Commission was chaired by Ismail Serageldin, Vice President of the World Bank. Michel Camdessus, the former IMF Director, headed the World Water Panel on Financing Infrastructure, which produced the *Financing for All* report. With all due respect to these personalities, it is hard to imagine that they can be honest brokers, because they need to protect their own institutions. This might need to be clarified before the World Bank and the IMF can be free from suspicion of vested interest.

Indigenous peoples wanted to take part in these collaborative processes, but we did not have enough advance information, nor were the financial resources available to allow our participation. In the 1990s, civil society actors, like NGOs, indigenous peoples, and women became active players in a series of UN world conferences, and limited resources were made available for their participation in the follow-up processes. But with the semi-privatisation of processes related to water, the situation has changed. Now indigenous peoples and other civil society groups have to do their own fund-raising to be able to participate.

At the Second World Water Forum (2000) in the Hague, a small group of indigenous peoples were able to participate through a thematic session organized by UNESCO on *Water and Indigenous Peoples*. The indigenous peoples and their representatives (less than 10 in number) participating in this session produced a report that underlined the marginalisation of indigenous peoples within the World Water Forum process, and called for a more prominent role in the future.

Indigenous peoples were more strongly represented at the Third World Water Forum through a partnership with UNESCO, other indigenous peoples' organizations and non-governmental organizations, the WALIR (Water, Law and Indigenous Rights) Program of the University of Wageningen and the Secretariat of the Forum. A two-day indigenous peoples' preparatory meeting was held, where we discussed in more depth our water issues, and linked these with the agenda and program of the Water Forum. *The Indigenous Peoples' Kyoto Water Declaration* emerged from this process.

The Second World Water Forum and its outcomes

The Second World Water Forum had an overwhelming presence of representatives of the water industry and so-called water specialists, and very limited participation from indigenous peoples. The documents arising from this forum are clearly expressions of the views and interests of the private sector. The outcomes included a 'Ministerial Declaration' with no official status, the 'Vision for Water in the 21st Century' and a 'Framework for Action' to implement the Vision. The predominant view which underpins these documents is that water is an economic good, and the failure to place a price on water that reflects its economic value in its various alternative uses encourages wasteful and environmentally damaging use and results in its misallocation. Water is regarded as a commodity that can be traded and sold.

This view is at odds with the way indigenous peoples regard and relate to water. Our waters, territories and lands are the fundamental physical, cultural and spiritual basis for our existence

and our identities as distinct peoples. Water for us is sacred; it belongs to nature and cannot be owned or turned into a commodity by any individual, state or corporation. Our collective responsibility and obligation is to ensure the protection, availability and purity of water for the present and future generations and for the rest of creation[11].

Failure to look into the underlying causes of the water crisis

The World Water Vision describes the water crisis in these terms:

- one out of five people does not have access to safe and affordable drinking water
- half of the world's wetlands are destroyed
- water services are heavily subsidized by governments
- decrease of groundwater tables due to unregulated access, affordable small pumps and subsidized electricity and diesel oil
- the management of water on a sector-by-sector basis and highly fragmented institutions.

These are, indeed, some of the problems. But the report lacks a historical, in-depth analysis of the underlying causes of this water crisis. It should have looked more comprehensively into the significant social, political, economic, ecological, cultural and even spiritual roots of the crisis. It is not enough just to look into the technical, managerial and economic aspects, and not analyse the frameworks used by the think-tanks and donor agencies. There are precedents in other inter-governmental processes, where serious research was the first step to be taken. The UN Forum on Forests, for example, carried out a study on the underlying causes of deforestation. Other multi-stakeholder processes like the World Commission on Dams also presented a comprehensive report[12] on the history of dam building and the role played by institutions like the World Bank and the dam-builders in designing policies and programs.

The documents failed to refer to any of the experiences of indigenous peoples with water, whether historical or recent. Nor did the documents use the assessment and recommendations of the World Commission on Dams report, which reflected the situation faced by indigenous peoples and other sectors directly affected by dam projects. The prevailing view of water as an integral part of the basket of rights, which all peoples should enjoy, has been changed by the market-centred paradigm promoted by the World Bank, which regards water mainly as an economic good. This underpins the proposals for full cost recovery of economic costs and economic efficiency. A paradigm that puts a premium on the role of market forces will not attach much importance to the role and participation of indigenous peoples and local communities when water policies and programs are designed.

There are many reasons for the degradation and disappearance of freshwater resources. The most common, however, are deforestation, extractive industries, agro-chemical-based intensive agriculture, and the destruction of wetlands. Largely because of loans given to the timber industry, around five million ha. of primary rainforests are degraded annually[13]. Foreign debt is another key reason why governments in the Third World resort to massive deforestation, conversion to cash crop production or plantations, extraction of minerals, etc. They need to export raw materials and agriculture products so they can generate foreign exchange to service their debts. Indigenous peoples are among those who have suffered most from this kind of development model, as their territories are often exploited.

Intensive irrigation and the massive use of agro-chemicals that accompanied the Green Revolution not only resulted in over-extraction of groundwater and salination of agricultural soil. They also led to the pollution of groundwater with persistent organic pollutants. The extractive industries, which also enjoy loans from donor agencies and private banks, have contributed significantly not only to the pollution of waters, but also to the destruction of groundwater aquifers. Many indigenous communities have lost their water sources through underground mineral extraction and open-pit mining.

The World Wide Fund for Nature, in its critique of the Second World Water Forum, also cited that the failure to analyse the underlying causes of the water crisis has "(…) led to a failure to recognize that it is investment in a healthy environment that will ensure provision of reliable supplies of

clean water for people and nature. (…) It failed to adequately consider how to maintain the other values of health freshwater ecosystems, such as the fisheries that sustain millions of the world's poor[14]".

Those who wrote the Water Vision, at least, should have analysed the roles played by the World Bank and other donors in shaping government policies and programs in the Third World[15]. If the policies on water and also on irrigation, energy, agriculture, and forestry had been examined in greater depth, their impacts on water scarcity and water pollution would have been established. If the UN, the World Bank, the donor agencies, academia, and the water specialists had undertaken a more comprehensive analysis of the root causes, the Vision and Framework would have come out differently.

Water as an economic good and a human need, not a human right

Another criticism against the Forum reports is the reduction of water to an economic good, and the strong push for its privatisation and full cost recovery. The right to water, which includes access and control over water resources, is one of the most basic demands of indigenous peoples. Water is an integral part of our ancestral territories and resources, and when we claim our right to our ancestral territories, this includes our right to the water found there. The stories of our struggles to assert these rights, from colonization to the present day, are replete with cases where water was the central issue. Colonizers and governments have used the diversion of water away from our territories as a tool to push indigenous peoples out. In l993 I participated in the Peoples' International Tribunal in Hawaii, which looked into the situation of the Native Hawaiian peoples, the Kanaka Maoli, 100 years after they were forcibly annexed to the United States. Several testimonies presented by the elderly told how the US government diverted waters away from their traditional communities.

For us, the Igorot peoples of the Cordillera Region in Northern Philippines, the damming of our rivers was the key issue that pushed us to fight against the Marcos dictatorship and the World Bank, and finally to go to the United Nations. In the mid-1970s, the World Bank gave loans to the Marcos government for the Chico River Hydroelectric Dam Project. The whole country was under martial rule at the time, and the government thought they could decide how our lands and waters were to be used, without our consent. Gross violations of our civil and political rights as well as economic, cultural and social rights became daily occurrences and a resistance movement was launched to stop the project.

In l982, when the UN Working Group on Indigenous Populations came into being, a representative of the Cordillera participated and presented this case. It won international support and, by the mid-80s the World Bank decided to cancel the project. This battle was won but not without heavy sacrifices, displaced communities, and divisions between families, clans and tribes.

Many of the sacred sites of indigenous peoples all over the world are water bodies. And these peoples will lay down their lives to ensure that these sites remain intact and common. Where I live there is a lake, which is the main source of water for several villages. It is considered sacred, so nobody is allowed to build a house or plough a field near the lake. Since time immemorial the iBesao[16] have been performing rituals to appease the spirit protectors of the lake. Recently, when some people from the nearby town tried to claim part of the land around the lake as their private property, more than 700 people from seven villages of Besao went to dismantle the fences and warn off the town folk.

Those who argue that water is an economic good propose to use market forces to establish the 'right' price for what they say is an increasingly scarce resource. But for indigenous peoples, water is a basic human right, and is essential for an adequate and decent standard of living, according to the International Covenant On Economic, Social and Cultural Rights (ICESCR)[17].

International human rights treaties negotiated after the ICESCR clearly guaranteed the right to water, with groups historically subject to human rights discrimination (i.e. women and children) specifically protected[18].

But the concept of water as a human right dis-

appeared from the outcomes of the Water Forum. And the Ministerial Declaration, even if it was unofficial, agreed that water was a basic need, not a human right[19]. The same was true at the Third Forum. If water is a human right then it is the responsibility of the State to ensure that this right is respected and promoted. But if it is a human need, those who can afford to pay for it can enjoy it.

Framework for Action and world water actions

The Framework for Action, developed by the Global Water Partnership, set out a strategy for the realization of the World Water Vision by 2025 and prioritised actions to achieve this. Indigenous peoples were not involved in any of the processes associated with this document. And some of the recommendations contained in the Framework can be detrimental to indigenous peoples. For example, the report identifies agriculture as the largest water user and recommends introducing payment for water services. However, when governmental authorities set prices, poor farmers and indigenous peoples who are mainly engaged in subsistence agriculture in the developing world, can hardly afford to pay irrigation fees or are not interested in doing so especially when the quality of these services is poor and the revenues are not invested to benefit their own systems. They would prefer to continue with traditional, rain-fed agriculture. Pricing of water services at full cost will further marginalize the poor and indigenous peoples. This is a part of the concern expressed in our Declaration in Kyoto.

Another proposal is the promotion of better agronomic practices, such as improving crop varieties. This could involve the use of biotechnology to develop more drought-resistant varieties, or varieties that yield more mass per unit of water, or to switch to crops that consume less water. This seemingly sensitive proposal can nonetheless amount to asking us to stop planting and eating traditional crop while entailing extra economic burden for the purchase of new variety seeds[20]. In Asia, for instance, rice is a ritual and traditional crop for many indigenous peoples and many communities still practice seed-saving of traditional varieties. The use of genetically-altered crops is alarming, especially when it is driven by a market-centric mindset, blind to social and cultural implications, as well as potential ecological and health hazards[21].

Technological solutions to solve the water crisis are also problematic, when they are associated with political decisions to set a price on water. Proposals for more investment in an engineering-led, business-as-usual approach, such as building more dams, pipes, irrigation systems and toilets appear in most of the recommendations for action. But as our indigenous colleague from the Niger Delta said, although they received the pipes, they cannot pay for the water that comes out of them[22].

The concept of public-private partnerships (PPPs) is one of the key solutions proposed in the World Water Actions report. Out of the 200 partnerships identified in the report, there are a few good examples, which involved women and which tried to implement an ecosystems approach. But on the whole, these partnerships give lead roles to private, transnational and national water corporations. And if the water transnationals fail to earn the profits they have projected, they can just sell the company back to the government, as happened in the Philippines, with the Suez company[23].

The Third World Water Forum – governance and participation

The Third World Water Forum, according to Mr. Ryutaro Hashimoto, Former Prime Minister of Japan and Chairman of the National Steering Committee of the 3rd World Water Forum, will "(…) play a critical role in solving water issues in the 21st century (…)" The forum's organizers, however, still consist of a consortium of government, business and multilateral development organizations, thus limiting what it can achieve. Representatives of key stakeholders such as indigenous peoples, local communities, environmental and development NGOs, social movements, small farmers and grassroots women's groups, among others, are not centrally involved in the processes of this forum.

Once again, I would like to point out that the two key organizations established in l996, the World Water Council (WWC) and the Global Water Partnership (GWP) do not have representatives from indigenous peoples and local communities. The only reason we were able to participate in the last two forums was through the intervention of United Nations institutions, academia, NGOs and individuals involved in these water processes.

The Third World Water Forum is being described as the world's biggest international water conference, as 12,000 scientists, ministers, representatives of non-governmental organizations, private companies and international institutions participated. Around 100 ministers attended. But, it can not be said that it met its goal of delivering concrete plans to tackle water-related problems, such as achieving the UN's goals of halving the proportion of people without access to safe drinking water and sanitation by 2015.

Even ministers who attended were highly critical of the results, including their own Ministerial Declaration. The main criticism was that, while water was acknowledged as an urgent global issue, there were no concrete, financial pledges to achieve the MDG goal on water and sanitation.

The industrialized countries, as usual, did not promise any significant funding. Instead, the World Panel on Financing Global Water Infrastructure emphasized private investment in financing water and sanitation projects. The report was criticized for putting profit before human needs and human rights. Its call for US$100 billion a year in order to meet UN targets on water was also questioned. This did not take into account the ecosystems framework and ignored community-based projects that ensured water availability at a very low cost[24]. Because of massive protests by civil society participants against this report and its proposals, the final document of the forum merely mentioned it.

When World Water Forums are mainly designed and run by the water industry and its supporters, like the World Bank and the IMF as well as so-called water specialists and experts, there is a clear disconnect with the assertion of the UN Human Rights bodies, indigenous peoples and civil society that water is a basic human right. This raises the issue of governance in relation to water. The United Nations may need to assess whether it should play a leading role and not abdicate its responsibility to the private sector.

Ways forward

Defending one's ancestral lands and waters demands heavy sacrifices on the part of indigenous peoples. This is especially so in situations where space for serious dialogues is virtually absent, and where force and deception are used by those in power to quell any resistance to their projects. We are constantly seeking ways to enable the modern world to accept and understand our world views, cultures and lifestyles. It is in this context that we see the value of bodies like the United Nations and processes like the World Water Forum. The UN has provided the opportunity for us to work more constructively with governments, and to jointly develop international standards for the protection of our rights. These are also opportunities to present our views and recommendations on other concerns, like biodiversity, water, and forests.

During the two last World Water Forums, although they were heavily dominated by the water industry, donor community and water specialists, we managed to carve out a few spaces where we could discuss and present our own concerns. We firmly believe that these discussion forums should be more open to the diversity of views and proposals on how the water crisis can be resolved. It should be made easier for us to participate more fully, not just because we need an opportunity to present our issues, but because we believe that the rest of the world will gain significantly from our experiences and perspectives.

In the light of our experiences in engaging with the recent debates on water and our analysis of the outcomes, we reiterate the recommendations put forward in our declarations on water and in the *Indigenous Peoples' Discussion Paper Water, Human Settlements and Sanitation* presented at the 12th Session of the Commission on Sustainable Development[25]. I will conclude this paper by quoting one of its messages:

"Indigenous peoples have the right to self-determination. By virtue of that right Indigenous peoples have the right to freely exercise full authority and control of their natural resources including water. Such rights cover both water quantity and quality and extend to water as part of a healthy environment and to its cultural and spiritual values. Indigenous interests and rights must be respected by international agreements on trade and investment, and all plans for new water uses and allocations.

Indigenous peoples' interests on water and customary uses must be recognized by governments, ensuring that Indigenous rights are enshrined in national legislation and policy.

Self-determination includes the practice of our cultural and spiritual relationships with water, and the exercise of authority to govern, use, manage, regulate, recover, conserve, enhance and renew their water sources, without interference.

The promotion of respect and observance of Indigenous peoples' rights and fundamental freedoms, in particular the right of self-determination and the free use and control of their lands and territories, is necessary for the use and conservation of water and of water sources and resources.

International law recognizes the self-determining rights of Indigenous peoples to :

- Own, control and manage their traditional territories, lands and natural resources;
- Exercise their customary law;
- Represent themselves through their own institutions;
- Require free prior and informed consent to developments on their land;
- Control and share the benefits of the use of their traditional knowledge.

Governments should support the immediate adoption of the UN Draft Declaration on the Rights of Indigenous Peoples that will help ensure the recognition and protection of Indigenous peoples' rights."

ENDNOTES

(1) This is a perspective from Tebtebba, an indigenous peoples' organization from the developing world which has been engaged in some international events around water and in most UN processes which deal with indigenous peoples' rights.

(2) As of October 2002, the following 16 states had ratified ILO 169: Mexico, Norway, Costa Rica, Colombia, Denmark, Ecuador, Fiji, Guatemala, The Netherlands, Dominica, Peru, Bolivia, Honduras, Venezuela, Argentina and Paraguay. Austria and Brazil have ratified, but have yet to transmit their instruments of ratification to the ILO. The following states have submitted it to their national legislatures for ratification or are discussing ratification: Chile, The Philippines, Finland, El Salvador, Russian Federation, Panama, and Sri Lanka. Germany has adopted ILO 169 as the basis for its overseas development aid and the Asian Development Bank and the UNDP have incorporated some of its substance into their policies on Indigenous peoples. See, for instance, Asian Development Bank, *The Bank's Policy*.

(3) Article 13(1) requires that governments recognize and respect the special spiritual, cultural and economic relationship that indigenous peoples have with their lands and territories and especially "the collective aspects of this relationship". Article 13) defines the term 'lands' to include "the concept of territories, which covers the total environment of the areas which the peoples concerned occupy or otherwise use". Article 14 requires that indigenous peoples' collective "rights of ownership and possession… over the lands which they traditionally occupy shall be recognized" and that states "shall take steps as necessary to identify" these lands and to "guarantee effective protection of rights of ownership and possession".

(4) This is in paragraph 18.9 of Article 18.

(5) Article 25 states: "Indigenous peoples have the right to maintain and strengthen their distinctive spiritual and material relationship with the lands, territories, waters and coastal seas and other resources which they have traditionally owned or otherwise occupied or used, and to uphold their responsibilities to future generations in this regard". Article 26 states: "Indigenous peoples have the right to own, develop, control and use the lands and territories, including the total environment of the lands, air, waters, coastal seas, sea-ice, flora and fauna and other resources which they have traditionally owned or otherwise occupied or used. This includes the right to the full recognition of their laws, traditions and customs, land-tenure systems and institutions for the development and management of resources, and the right to effective measures by States to prevent any interference with, alienation of or encroachment upon these rights".
Draft Declaration on the Rights of Indigenous Peoples, UN Doc. E/CN.4/Sub.2/1994/2/Add.1 (1994).

(6) SEC. 7. Rights to Ancestral Domains of Indigenous Peoples' Rights Act (1997) recognizes Indigenous peoples right to water and states: "The rights of ownership and possession of ICCs/IPs to their ancestral domains shall be recognized and protected. Such rights shall include:
Right of Ownership, The right to claim ownership over lands, bodies of water traditionally and actually occupied by ICCs/IPs, sacred places, traditional hunting and fishing grounds, and all improvements made by them at any time within the domains; …"
Indigenous Peoples' Rights Act (1997) can be downloaded from www.ncip.gov.ph.

(7) UNESCO-WWAP (2000), Water for People, Water for Life, Executive Summary, p.4.

(8) These were UNEP, UNDP, UNESCO, WHO and FAO.

(9) The World Water Council, an international water policy think tank, was established as an NGO in 1996 through the initiative of water specialists, the academic community and international organizations. It has 50 State governments as its members.

(10) The Global Water Partnership is an organization created with the joint support of a number of international funding organizations, which a mandate to support integrated water resource management in developing countries. The organization gets funds from donor agencies of countries like Canada, United Kingdom, Denmark, Netherlands, Switzerland, Norway, among others, and the World Bank, Ford Foundation and even the UNDP.

(11) Our traditional practices are dynamically regulated systems. They are based on natural and spiritual laws, ensuring sustainable use through traditional resource

conservation. Long-tenured and place-based traditional knowledge of the environment is extremely valuable, and has been proven to be valid and effective. Indigenous Peoples' Kyoto Water Declaration, www.tebtebba.org.

(12) This report stated that large dams affect critical, life-sustaining resources, such as land fisheries and the quality and allocation of freshwater, an increasingly scarce and coveted resource. This report further acknowledged that despite the chronic underperformance of large dams in the areas of energy production, flood control, irrigation and overall economic efficiency, there is still a strong bias towards building large dams. The social and environmental costs of large dams, which includes large-scale displacement of communities, inadequate compensation and resettlement plans, loss and destruction of livelihoods, permanent transformation and loss of forests, farmlands, floodplains, pastures, wetlands, and biodiversity, among others, are also well-documented. Dams and Development: A Report of the World Commission on Dams (2000),p.20.

(13) This was the estimate of the World Rainforest Movement (WRM) in 1990 in their report on Rainforest Destruction (1990). p.51.

(14) WWF Information Documents, What is the World Water Forum, 2003.

(15) The World Bank, IMF and other multilateral and regional banks have the capacity to persuade or force governments to comply with privatisation schemes. Countries under structural adjustment programmes have to adhere to conditions such as 'public sector reform' if they wish to obtain loans for infrastructure development. This means privatisation of state-owned companies. According to Friends of the Earth, the poorest countries, like Mozambique, Benin, Niger, Rwanda, Honduras, Yemen, Tanzania, Cameroon and Kenya, were forced to privatise their water supply under pressure from the IMF and the World Bank. These countries privatised as a condition for receiving credits from the IMF's new Poverty Reduction and Growth Facility. Water privatisation leads to further poverty, as families can no longer afford to pay for water. IMF and WB conditions were imposed in Ghana in May 2001 and as a result there was a 95 percent hike in water fees. Friends of the Earth, International Secretariat (2003), Water Justice for All: global and local resistance to the control and commodification of water. Issue 102, Amsterdam. p.5.

(16) iBesao means the people of Besao.

(17) The International Covenant of Economic, Social and Cultural Rights (ICESCR) does not contain an express guarantee of a human right to water. However, articles 11 and 12 of the ICESCR provide an implicit guarantee. Article 11 outlines a number of rights connected with the realization of the right to an adequate standard of living "including adequate food, clothing and housing". Although the right to water is not expressed in this list, it clearly falls within the category of rights essential to an adequate standard of living. The right to water is also linked with the right to health, enshrined in article 12 of the ICESCR. The Committee on Economic, Social and Cultural Rights, which is responsible for monitoring state compliance with the ICESCR, endorses this view. In a recent decision it stated that "the human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realisation of other human rights".

(18) For example, article 24 of the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) requires states to ensure all women "enjoy adequate living conditions, particularly in relation to … water supply" (see para 2(c)). Article 24 of the Convention on the Rights of the Child stipulates that states must combat disease and malnutrition "through the provision of adequate nutritious foods and clean drinking water" (see para 2). Thus, it can be said that the right to water is well established under international law.

(19) For Maude Barlow and Tony Clarke: "The story of what happened at the World Water Forum is the story of the separation of water from the land and from 'the commons' to which it belongs. It is also a denial of historic benchmarks for democracy enshrined halfway through the 20th century (…) the Universal Declaration of Human Rights and its accompanying International Covenants on Economic, Social and Cultural Rights and on Civil and Political Rights were adopted as the cornerstones of the United Nations (…) Yet at the dawn of the 21st century, something as fundamental as water is no longer recognized as a universal right by the dominant economic and political elites. Being designated as a need, water has been subjected to the supply and demand forces of the global marketplace, where the distribution of resources is determined on the basis of the ability to pay". Maude Barlow and Tony Clarke, Blue Gold, 2002, p. 80.

(20) Improving plant varieties through biotechnology poses actual and potential ecological, social and health problems. The genetic engineering and planting of seeds and trees in publicly-funded Consultative Group on International Agricultural Research (CGIAR) bodies and private laboratories are creating problems like the genetic contamination of traditional species. This is precisely the reason why the precautionary principle was enshrined in the Rio Declaration in l992 and why the Biosafety Protocol was formulated.

(21) We saw how the Green Revolution brought in hybrid plant varieties, which required massive irrigation water and heavy use of agro-chemicals which are now the major pollutants of groundwater. We have seen how the forest industry facilitated deforestation of our primary forests and changed indigenous tropical trees with fast-growing trees, which consumed more volumes of water, through the Tropical Forestry Action Plans.

(22) Our traditional knowledge developed over the millennia should not be compromised by an over-reliance on relatively recent and narrowly defined western reductionist scientific methods and standards. We support the implementation of strong measures to allow the full and equal participation of Indigenous Peoples to share our experiences, knowledge and concerns. The indiscriminate and narrow application of modern scientific tools and technologies has contributed to the loss and degradation of water (para 15, Indigenous Peoples Kyoto Water Declaration).

(23) Suez was formerly named Lyonnaise des Eaux. The vice-president of Suez, Rene Coloumb, is the President of the World Water Council.

(24) The World Wide Fund for Nature in their assessment of the Third World Water Forum said that: Ministers from industrialized countries also criticised the final ministerial declaration. Among the criticisms were the failure to mention the impact of climate change on sea levels, which threaten some countries with drought and flood; gender issues since women in many poor countries are forced to walk long distances to carry water; and water management through poverty reduction. "What was missing was very important", said Agnes Van Ardenne-van der Hoeven, Dutch minister for development cooperation. "It is important to consider in what way the rich world can change its policy and support, in an indirect way, poverty reduction." WWF Information Documents, What is the World Water Forum, 2003.

(25) E/CN.17/2004/10/Add.4, *Contribution by indigenous peoples:* Water, sanitation and human settlements. This is a paper prepared by Tebtebba Foundation and the Indigenous Environmental Network for CSD 12. Parts of the section on Conclusions and Recommendations are lifted and included.

cultural diversity and privatisation of water

To speak of indigenous peoples and water is to speak of cultural diversity. Original inhabitants share the same philosophy about water, but they practise diverse forms of water management, according to their own differing realities, histories and experiences. In the indigenous world, there is no single 'model' for using water resources, but multiple alternatives and forms of management that change from region to region and from time to time. The common element underlying these diverse forms of water management is 'respect for water', considering water resources not as an input or a commodity, but as a living part of Nature, as a being with which one must interact in order to ensure the rights and participation of all living beings.

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The way water is distributed, the ways people contribute to and are compensated by their water distribution, as well as conflict resolution, administration, access rights, technological management, etc., vary from place to place. But the essence of their vision remains inalterable. It is like the water cycle, following multiple pathways and taking manifold forms, but it is always Water.

This cultural diversity regarding water is practically left out of most national and international policies and norms for water resources. The dominant vision, in the present globalised world, is that water must be viewed, above all, in its economic dimension, assuring a price that will ensure total cost recovery, plus a profit to encourage new private investments. The solution presented by the 2000 World Water Vision from the Hague[1] or the Camdesus Report[2] is that, without new private investments in the sector, it will be impossible to guarantee the principle of water for all. Consequently, these policies promote a series of incentives and guarantees for private investors to put money into water.

Traditional water management knowledge and practices are neglected and often even blamed for waste and poor efficiency in water utilization. When traditional management is acknowledged, this is normally to create reservations where indigenous rights and knowledge are allowed, within a small, isolated area. Indigenous systems are seen as something from the past, to be phased out.

This concept proposes a single model, or rather the dominant model: privatisation or commoditisation of water. The Camdesus Report recognizes that there are public systems, but its conclusions emphasize private intervention. When it promotes the Public-Private Partnership, the emphasis is on the role of and advantages to be granted to the private partners.

Community, indigenous and traditional systems are generally ignored. In the dominant mindset, there is only public or private. Community systems, since they have no legal standing as 'public', are often lumped into the private category. However, there is a great difference between private investors in the water sector, and community water supply systems, although both are 'non-public'. The former aim for investment payback and the greatest possible profit, whereas social water management systems aim to meet the people's needs. There is not only the public sector and the private investor, but also the community-social stakeholders. Indigenous systems fit into this third category, and their particular strength is that they aim to care for all living beings, and for the Earth itself.

If we assume that indigenous systems are part of this extensive group of community-social systems, we will see that we are not talking of a marginal sector, or a leftover from past history, but an essential, fundamental sector. The solution for water problems will not come from private investors or public bureaucrats, but from an increasingly prominent role played by community managers alongside society's participation in and oversight of public governance.

An essential, fundamental problem for humankind, such as access to water, can be resolved only by promoting society's broadest possible participation. Indigenous systems emphasize such participation, presence and monitoring. By contrast, private-investor options cut the public off from this relationship, making people think that the problem lies simply in paying a water bill.

Decisions about water management and policies, laws, contracts and projects promoting the commoditisation and privatisation of water must be amply discussed and decided by the people. In all areas, but especially regarding water, these decisions cannot be made behind the society's back. Applying democracy to water is an essential principle that must be learned from the indigenous vision and spread throughout the world. In most developing countries and many supposedly developed ones, significant decisions about water resources are made without adequate information, debate or consultation with the public.

If we truly respect democracy for a people, a nation or a community, it is not possible to grant foreign aid or loans to a country on the condition that they privatise water services. The World Bank, multi-lateral banks and some sectors of international co-operation may think that the best way out is to privatise water, but they should

not impose that policy as a condition for structural adjustment plans or re-negotiation of foreign debt. Applying the mechanisms of democracy to water management will mean that international agencies do not link foreign aid to privatisation and commoditisation of this vital resource.

Similarly, if water is included in free trade treaties as a commodity, a water supply service, an environmental service or external investment, this jeopardizes the democratic management of water. The weight and obligations of these free-trade treaties (WTO, FTAA, FTTs[3]) are so burdensome that they ultimately overrule national constitutions and laws. When a country contradicts what it has signed in a free trade treaty, it is liable to be sued before an international arbitration panel such as the World Bank's ICSID[4]. This is the case for Bolivia, currently facing a lawsuit by the US trans-national, Bechtel, for US$25 to 100 million for breach of contract in having amended the law promoting privatisation of water supply services.

In summary, imposing laws, conditions on loans, and the inclusion of water in free trade treaties not only endangers democratic management of this fundamental resource, but eliminates cultural diversity by imposing one model over the others. It standardizes water management, putting an end to centuries of social, community water management, of which the indigenous peoples are living exponents.

ENDNOTES

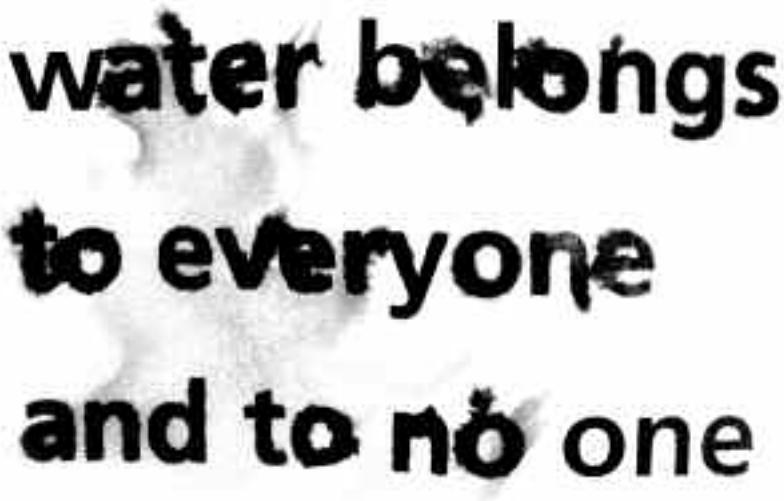
(1) World Water Vision. Document presented as the outcome of the Second World Water Forum, The Hague, 2000.

(2) Michel Camdessus was Executive Director and President of the International Monetary Fund. The World Water Consensus and other institutions commissioned him to prepare a keynote paper for the Third World Water Forum, entitled: 'Financing Water for All'.

(3) WTO: World Trade Organization. FTAA: Free Trade Area of the Americas. FTTs: bilateral or regional free-trade treaties.

(4) International Centre for Settlement of Investment Disputes

Irrigation system managed by indigenous communities, Ecuador – © *R. Boelens*



Starting with a brief overview from an Andean viewpoint, the authors propose a critical reading of several statements by the Second World Water Forum in The Hague. The concepts of the ancestral inhabitants of the Andes regarding nature, water and community management are fundamental to a more integrated vision of water management for the planet as a whole. Their testimony may reveal a paradigm for equity and development which takes identity into account.

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http://conaie.org/

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The Andes

The Andes mountain range bears steadfast witness to the origin and development of one of the most outstanding historical processes of the ancient world, which led to the emergence of several civilizations. This was made possible by the manner in wich, over thousands of years, the original societies learned to use, transform and conserve natural resources, to organize their territory and to generate social and economic mechanisms uniquely suited to the Andean ecosystem.

The Andes mountain range

The Andes range runs north-south, parallel to the shores of the Pacific Ocean, covering 70 degrees of latitude along the western edge of South America. It is 7250 km. long, occupying a continuous area of over two million square kilometres.

As a region, the Andes have some of the greatest environmental and geo-morphological diversity in the world. In view of its enormous length from north to south, stretching through all climatic zones, and diverse vegetation, from the equator to the Antarctic, as well as from sea level up to eternally snowcapped summits, it is not surprising that the Andes contain the world's most diverse range of types of landscape, climate and plant communities.

The geo-morphological and climatic complexity of the Andes currently seems to be a constraint, limiting the region's development. The modern world does not yet know how to make full use of the region's diversity. In Antiquity, Andean America's geographical and environmental constraints were turned into advantages, by making use of the opportunities offered by plants, animals, earth and water.

Transforming constraints into opportunities

In addition to the steep slopes and unpredictable climatic changes characterizing the Andes, scarcity of water is one of the greatest challenges to survival. To mitigate this situation, Andean indigenous populations developed technologies suited to their physical, ecological and cultural surroundings, and even moved huge amounts of earth and water to create sustainable agricultural niches.

Many techniques were used by Andean women and men to manage water and create croplands, using the particular water systems for diverse natural conditions, such as the *waru waru*, *camellón* or *sucaqollu* seedbed/berms for floodplains around Lake Titicaca; the *qocha* ponds to catch rainwater, and the better-known farming terraces or *andenes* to take advantage of steep Andean mountainsides.

Nowadays, most of the indigenous expertise used to build reciprocal coexistence with Andean environments is in disuse, the technologies abandoned and the people who made them possible, disenfranchised.

The Andean population

In the Andes, for over 20,000 years, the people established a lifestyle based on sustainable agriculture and livestock management. This population constituted a society that maintained a well-balanced relationship with the environment, based on values of complementarity and reciprocity.

Today, almost all indigenous peoples in the Andes share a similar set of problems regarding their social, political and economic situation as colonized, marginalized population groups.

Water in the Andean worldview

Although the visions of water in the Andean region have particularities according to the different indigenous cultures, the diversity of ecological areas, the different locations of basins, and the levels of social organization (communities, hamlets, villages, *ayllus*, etc.), there are common denominators that must be maintained and respected. For Andean peoples, water is much more than a natural resource:

Water as a living being

In many Andean communities, water is viewed as a living being, providing life and supporting the movement of the universe. One has a dialogue

with water, treats it affectionately, and rears it like a growing creature. This vision has been a fundamental factor in suitable harvesting, conservation and reproduction of water resources.

Water as a divine being

According to ancient traditions, passed down in many contemporary communities, water originated from *Wirakocha*, the God who created the universe, who impregnated *Pachamama* (Mother Earth) and made it possible for life to reproduce. Therefore, water is a divinity, present in lakes, lagoons, the sea, rivers and all bodies of water.

Water as the basis for reciprocity and complementarity

Water must play a social role, considering the integration of living beings, and the co-ordination of Nature with human society. It is the blood of the Earth and of the Andean universe. It is important in order to facilitate reciprocal practice in Andean communities. It must order people's lives, and present differences not in terms of opposition but as complementary elements, enabling conflict resolution on the basis of community agreements.

Water as a universal community right

Water belongs 'to everyone and to no one'. It belongs to the Earth and to living beings, including human beings. Therefore, it is critical to distribute it equitably according to community needs, customs and standards, and according to cyclical availability.

Water as an expression of flexibility and adaptability

Water behaves according to ecosystems, circumstances and situations, without following rigid norms. It depends on the weather, climate and terrain. Andean society, like water, is continually open to whatever it has to face, selectively incorporating elements from other cultures and human groups to supplement their own culture.

Water as a creative, transforming being

Water follows natural laws, according to seasonal cycles and territorial conditions. Sustainable water use implies generating and applying knowledge and skills obtained over the centuries, and building water infrastructure to make it possible to harvest and distribute water, on the basis of efficient, joint management.

Water as social re-creation

Water is a foundation for re-creating diversity over space and time, in community organizations, in people's participation, enabling communities to practice self-determination, through an ongoing dialogue and exchange with Nature.

The reality of the context of the World Water Vision

The World Water Vision, approved by the Second World Forum in The Hague (March 2000) not only ignored the outlook of rural and indigenous peoples in the Andes and the world, but even ignored their survival. The Vision from The Hague, which was to be turned into an International Action Plan in Kyoto (March 2003) threatens conservation and sustainable use of water resources on an international scale, and especially for countries with highly significant indigenous populations, such as in the Andes.

In these countries, laws on natural resources, especially regarding water, fail to consider the vision, culture and proposals of indigenous and rural folk regarding one of the millennium's most strategic resources. They fail to respect the rights and common-law practices of indigenous peoples. This reality is all the more alarming when we see that indigenous and rural people's water management sustains national food security.

We are concerned mainly by four proposals in the Hague World Water Vision:

- Reducing the use of water in the agricultural sector by widespread use of trans-genetic crops: This proposal for a way to use water efficiently, strikes directly at the immense bio-

diversity of native crops in the Andes. It would make entire populations dependent on biotechnology companies, undermine their food security and sovereignty, and violate the precautionary principle regarding such crops.

• Reallocating water from lower-value uses (e.g. household farming) to higher-value uses (large-scale agriculture, industry and water supply): This proposal would lead, in the Andean regions, to destroying small-scale family farm production, which is the basis for their livelihood and culture, boosting migration to cities and generating new pockets of poverty there.

• Making private investment the driving force to influence solutions to water problems: This proposal, which is the basis for many official policies in the Andean countries and the world over, leads to privatisation of water, relieving the State of any responsibility to water users, and artificially generating a demand for big business at the expense of most of the world's population, especially indigenous and peasant communities.

• Charging the total cost of water: Charging this in a context of privatising the resource, while appealing to private investors, jeopardizes the availability of water to maintain ecosystems, restricts people's access to this resource, and transforms water into a commodity, no longer available for public use as a national asset, common-law right or collective right.

Proposal for action based on Andean visions

How to respect the visions of indigenous and peasant populations of the Andes, strengthen their identity, assure their rights and conserve water resources? We feel that the following principles are fundamental:

Water as common heritage

To strengthen integrated water management, any action plan regarding water must be oriented toward protecting and conserving it, and must guarantee its equitable availability to assure the existence of all the planet's living beings. Therefore, it is crucial to assure and protect water systems, both in their geographical setting and their natural cycle, through consensus-based actions and mechanisms that keep ecosystems, plant and animal species and community life intact, recreating their cultural identity with dignity. Water is the Earth's heritage and belongs to all forms of animal, plant and human life. Therefore, any legal framework regarding water resources must be based on this principle.

Water as public domain

This principle entails defining water, in constitutions, as a public asset under the control of society at large. At the same time, equitable usage mechanisms must be formulated that will be responsive to the needs of Nature and of human communities, with priority for the rights of livelihood, food sovereignty and local development.

Water as common property, not a commodity

Water hoarding by the most powerful sectors of the economy, such as mining, industry, agribusiness, export and so on, acts to the detriment of most users and of Nature itself. Therefore, no company, national or transnational, or any private person, has the right to appropriate water ownership or hoard its usage for private profit at the expense of the rest of society. Because water is public domain, it is a life resource that cannot be reduced to a single commercial value, subject to market laws. Therefore, water cannot be dealt with in free trade treaties such as WTO, FTAA, or bilateral agreements.

Re-valuing Andean expertise, technologies and organization

The lore of the Andean world and their technological and social systems for water management are grounded in the principle of reciprocal coexistence with Mother Earth and in collective ownership of water, based on their own legal and social system. These factors have been able to guarantee the sustainability of ecosystems from time immemorial and therefore must be preserved, respected and recognized. Traditional water management systems, developed and valid-

ated over hundreds of years, but nowadays set aside, are proven alternatives for water resource sustainability. Therefore, they must be better understood, valued, recovered and disseminated as technologies for sustainable development.

Integrated, participatory management systems

Water management systems must be based on a holistic concept integrating the watershed territory, with compatible uses and sustainability of the resource. The prioritisation of water uses must be based on participatory mechanisms that enable water conservation and equitable access. Sustainable management projects require public information on the current status and availability of surface and ground water. This information is currently almost non-existent, not systematized and difficult or costly to access.

Participatory institutions and societal oversight

Legislative norms and water management forms must guarantee that water is available in terms of volume and quality, to ensure the sustainability of ecosystems and human communities and to satisfy their needs. Therefore, systems of governance, both at the basin level and nationally, must be based on existing local water authorities, such as indigenous and rural communities, irrigators' associations, and other water users. Governments of Andean countries must respect and value the original holistic rights and management arrangements of indigenous and rural communities, which must be recognized as common heritage.

Suitable economic policies

All public investment policies must consider water conservation as a priority, with sustainable management and local and regional development policies based on indigenous and rural uses and customs. Any private investment in the water sector must be subject to such criteria. In Andean watersheds, water resources are generated in the highest areas, but generally benefit the lowlands. Water policy must prioritise suitable mechanisms to benefit all equitably, guaranteeing better quality of life for the people living in the high-altitude areas, who are the most under-privileged.

Indigenous women claiming water control rights, Licto, Ecuador – © *R. Boelens*

local rights and legal recognition: the struggle for indigenous water rights and the cultural politics of participation

In former days, indigenous water property rights were taken away through violence, conquest, colonization and oppression. Although violent take-overs have not disappeared, the keywords in today's society are no longer exclusion and outright oppression but so-called 'inclusion', 'integration' and 'participation' in the name of 'equality'. Fundamental questions then arise: equal to what, to whom, to which model? Inclusion in what? Participation in accordance with whose objectives, visions and terms?

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In many regions of the world, peasant and indigenous water management systems are the foundations that sustain local livelihood and national food security. In most Andean countries, for example, indigenous and peasant communities are the main providers of food for the national populations. Therefore, security of access to water and the means to manage their water systems is of crucial importance. Despite this fact, millions of indigenous water users find themselves structurally among the poorest groups of society. Moreover, they are usually not represented in national and international water decision-making bodies. This contributes to a situation of increasing inequality, poverty, conflict and ecological destruction. On top of the historical, extremely unequal distribution of access to water, today indigenous and customary water rights in Latin America and elsewhere are increasingly under pressure.

In this context, it is alarming that, having examined the Second World Water Forum documents, participants reached the conclusion in their final statement that "(…) indigenous peoples and their unique systems of values, knowledge and practices have been overlooked in the Global Water Vision process. The session concludes that there is an urgent need to correct the imbalance of mainstream thinking by actively integrating indigenous women and men in subsequent phases, starting with the Framework for Action" (Second World Water Forum, 2000).

While this attention was lacking in the carefully prepared, official, March 2000 debate, the situation in the field is far worse. Even when indigenous rights and water management practices are not simply obstructed by national legislation and intervention policies, attention to the subject is negligible. Governments have paid it mere lip service. Most policies and legislation do not take into account the day-to-day realities and specific contexts of indigenous groups. The Forum rightly concluded that "strong measures should be taken to allow indigenous peoples to participate, more actively sharing their specific experience, knowledge and concerns in the Global Water Vision and 'Framework for Action'" (ibid.).

The program – *Water Law and Indigenous Rights. Towards recognition of local and indigenous rights and management rules in national legislation* (WALIR) – aims to help to counter the above-mentioned discrimination and injustice. In this paper, we outline some of the challenges of this action-research, exchange and advocacy program, which has been set up recently. Although the investigations also cover Mexico and the United States, its main focus of action is in the Andean countries: Peru, Bolivia, Chile and Ecuador.

The article will first address some basic background features of Andean water law, water policy and local rights. Next, it will refer to the action-research program and elaborate some of its key conceptual challenges: indigenous water rights and management rules, official recognition of local socio-legal repertoires, and the effectiveness of legal strategies for solving water conflicts and rights issues. The intention is not to give definite answers, but to clarify important questions and dilemmas. Finally, the article will focus on the problem of inclusion-oriented water law and policy strategies: the tyranny of these modern equality and participation discourses, which deny local and indigenous water rights, management rules and the construction of their own livelihood strategies.

Notes on the Andean context

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

The Andes is also going through a period of aggressive, neo-liberal water reform. It is common to see that powerful stakeholders are able to influence new regulations and policies, or monop-

olise water access and control rights. National and international elites or companies use both State intervention and new privatisation policies to nullify and appropriate indigenous water rights[1].

But at the same time, new opportunities for customary and indigenous cultures and rights systems are appearing. It can be observed that most Andean countries have accepted international agreements and are working towards constitutional recognition of ethnic plurality and multiculturalism (or *interculturalidad*). At a general level, 'indigenous rights' are associated with, or considered to be, 'human rights'. However, when it comes to translating such general agreements into practice, particular local and indigenous forms of water management (especially water control rights) tend to be denied, forbidden or undermined in specific legislative fields, such as water laws and policies (Bustamante, 2002; CONAIE, 1996; Gentes, 2002, 2003; Getches, 2002, 2003; Guevara and Urteaga, 2002, 2003; Pacari, 1998; Palacios, 2002, 2003; Peña, 2004).

In the Andes and elsewhere, the denial of contemporary forms of indigenous water management is often combined with a glorification of the past: "Incas yes, Indians no!" (Méndez, 2000; Almeida, 1998; Baud, 2003; Gelles, 2000; Flores Galindo, 1988). The attitude towards contemporary indigenous communities tends to be folkloristic. The use of either romanticized, paternalistic or racist approaches is very common. Policies are oriented towards an imagined concept of 'Indianity' or stereotype towards the assimilation and destruction of indigenous water rights systems.

As a result of the above, Andean countries are replete with examples of the negative impacts on organization and infrastructure of many top-down water programs. They usually fail to understand the dynamic and plural nature of indigenous rights and management rules.

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

Water rights, indigenous struggle, action-research and debate

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

This 'forced' collective action to manage the resource should not be romanticized, and is not embedded in a presumed 'Andean solidarity'. It is a form of local, 'contractual reciprocity', aimed at sustaining and reproducing local water management systems as well as the households and communities that depend on them (Boelens and Doornbos, 2001; Mayer, 2002; Ruf and Mathieu, 2001). Apart from its local orientation, this collective reciprocal action may also create a strong basis for broader political alliances, for example in backing particular water policies and opposing forms of legislation and policies that deny indigenous or customary rights.

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

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

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

These considerations led to the formulation of the WALIR (Water Law and Indigenous Rights) program, which is an international endeavour based on action-research, exchange, capacity-building, empowerment and advocacy[2]. As a think-thank, WALIR informs debates on indigenous and customary rights in water legislation and water policy. In collaboration with existing networks and counterpart initiatives, WALIR sets out to analyse the water rights and customary management modes of indigenous and peasant communities, comparing them with current national legislation and policy. In this way, it sheds light on how these indigenous rules and rights regarding water are both legally and materially discriminated against, and even destroyed. The aim is to contribute to a process of change that recognizes indigenous and customary water management rules and rights in national legislation.

While indigenous populations, especially, are being confronted with increasing water scarcity and neglect of their water management rules and rights, the current political climate seems to be changing. However, changes in the law are still void of content, while clear research results and proposals in this area are lacking. The program aims to help bridge these gaps, facing the challenge of taking the dynamics of customary and indigenous rules into account, without falling into the trap of 'freezing' such local normative systems or taking them out of context.

Recognition of local and indigenous rights: conceptual problems and strategic challenges

WALIR is an interdisciplinary program, comprising lawyers, anthropologists, water professionals, sociologists and agro-economists. Their social backgrounds also differ significantly, ranging from academics and policy-advisors to action-researchers and legal advisors of indigenous organizations. The countries studied and their respective legal structures are also, of course, very different, as are the national debates on indigenous and customary rights, and the languages and concepts that are used. The challenges, then, are manifold, and are both practical and conceptual. For example:

The notion of 'indigenous'

Decades ago, Frantz Fanon made the following observation, which it is useful to recall in the context of the WALIR program: "Colonial specialists do not want to recognize that the culture has changed, and they hasten to support the traditions of native society. It is precisely the colonialists who have become the defenders and advocates of a native lifestyle" (Fanon, 1963).

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

In the Andean region, as elsewhere in Latin America, the idea of so-called 'Indians' was invented and the concept of 'indigenous' was constructed by various racist currents, developmentalist paradigms and romanticized narratives – and by the indigenous peoples themselves. Very different regimes of representation constructed their own projections of 'Andean identity' or 'indigenous cultures'. Some of these refer to the 'backwardness' of the 'Indians', implying that they should be assimilated into mainstream culture. Others are neo-positive, idealized images of 'real and pure Indians', isolated from cultural interaction and defenders of original, positive human values[3]. Indigenous groups have often adopted or contributed to creating these stereotypes, sometimes unwittingly, sometimes with clear ideological and political purposes.

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

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

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

The issue of 'recognition'

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

In another paper, we discuss the dilemma regarding recognition of legal hierarchies, arguing that a distinction must be made between analytical-academic and political-strategic recognition[4].

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

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

- Do indigenous peoples and their advocates claim recognition of just 'indigenous rights' (with all the conceptual and political-strategic dilemmas of the 'indigenous' concept), or do they also struggle for recognition of the broader repertoires of customary and peasant rights prevailing in the Andes? And what precisely is the difference in concrete, empirical cases?
- There are no clear-cut, indigenous socio-legal frameworks, but many dynamic, interacting and overlapping socio-legal repertoires. Should indigenous peoples try to present and legalize delimited frameworks for their own water rights, rules and regulations? Or should they rather claim recognition of their water control rights and thereby the autonomy to develop those rules, without the need to detail and specify these rules, rights and principles within the official legal framework?
- Or would it be a more appropriate and effective strategy to claim and defend legalization of their water access rights – since these are increasingly being taken away from them – and assume that water management and control rights will follow once the material resource basis has been secured?
- Do recognition efforts only focus on the legal recognition of explicit and/or locally formalized indigenous property structures and water rights (reference rights, often, but not always, written down), or do and should they also consider the complex, dynamic functioning of local laws and rights in day-to-day practice? These 'rights in action' and 'materialized rights' emerge in actual social relationships and inform actual human behaviour, but are less tangible.
- How to define and delimit the domain of validity of so-called indigenous rights systems, considering the multi-ethnic compositions of most Andean regions and the dynamic properties of local normative frameworks? In terms of exclusive geographical areas, traditional territories, or flexible culture and livelihood domains?
- How to avoid assimilation and subsequent marginalisation of local rights frameworks when these are legally recognized? And how to avoid a situation in which only those 'customary' or 'indigenous' principles that fit into State legislation are recognized by the law, and the complex variety of 'disobedient rules' are silenced after legal recognition?
- Indigenous socio-legal repertoires only make sense in their own, dynamic and particular context, while national laws demand stability and continuity. How to avoid freezing customary and indigenous rights systems in static and universalistic national legislation, in which local principles lose their identity and capacity for renewal, making them useless?
- Enabling and flexible legislation might solve the above problem. However, enabling legislation and flexible rights and rules often lack the power to actually defend local and indigenous rights in conflicts with third parties. How to give room and flexibility to diverse local water rights and management systems, while not weakening their position in conflicts with powerful exogenous interest groups?
- What does such legal flexibility mean for internal inequalities or abuses of power? If, according to the above dilemma, the autonomy to develop and enforce local rules is claimed (instead of strategies that aim to legalize concrete, delimited sets of indigenous rights and regulations), how to face the

existing gender, class and ethnic injustices which also form part of customary and indigenous socio-legal frameworks and practices?

The complexity of 'law-oriented strategies'

Following from the above dilemma and problems, a major conceptual and practical challenge stems from the fact that national (positivist) legislation claims by definition that the law must focus on uniform enforcement, general applicability and equal treatment of all citizens. But local and indigenous rights systems, on the contrary, and by definition, address particular cases and diversity. How to deal with the conflict and fundamental difference between positive legal Justice (oriented at 'right'-ness/generality) and varying forms of local Equity ('fair'-ness/particularity)? State legislations have recognized this fact when faced with the problem of the law losing its legitimacy in practice. Official justice was perceived as being unfair in many specific cases. Legal rules are general and individual cases are particular, hence common laws were called upon. In many cases the second set of principles (fairness) has been institutionalised. This was not to replace the set of positive rules of rightness, but to complement and adapt it. In fact, it appeared that official legislation (Justice) often survived, thanks to the 'fairness' and acceptability of common laws that were incorporated. This was often carried out by formulating special laws. However, this institutionalised equity is a contradiction in terms. It leads almost automatically to the ironic situation in which the set of common or customary rules (equity), itself becomes a general, formalized system and loses its pretensions of 'appropriateness', 'being acceptable' and 'doing justice' in particular cases (Schaffer and Lamb, 1981; Boelens and Dávila, 1998; Lauderdale, 1998).

A closely-related dilemma involves the effectiveness of legal recognition. Considering the lack of access of peasant and indigenous communities to State law and administration, this question is prominent: is legal recognition the most effective strategy, or would it be better for peasant and indigenous communities to defend their water laws and rights 'in the field'? Moreover, often it is not the State law as such that sets the rules of the game in peasant and indigenous communities, but hybrid complexes of various socio-legal systems are in place. Formal rights and rules cannot act by themselves, and it is only the forces and relationships of society that can turn legal instruments into societal practice. Social and technical water engineers, lawyers and other legal advocates, in particular, have often overestimated the actual functionality or instrumentality of formal law and policies in local contexts.

On the contrary, their legal anthropological colleagues sometimes tend to underestimate the power of formal law, assuming that all conflicts are settled by means of local normative arrangements, without any influence from official regulations. However, the neo-liberal Water Laws (e.g. Chile) or top-down instrumental water policies (e.g. in Ecuador and Peru) have not only neglected customary and indigenous forms of water management, they also have had concrete, often devastating consequences for the poorest people in society.

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

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

Inclusion and exclusion: the cultural politics of participation

National water policies in the Andean countries, and especially their translation in field practice, reflect and deploy the political power and cultural hegemony of a dominant stakeholder group[5]. This group has, historically, imposed rules, rights and regulations, and has controlled

nation-building processes in the last centuries. As shown by Gelles, State bureaucracies usually ignore indigenous models of resource management, because of the alleged superiority of 'modern' Western cultural forms and organization, and because the power-holders and dominant cultures of these nations regard indigenous peoples as racially and culturally inferior (Gelles, 2000:9-10)[6].

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

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

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

New irrigation legislation and state policies are thus often an expression of post-colonial discourses on equality. As De la Cruz (1993) observed, "the principle of equality before the law is valid for the identical and profoundly unjust for the diverse" (Stavenhagen, 1994; Stavenhagen and Iturralde, 1990). This horizontal, disciplining power functions because it penetrates people and society as a whole. "This power is exercised rather than possessed; it is not a 'privilege', acquired or preserved, of the dominant class, but the overall effect of its strategic positions – an effect that is manifested and sometimes extended by the position of those who are dominated" (Foucault, 1978).

Thus across the Andes and many other regions of the world, irrigation technicians and development professionals introduce virtually the same irrigation techniques, knowledge, and norms everywhere (developed in Western research centres, universities, and development enterprises). But they are not just imposed in a top-down way. In many instances, it is the indigenous peasants themselves who ask for this same technology, in order to 'progress' and leave behind their traditional 'backward' technology, in order to become like the western-oriented, 'modern farmers' (Boelens and Dávila, 1998; Van der Ploeg, 2003).

This kind of power in modern nation-states seeks for inclusion, rather than exclusion, of Andean communities, indigenous peasants and other oppressed classes. At the same time this 'uniformity' and 'equality' supposedly makes it easy to measure these social groups. They are individualized, classified, and made into 'cases', according to the ways that they do or do not fit the model. Yet, their participation often results in disappointment, in social and cultural disintegration, and in their being defined as 'permanently backward people', due to their incapacity to meet the norms for being 'equal'. In the words of Fanon (1963): "The Western ideology, which is a proclamation of the fundamental equality of men (…) invites inferior men to become human beings, according to the Western example of the humanity that it represents. In spite of being fundamentally racist, it generally succeeds in hiding this racism through ever more subtle modifications; thus, maintaining its proclamation of men's extraordinary dignity".

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

In sum, contemporary nation-states employ a new and different symbology of power, which is espoused in modernization and development discourses as well as in neo-liberal economic policies. It aims to include, not to exclude; it pretends to provide universal benefits, while in fact extending state control and the cultural orientations of national and international power holders. Within this context, the recognition and balanced valuation of local beliefs and practices is necessarily precluded because any legitimisation of these local norms calls into question the supposed monopoly of the state and market ideology over rationality and legitimate culture (Gelles and Boelens, 2003).

The tyranny of participation

Although violent take-overs have not disappeared, as outlined above, the keywords are no longer exclusion and outright oppression, but so-called 'inclusion', 'integration' and 'participation', in the name of 'equality'[7]. But then, with these modern concepts, fundamental questions arise:

First, if equality is strived for, the question is: equal to what, equal to whom, equal to which model? The basic assumption in current Latin American water policies is, that 'progress' means: equality to the occidental, techno-centric and male-biased water management model. The concept of rational water management is interspersed with non-indigenous norms about efficiency, social security, effective organization, private ownership and economic functionality. In practice, indigenous peoples are forced to 'equalize'. In other words, they are forced to adopt the norms and practices of white or *mestizo* water users, which most often run counter to local social relations and environment, and disintegrate local communities and identity.

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

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

The famous Majes Project in southern Peru is one of the many cases in which the Andean peasant and indigenous communities, and especially their resources, were 'included' in the development process. Major investments were made – US$ 1,300,000,000 – to capture and conduct the water from the Colca Valley and irrigate the desert lowlands. Only 15,000 ha. have been irrigated, for a total of 3000 families, who each obtained a 5 ha. parcel. This is an investment of the order of US$ 80,000 per ha., or, what is even more appalling: US$ 400,000 per family (Hendriks, 2002).

But the original design excluded, outright, any provision of water for the upper basin, where the indigenous communities live, and where the water comes from. Furthermore, to recover investments, those families who did acquire land and water rights in the lower basin, had to pay US$ 25,000 per parcel, by no means affordable for an indigenous small-holder family. Indigenous communities in the Andean catchment were included, however. To undo their 'backwardness', they did get the largest share of the burden through the expropriation of

land, strong price inflation, depredation of natural resources, destruction of terraces, and debilitation of existing patterns of organization and culture (Tipton, 1988).

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

It is interesting to compare this with an example in Ecuador. According to Whitaker's study (1992) peasant and indigenous farmers with less than one ha. – who are responsible for the major part of national food production – represent 60% of all farmers, but they received only 13% of State spending on irrigation. At the same time, large landowners represent only 6% of farmers, and they received 41% of State spending on irrigation. The public financed all this. State irrigation investment in Ecuador at that moment represented 11.6% of the total foreign debt.

Another example is the inclusion of indigenous water communities in current global water policy models. In Chile, indigenous peoples are included in the 1981 Water Code, dictating privatisation of water rights. While ideological studies continue to praise the model, empirical field studies indicate the disintegration of collective, indigenous systems. The individualization of water rights has increased insecurity and disorganization – instead of decreasing insecurity, as neoclassical theory wants to have it (Bauer, 1997, 1998; Hendriks, 1998; Dourojeanni and Jouravlev, 1999; Castro, 2002). Moreover, according to the new legislation, decision-making rights on water management are now attached to the economic buying power of individuals. Rights-holders with more 'water actions' (volumetric rights per time unit) have more decision-making power, contrary to indigenous management and collective interests. In many cases, the interests of an elite owning water rights have effectively been able to deny the interests of the majority (the group of poorer users), and impose their own rules (Boelens and Zwarteveen, 2003; Hendriks, 1998).

Next, since individual water property owners can make use of the water entirely according to their personal interests, Chile faces the problem of a strong increase in water contamination, while individual property owners are not sanctioned for polluting their property. Often, indigenous communities and downstream cities bear the consequences (Bauer, 1997; Dourojeanni and Jouravlev, 1999).

At the same time, the water market itself has not developed (or in some cases has only very marginally), but extreme monopolization, speculation and hoarding of water rights did. A few power-generating and mining companies have accumulated the vast majority of rights, most of which are not used at the moment. The Water Code does not request water rights owners to actually make use of these rights, nor are they obliged to pay concession fees. This makes hoarding and speculation of water rights extremely attractive in a context of scarcity (Solanes and Getches 1998, Solanes and González-Villareal 1999). A major source for this accumulation and monopolization of water rights was the expropriation of the so-called 'unregistered' indigenous community rights (Castro, 2002; Dourojeanni and Jouravlev, 1999; Gentes, 2002; Hendriks ,1998). This relates to a recurrent problem of universal or national policy models: their validity is based on theoretical models and paradigms, but they usually fail to look at human suffering and internal contradictions in the field.

A final and very common example at field level shows the problems that arise from outside-driven integration of indigenous communities into uniform national legislation, organizational models and engineers' designs[8].

The Ecuadorian State intervened in an indigenous area of 20 communities in the Andes, in Licto, to build an irrigation system and carry out an integrated development program. The system was designed in the country's capital, without user involvement. The hydraulic design disregarded community production systems and boundaries, and imposed a classic, universal blueprint.

Although the great majority of water users were female because of male outmigration, the infrastructure had no night reservoirs and the schedule was based on 24-hour irrigation. Night irrigation, however, made it impossible for women to make use of water rights – for reasons such as sexual violence, child care, soil erosion, remote fields, etc.

The nation-wide, uniform, legal recipe dictated the organization of the system, which would strengthen bureaucratic power and artificial leaders, while weakening community structure and collective action which remains the only way to survive in this region.

Law also pre-established that most women could not get water rights – unless they were formally recognized as 'heads of households' – although it was they who, according to local indigenous rules, had worked, invested and thus created the water rights. The State imposed a model in which water rules and rights were established by standard government rationality: those individuals who have land and pay fees, get water rights. Indigenous rationality, on the contrary, says: you cannot just buy rights. Those who contribute with labour, organizational capacities and participate in the meetings, create water access and decision-making rights. Thereby, individual rights are derived from the collective ownership of infrastructure.

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

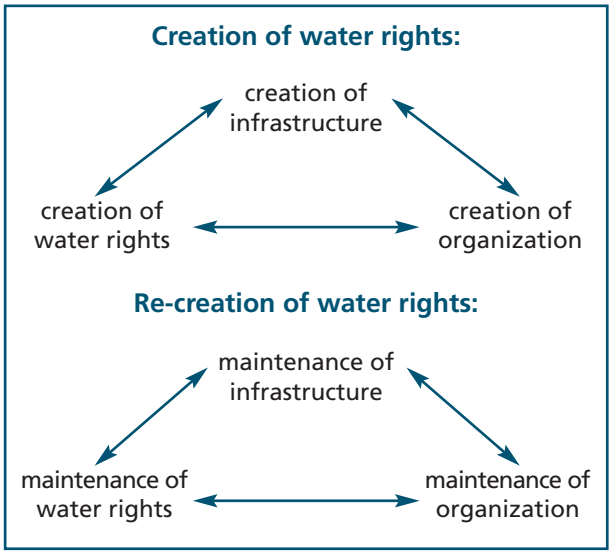

Diagram 1: Driving force behind indigenous water management and collective action.

When the State agency, because of financial crisis and lack of capacity, did not complete construction of the system, the indigenous communities took over its development, with the help of a local NGO. They adapted the design, management and water rights to local demands and capacities. Although many had no formal education or were illiterate, the means were developed to discuss collectively the design, rules and rights. For example, they used scale models and user-to-user training in the local language. Through interactive design and visual capacity-building tools, the creation of infrastructure and water rights were linked. Next, combined literacy training and water management capacity building strengthened the position of female water users and female leaders, since they were to become involved in the management of the system. It was they who were in charge of creating and maintaining water rights in the system. Fundamentally, collective action formed the basis for the construction of infrastructure and the construction of water rights. A system was developed which the communities now manage themselves, from the main level to the field level.

However, once the 20 indigenous communities had finished the system, with clear rules and rights and strong collective management, the State administration came in again. It did not want to recognize local management, regula-

tions and water rights. Simply because local rules were not sustained by national law, they were declared 'illegal'.

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

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

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

Conclusion

Is it not ironic that precisely those producers of local livelihood and national food security, who developed a variety of water rights and management systems in order to adapt them to the multiple local constraints and opportunities, are the same ones that suffer most from inclusive policies and uniform, positive legislation? But, while current cultural politics and policies of 'inclusion' are the problem, the solution is not to go back to 'exclusion'. Participation is desirable, but with a different approach to rights: one that takes into account, from a critical perspective, the fact that peasant and indigenous communities want to take part on their own terms, given the diversity of identities, organizational forms and normative frameworks that govern their water management in practice – and given that most rights of access and control have been taken away from them.

ENDNOTES

(1) The issue is often related to current land reform policies. Mayer, 2002; Zoomers and Van der Haar, 2000.

(2) WALIR is coordinated by Wageningen University and the United Nations Economic Commission for Latin America and the Caribbean (UN/ECLAC) and is implemented in co-operation with counterpart institutions in Bolivia, Chile, Ecuador, Peru, Mexico, France, The Netherlands and the USA, at international, national and local levels.

(3) It was therefore not just the dominant, racist class and social Darwinists, but also many 'indigenist' (and later 'Indianist') scholars – e.g. Marxist thinkers and activists, who fought against racial discrimination and racial oppression – who contributed to the great *mestizaje* project, intending to paternalistically 'include the poor indigenous peoples in modern society'. This was carried out, among other means, by 'modern' technology (e.g. irrigation techniques), legislation and capitalization of Andean communities, or by defining 'indigenous' as synonymous with 'revolutionary', in Western schools of thought. Furthermore, some indigenous and Indian scholars and movements tried to create the 'modern Indian', rooted in ancient indigenous myths and symbols and pan-Andean discourses, in order to foster regional pride and nationalism or legitimise their political and ethnic (often *mestizo*) positions. The 'indigenous' was – and often still is – characterized by projecting stereotyped images (see, for example, Almeida, 1998; Baud, 2003; Baud et al., 1996; Boelens and Gelles, 2002; Degregori, 2000; Gelles, 2002; Guillet, 1992; Hale, 2002; Iturralde, 1993; Stavenhagen, 1994; Stavenhagen and Iturralde, 1990).

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

(5) This section is based on Gelles and Boelens (2003).

(6) This bureaucratic irrigation tradition has been especially powerful in countries such as Peru and Ecuador. As Lynch (1993) and Boelens and Zwarteveen (2003) have shown, its devaluation of particular actors of water use extends to women, as the gender discrimination found in the field and in irrigation offices is part and parcel of the bureaucratic tradition.

(7) For an analysis of equality and participation discourses, see, among others, the works of Michel Foucault, Hans Achterhuis, Arturo Escobar, Michael Taussig, Ivan Illich, René Girard, Bernard Schaffer. With reference to the title of this section, see also Bill Cooke and Uma Kothari, 2002.

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

REFERENCE LIST

Almeida José, 1998, *Andean social construction of identity and political direction.* Searching for Equity, R Boelens and G Dávila eds., pp 203-210, Van Gorcum, Assen.

Assies Willem, 2000, *David fights Goliath in Cochabamba: water rights, neoliberalism and the renovation of social protest in Bolivia.* Draft, Colegio de Michoacán, Rural Studies Institute, Zamora, Michoacán.

Baud Michiel, 2003, *Intelectuales y sus utopías; Indigenismo y la imaginación de América Latina Cuadernos del CEDLA nº 12.* CEDLA, Amsterdam.

Baud Michiel, Koonings, Kees, Oostindie Gert, Ouweneel Gert, Silva Patricio, 1996, *Etnicidad como estrategia en América Latina y el Caribe.* Abya Yala.

Bauer Carl, 1997, *Bringing water markets down to earth: the political economy of water rights in Chile, 1976-95.* World Development Vol 25, nº 5, pp 639-656.

Bauer Carl, 1998, *Slippery property rights: multiple water uses and the neoliberal model in Chile, 1981-95*. Natural Resources Journal 38, pp 110-155.

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

Benda-Beckmann Franz von, 1996, *Citizens, Strangers and Indigenous Peoples: Conceptual Politics and Legal Pluralism.* Law and Anthropology 9 (1996), pp 1-42.

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

Boelens Rutgerd, Dávila Gloria eds., 1998, *Searching for Equity. Conceptions of justice and equity in peasant irrigation.* Van Gorcum, Assen.

Boelens, Rutgerd, Doornbos Bernita, 2001, *The battlefield of water rights. Rule making amidst conflicting normative frameworks in the Ecuadorian highlands.* Human Organization 60 (4), pp 343-355.

Boelens Rutgerd, Hoogendam Paul eds., 2002, *Water Rights and Empowerment.* Van Gorcum, Assen.

Boelens Rutgerd, Zwarteveen Margreet, 2003, *Water, gender and 'Andeanity': Conflict or Harmony? Gender dimensions of water rights in diverging regimes of representation.* T Salman and A Zoomers eds., Imaging the Andes: Shifting margins of a marginal world, CEDLA Latin America Studies 91, Aksant/CEDLA, Amsterdam.

Boelens Rutgerd, Zwarteveen Margreet, 2003, *The politics of Andean water policy reforms. Local and indigenous rights in the context of privatisation policies.* Austrian Journal of Development Studies 19 (4), pp 56-75.

Boelens Rutgerd, Roth Dik, Zwarteveen Margreet, 2002, *Legal complexity and irrigation water control: analysis, recognition and beyond*. Paper for the International Congress of Legal Pluralism, 7-10 April 2002, Chiang Mai, Thailand.

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

Castro Milka, 2002, *Local norms and competition for water in Aymara and Atacama communities, Northern Chile.* Water Rights and Empowerment, R Boelens and P Hoogendam eds., pp 187-201, Van Gorcum, Assen.

CEPAL, 1988, *Gestión para el desarrollo de cuencas de alta montaña en la zona andina.* CEPAL/United Nations, Santiago, Chile.

CONAIE, 1996, *Propuesta Ley de Aguas.* CONAIE, Quito.

Cooke, Bill and Uma Kothari. 2002, *Participation. The new tyranny?* Zed Books, London.

Cruz Rodrigo De la, 1993, *Aportes del Derecho Consuetudinario a la reforma jurídico del Estado.* Derecho, pueblos indígenas y reforma del Estado, pp 71-96, Abya-Yala, Quito.

Degregori Carlos Iván ed., 2000, *No hay país más diverso.* Compendio de la antropología peruana, PUCP, UP, IEP, Lima.

Dourojeanni, Axel and Andrei Jouravlev, 1999, *El Código de Aguas en Chile: entre la ideología y la realidad.* Serie Recursos Naturales e Infraestructura 3, CEPAL, Santiago, Chile.

Fanon Frantz, 1963 (1959), *The wretched of the earth.* Grove Press, New York.

Flores Galindo, Alberto, 1988, *Buscando un Inca. Identidad y utopia en los Andes.* Editorial Horizonte, Lima.

Foucault Michel, 1978, *Discipline and punish: the birth of the prison.* Pantheon Books/Random House, New York.

Foucault Michel, 1980, *Power/Knowledge: selected interviews and other writings 1972-1978,* edited by Colin Gordon, Pantheon Books, New York.

Gelles Paul H, 1998, *Competing cultural logics: State and 'indigenous' models in conflict.* R Boelens and G Dávila eds., Searching for equity, pp 256-267. Van Gorcum, Assen.

Gelles Paul H, 2000, *Water and power in highland Peru: the cultural politics of irrigation and development.* Rutgers University Press, New Brunswick, New Jersey.

Gelles Paul H, 2003, *Indigenous peoples, cultural identity and water rights in the Andean nations.* WALIR: CEPAL, Wageningen University, University of California, Wageningen and Riverside, California.

Gelles Paul H, Boelens Rutgerd, 2003, *Water, Community and Identity: The politics of cultural and agricultural production in the Andes.* T Salman and A Zoomers eds., Imaging the Andes: Shifting margins of a marginal world. CEDLA Latin America Studies 91, Aksant/CEDLA, Amsterdam.

Gentes Ingo, 2002, *Estudio de la Legislación Oficial Chilena y del Derecho Indígena a los Recursos Hídricos.* WALIR: CEPAL and Wageningen University, Santiago de Chile.

Gentes Ingo, 2003, *Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en Chile.* WALIR: CEPAL and Wageningen University, Santiago de Chile.

Gerbrandy Gerben, Hoogendam Paul, 1998, *Aguas y acequias.* PEIRAV – Plural Editores, Cochabamba.

Getches David, 2002, *Indigenous Rights and Interests in Water under United States Law.* WALIR: CEPAL and Wageningen University, Wageningen/Boulder, Colorado.

Getches David, 2003, *Indigenous peoples' rights to water and international norms.* WALIR: CEPAL and Wageningen University, Wageningen/Boulder, Colorado.

Guevara G Armando,Vera D Iván, Urteaga C Patricia, Zambrano Gustavo, 2002, *Estudio de la Legislación Oficial Peruana sobre la Gestión Indígena de los Recursos Hídricos.* WALIR: CEPAL and Wageningen University, Lima.

Guevara G Armando,Vera D Iván, Urteaga C Patricia, Zambrano Gustavo, 2003, *Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en el Perú.* WALIR: CEPAL and Wageningen University, Lima.

Guillet David, 1992, *Covering Ground: Communal water management and the State in the Peruvian Highlands.* University of Michigan Press, Ann Arbor.

Hale Charles R, 2002, *Does multiculturalism menace? Governance, cultural rights and the politics of identity in Guatemala.* Journal of Latin America Studies 34 (3) pp 485-524.

Hendriks Jan, 1998, *Water as private property. Notes on the case of Chile,* Searching for equity, R Boelens and G Dávila eds., pp 297-310, Van Gorcum, Assen.

Hendriks Jan, 2002, *Water Rights and Strenghtening Users' Organizations: the Art of Negotiating,* Water Rights and Empowerment, R Boelens and P Hoogendam eds., pp 52-74, Van Gorcum, Assen.

Iturralde Diego, 1993, *Usos de la Ley y usos de la costumbre: La reivindicación del derecho indígena y la modernización del Estado.* Derecho, pueblos indígenas y reforma del Estado, Colección Biblioteca Abya-Yala 2, Abya-Yala, Quito.

Lauderdale Pat, 1998, *Justice and Equity: a Critical Perspective.* Searching for equity R Boelens and G Dávila eds., pp 5-10. Van Gorcum, Assen.

Lynch Barbara D, 1993, *The Bureaucratic Tradition and Women's Invisibility in Irrigation.* Proceedings of the 24th Chacmool Conference, pp 333+342, University of Calgary Archeological Association, Alberta.

Manrique Nelson, 1985, *Colonialismo y pobreza campesina: Caylloma y el Valle del Colca siglos XVI -XX.* DESCO, Lima.

Mayer Enrique, 2002, *The Articulated peasant. Household economies in the Andes.* Westview Press, Boulder, Oxford.

Méndez Cecilia, 2000, *Incas sí, indios no: apuntes para el estudio del nacionalismo criollo en el Perú.* IEP, Lima.

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

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

Palacios Paulina, 2003, *Estudio sobre marcos normativos indígenas y consuetudinarios en la gestión del agua en el Ecuador.* WALIR: CEPAL and Wageningen University, Quito.

Patterson Thomas, 1991, *The Inca Empire: The Formation and Disintegration of a Precapitalist State.* Berg Press, New York.

Peña Francisco (ed.), 2004, "Los pueblos indígenas y el agua", El Colegio San Luís, IMTA, WALIR. Obranegra Editores, Bogota and Mexico.

Ploeg Jan Douwe van der, 1998, *Peasants and power.* Searching for equity. R Boelens and G Dávila eds., pp 39-45, Van Gorcum, Assen.

Ploeg Jan Douwe van der, 2003, *The Virtual Farmer.* Van Gorcum, Assen.

Ruf Thierry, Mathieu Paul, 2001, *Water rights and the institutional dynamics of irrigated systems: between State, market and community action.* International Journal of Water 1, nº 3-4.

Schaffer Bernard, Lamb Geoff, 1981, *Can equity be organized? Equity, development analysis and planning.* Institute of Development Studies, Sussex University, Brighton.

Second World Water Forum, 2000, *Forum Session conclusions Water and Indigenous People,* www.worldwaterforum.org, The Hague, March 2000.

Solanes Miguel, Getches David, 1998, *Prácticas recomendables para la elaboración de leyes y regulaciones relacionadas con el recurso hídrico.* BID/CEPAL, Washington DC.

Solanes Miguel, González-Villareal Fernando, 1999, *The Dublin principles for water as reflected in a comparative assessment of institutional and legal arrangements for integrated water resources management.* TAC Background papers 3, Global Water Partnership, Stockholm.

Stavenhagen Rodolfo, 1994, *Indigenous rights: some conceptual problems.* Indigenous peoples, Experiences with self-government, Willem Assies and André Hoekema eds., University of Amsterdam and IWGIA, Copenhagen, Amsterdam.

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

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

Vincent Linden, 2002, *Water rights, livelihoods and empowerment.* www.indigenouswater.org, WALIR, Proceedings International Seminar on Water Law and Indigenous Rights, March 2002, Wageningen.

WALIR, 2002, *Water Law and Indigenous Rights:* www.eclac.cl/drni/proyectos/walir

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

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

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

worldviews and water management

traditional water management among the Kankanaeys of Besao, Mountain Province, Philippines

The issue of water is one of survival for the iBesao (people of Besao), who consider themselves the stewards of water, land and forests. Traditional management of water resources is closely associated with religious beliefs in *nakinbaey* or spirits of nature. The *nakinbaey* inhabiting water sources are believed to be responsible for producing water. It is therefore imperative for people to prevent *nakinbaey* from leaving, by observing culturally prescribed behaviours: the *inayan. Inayan,* literally meaning "beware!", governs the day-to-day behaviour and relations of Besao people and embodies Besao custom law.

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Besao: a brief profile

Besao, one of the municipalities of Mountain Province, has a population of 10,067 people (NCSO, 2000) living on a total land area of 107.8 square km. The altitude ranges from 400 to 2,364 m above sea level. Based on Department of Environment and Natural Resources categories, all of Besao's lands are forest, of which 52% is further classified as forest reserve, 26% as timber land and the remaining 22% as unclassified forest. The Department of Agriculture, on the other hand, reports that 10% of the municipality's total land area is used for agricultural purposes, while 88.6% are grasslands and wooded forests (SRA-MBN Operationalization Plan, 1997).

Map of the Cordillera Region in Northern Philippines

The people of Besao (iBesao) are of the Kankanaey ethnolinguistic group. They are basically engaged in paddy and *kaingin* agriculture (swidden agriculture) for income. Besao is one of the highest producers of rice in the province but does not produce enough to supply the total needs of the municipality. Other agricultural products include root crops, citrus fruits, banana, corn and coffee as well as vegetables like cabbage, beans and legumes. Additional resources come from backyard livestock raising.

The Besao people have six major uses for their land, namely: croplands, grazing areas, cultural sites, forests, hunting grounds and residential areas. The croplands are the main source of livelihood, and include the *payew* or irrigated pond field for rice production and the *uma* or the non-irrigated *kaingin* for other crops, like legumes, root crops, fruit and vegetables. Forests are further classified in Besao as either *batangan* (pine forest) or *kallasan / pagpag* (mossy forests).

Traditional respect and ownership regimes

Tiga-ipugaw nan danum… maanap; mawada… tumayaw nu maukos…, Et no pay mamid, intoy ken tako pay?
(Water is like man – it can come out… it runs away when displeased. If water disappears, what do we eat?)

IBesao representations of water reflect their high regard for water: they see it as life itself. It needs sustenance in order to perpetuate itself, as well as man. This notion is embodied in the concept of *nakinbaey*, which is literally translated as 'inhabitant'. The inhabitant refers to a supernatural being or spirit, attributed to most water sources and other sacred / ritual sites in Besao. Among the Besao people, the *nakinbaey* is believed to be responsible for producing water. To guarantee the water supply, therefore, the *nakinbaey* has to be prevented from leaving. This requires people consciously to respect the water by observing culturally prescribed practices.

Sustaining water out of respect for life – © *E. Bang Oa*

Anything that has to do with death is repulsive to the *nakinbaey*. People transporting dead human and animal remains, for example, do not pass near water sources. Butchering animals, especially dogs, near an 'inhabited' water spring is considered disrespectful towards the water source. Community members in mourning avoid water sources for about three years. They have to request the services of other community members for their water needs. The iBesao consciously avoid spitting or using soap near water sources.

It is prohibited to graze animals near or above water sources. Fields above water sources are tilled manually, without the use of water buffalo (*carabao*) for plowing. The breath and excreta of cattle are believed to be repulsive to the *nakinbaey*. In Gueday, the community also prohibits grazing and using *carabao* in the fields at the foot of Mt. Mong-o. Cattle excreta are considered to be repugnant to the spring there. Mt. Mong-o is also believed to be home to their *pinading* (a supernatural being).

These culturally proscribed behaviours are all part of the *inayan* or *lawa* concept that governs the day-to-day behaviour and relations of the Besao people. The people themselves have defined the *inayan* concept as the embodiment of Besao custom law: "Our customary laws are embodied in the *inayan* or *lawa*, which discourages any act that causes harm to anybody or anything, and forbids the violation of norms. It appeals to one's conscience to judge the rightness or wrongness of what one does or plans to do and cautions the person through some form of 'punishment', to be carried out by *Kabunian* (god), for wrongdoings. It is a simple 'do not' command that is replete with values, like respect for other people and nature, justice, morality, harmony, sharing resources and helping one another, among others…" (Besao Ancestral Domain Management Plan, 2000).

Displeasing the *nakinbaey* results in it abandoning the area, or what is locally described as *tumayao* (to fly away/to evaporate) or *mammid* (to disappear). Old people in Besao can recall two water sources that are believed to have abandoned the area sometime in the early 1940s in this way. According to Galeled Anosan (over 85 years old, Besao), Betak used to be one of the sources of domestic water for Besao proper. During the war, a man from Tadian seeking refuge in the area reportedly butchered a dog near Betak. A year afterwards, Betak dried up. Mariano Martin (85 years old, Besao) recalls the water source in Kinpit-ek, which was believed to have gone to Ilocos (a neighbouring province) as the *nakinbaey* reportedly told a *men-sip-ok* (shaman). The community sent representatives to Ilocos to call the water back to Kinpit-ek, by performing a ritual in the area. They killed a chicken, reciting a prayer for the water to return. They then took a cup of the water away with them, emptying it in Kinpit-ek. But the spirit of Kinpit-ek never returned.

If it does not leave the area when offended, the *nakinbaey* is believed to produce less water, or cause stomach problems among the users. The volume of water from most sources has reportedly been decreasing. Old persons attribute this to the non-practice, for about 60 years now, of the *legleg*, an appeasement ritual.

Ownership

Maid kenkuas nan danum. Kuan am-in ay ipugaw nan danum…
(Nobody owns water. Water belongs to everyone.)

Water is considered as a shared resource that cannot be privatised through contemporary water rights instruments. While ownership is communal, priority rights to water systems are vested in the community or farmers who first tapped the said system for their use. Natural rights are also claimed by the community living where the water naturally flows. No one is

allowed to divert water from its natural course, nor from existing irrigation systems, without consent from the community or communities depending on it. With agriculture as the mainstay of life in Besao and rice as the staple food, water is regarded as highly as land.

In cases where water sources are found within traditionally-held private lands, the land-owner has all rights to the land, but not to the water. He can only have priority use of the water. He cannot divert or stop the flow of the water at his own discretion. A case in point here is the Kapusean source in Suquib, which is found within a rice field belonging to Gan-i. Gan-i and his present descendants have been blessed with a water source right in their rice field. This means he can plant rice all year round if he wants to. But the spiritual respect for water, together with community rights to own and access the water prevailed over Gan-i's rights. As Joaquin Anosan of Suquib recalled, all the farmers using the Kapusean source downstream of Gan-i's field agreed to give a part of their harvest to Gan-i, to compensate him for his lost opportunities in not farming his field. Today, Gan-i's grandchildren have been allowed to use the rice field, but are restricted by the community from using farm animals for tilling.

Rights to access and use of water for irrigation come with the right to land. The transfer of water rights follows the transfer of land ownership, through sale, barter or inheritance.

Water management systems

Based on Besao municipal data, there are a total of 51 potable water sources in Besao (MHO, 1992) and 88 irrigation systems. Most of these potable water sources are springs and creeks, while rivers are the main source of irrigation water. Based on municipal assessments, 73% of the total population has access to domestic water supply, where access is defined in terms of sufficiency and potability.

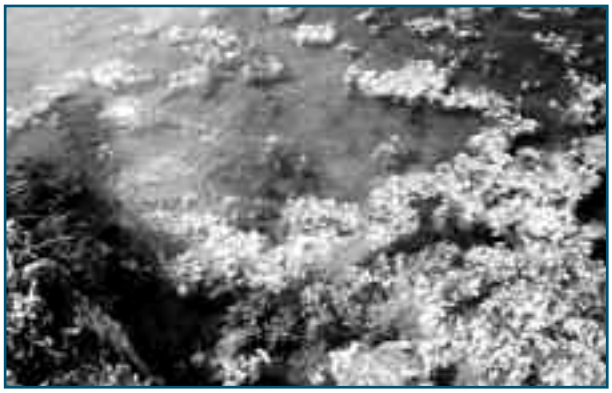
Irrigation

Nan ikak-an isnan danum, ay waay initdon di Kabunyan isnan ipugao id idi…Maid kenkuas danum; kuan am-in ay ipugao. Paypayew nan kinkua's nan danum. Nan payew nan kuan di ipugao.

(What we do with water has been taught by the Gods to the people of old… Nobody can claim ownership of the water. Water is owned by all people. The rice fields own the water. Rice fields are owned by man…)
(Galeled Anosan, 85 years old, Besao East, March 2003).

Out of the 88 communal irrigation systems listed by the municipal agricultural office, 78 are classified as 'private', meaning that they were privately constructed by the farmer/user. A closer look into these private irrigation systems reveals that they are the traditional irrigation systems used by the parents and/or grandparents of the present owners.

To illustrate the traditional water management system that still prevails today, let us take a look at Kapusean in Suquib. Kapusean is a spring located in one of the corners of Gan-i's rice field, above the residential area. It is believed to be inhabited by a spirit. Adults described Kapusean during their childhood as *kega nauneuneg* and *kaeegyat ay ilaen* (seemingly very deep and fearsome when seen).



The Kapusean Water Source in Suquib, Besao, Mt. Province: located in a privately-owned rice paddy – © *E. Bang Oa*

Kapusean is a traditional irrigation water source, which presently serves 15 ha. of rice fields belonging to 219 farm-owners. Its outflow is divided into two irrigation systems, called

Kapusean East and Kapusean West. Kapusean East serves some 5.5 ha. of rice fields owned by 99 farmers, while Kapusean West serves 9.5 ha. of rice fields, owned by 120 farmers (Municipal Agricultural Office, 2002).

Kapusean Service Area: 15 ha. of rice land owned by 219 farm families – © *E. Bang Oa*

Apart from the mud retaining walls of the rice field, no development has taken place at Kapusean. Small intakes were made in the walls in the left and right sides of the rice field, to direct the water to the rice fields downstream. Each of the rice fields downstream has a water outlet to direct water flow from one field to the next. These outlets are carved into the mud or stonewalls of the rice field and may be supported by a wooden or bamboo trough.

The main irrigation canal – © *E. Bang Oa*

Through use, Kapusean is therefore 'owned' by all the farmer-irrigators along the down-flow from the spring. Farmer-irrigators using a common water source are grouped into a *dumapat*.

Diverting canal water from one field to another – © *E. Bang Oa*

In Kapusean, there are nine *dumapats*, namely, Lamagan 1, Lamagan 2, Bengdana, Kongkong, Tugtog, Kabatuan, Kapusean 1, Kapusean 2 and Napuki. These *dumapats* are informal organizations, particularly concerned with the equitable access to and distribution of water. There is no designated head for each *dumapat*, but leadership is usually attributed to the knowledgeable elders and/or those who are articulate.

Membership and responsibilities

Membership is based on ownership of land that was originally designated for irrigation in the establishment of the irrigation canals, and along the down-flow of the water. Present-day farmer-irrigators can trace their families' membership of the *dumapat* back at least four to five generations.

All decisions regarding irrigation water are taken at the *dumapat* level – from the establishment of irrigation canals, and day-to-day maintenance, to conflict resolution. *Dumapats* are particularly active during the dry season, when water supply decreases. At the end of the planting season, in January to February, the *dumapats* start what they refer to as *menpabala isnan danum*, which is literally translated as 'to bring out water'. This is the process of cleaning up, weeding and rehabilitating structures in the water source area and irrigation canals, to facilitate the easy flow of water to the rice fields in preparation for the dry season, that usually runs from March to May. Each member family of the *dumapat* sends at least one representative to these cleaning-up activities. Members who are not able to participate in these activities are fined in cash or in

kind. What or how much they contribute is usually based on the absent member's means. In most cases, an adequate 'fine' would be to provide snacks or a meal for those who worked in the irrigation system.

The decrease in the water supply during the summer season prompts the *dumapat* to watch over the equitable distribution of water to the fields, through a process known as *mananum*, which means 'to water'. (*Mananum* also refers to the person doing the watering.) Watering the fields is done through the *banbanes* (*turn-taking*) system, where each *dumapat* member has a scheduled time in which he/she can water his/her fields. In the past, the schedule was based on the rising and setting of the sun. Today, it is conveniently scheduled into two time slots: 6 a.m. to 6 p.m. and 6 p.m. to 6 a.m. It takes about five days for each *dumpat* to complete a full *banbanes* cycle.

During the *banbanes*, the *dumapats* have the right to divert the water flow in order to water their fields, but only within the specified time allotted to them. Kapusean 1, for example, can direct all water flow to its *penged*, or canal, from 6 a.m to 6 p.m on the first day. This is achieved by building temporary mud walls that cut across the canal(s), or temporarily removing the troughs that supply water to other fields. During these watering periods, members of each *dumapat* are expected to wait, and watch for their turn.

Once a field is filled up with water, the next field-owner makes sure that the temporary mud wall is removed to allow water to flow into his field. He also temporarily blocks the water from flowing away from his field. If a turn is missed, one has to wait for the next cycle. *Dumapats* therefore keep vigil to ensure that their fields are watered.

Thus, in summer, it is common to see groups of people watching over their fields day and night. At night, the *mananum* exchange stories, while awaiting their turn. Sleeping during the watch – especially before one's turn – and missing one's turn are usually regarded as being slow and irresponsible. There is strict observance of the times allocated for watering fields. Whether or not fields are fully watered during one's turn, the water has to be given to the next farmer in line when it is due.

To minimize crop loss due to water scarcity, farmers plant less during the dry season, according to the estimated capacity of available water. The iBesaos are also conscious of the need to keep the water clean. Clothes and chemical/agricultural equipment are washed at a distance from water sources and bodies.

In the spiritual realm, all *dumapats* are expected to perform the *legleg* annually during the start of the dry season, usually after planting. Traditionally, the performance of the *legleg* is believed to ensure continuous production or generation of water. The *legleg* is a cleansing ritual to appease and please the *nakinbaey*. These ceremonies are usually officiated by community elders with the participation of all water users, especially the *dumapat* (irrigator groups). Elders and *dumapats* kill a chicken or pig near the water source as an offering to the *nakinbaey*. After the sacrifice, the elders proceed to read the gall bladder[1] of the sacrificial animal. Based on the reading, the elders recite a *sapo* or prayer directed at the *nakinbaey*, calling on it to stay and not to reduce its flow, but instead to increase its water production. They boil the chicken meat with *itag* (salted dried pork). When cooked, another *sapo* is recited this time inviting the spirit to partake of the food. After eating, the elders and *dumapats* may proceed to a designated *dapay*[2]. Here they kill another chicken and eat it before everybody goes home and observes a *ngilin* for the following three days. *Ngilin* refers to the traditionally-observed rest days associated with the rituals and belief system. In this instance, all those who participated in the *legleg* are expected not to work on the farm and are banned from death wakes within the three days period.

At the individual level, farmers used to perform the *say-at* after planting rice. This is a ritual performed by farmers to ensure the overall wellbeing of the plants. A chicken is killed beside the rice paddies as an offering to the *anito* (spirits). The accompanying *sapo* basically includes an appeal for a continuous supply of water, on which the rice plants depend (Ag-a, Bagayo, 2003).

Domestic water supply

All *barangays* (lowest political subdivision in the Philippine government system) in Besao have their designated water sources for domestic purposes. Based on year 2000 municipal data, 73% of the total population has access to domestic water through water works systems. Water works systems are community-managed. Each community is obliged to maintain and manage its water sources by cleaning and rehabilitating installed pipes or tanks when needed. Each community must also protect its water sources from pollution, forest fire and erosion. Most of the water sources are found in the mountains outside the settlement areas. Community initiatives to sustain their water supply involve fencing off the water sources, supporting natural forest regeneration and voluntary reforestation.

Water is piped from the source into tanks in the community. From the tank, water is either fetched or is piped into private houses. People who are not community members may fetch water from the tank but are not allowed to install pipes to supply water outside the community or defined service area. Temporary arrangements about sharing water works services may be agreed upon between the family / community concerned and the user-community on occasions with a high water demand, like weddings.

Conflict management

Conflicts arising from irrigation water concerns are handled from the personal to the *dumapat* levels. Most iBesaos do not remember any major intra- or inter-community conflict over irrigation water that has been settled beyond the *dumapat*. In Besao proper, community members can only remember petty disagreements, such as water theft / diversion and 'stealing' a turn, as the usual cases of conflict in the area. These are usually settled between the victim and the suspect. Stories of physical aggression in the fields among the *mananum* are common, though. There are stories of men and women in heated arguments over untimely transfer or blocking of water. These may involve physical aggression, including women fighting in the rice fields. These confrontations and petty fights, in the eyes of the iBesao, are usually enough punishment for the guilty party.

Maintaining the watershed / forest

Besao is a watershed for the Abra river. Streams and creeks flowing from the Angasan and Buasao watershed drain to the Layugan, Guinawang and Balas-iyan rivers, which are all tributaries to the Abra river. Water management involves the peoples' recognition of the relationship between forest and water resources and the manner by which the iBesao use and maintain their forest lands. The iBesao have a tradition of selective logging and make a conscious effort to regenerate forest cover, by maintaining the *pagpag* (mossy forest) and *batangan* (pine forest). The community obtains its forage, fuel and timber from the *pagpag*, which also serves as hunting grounds. The mossy forest is communally owned.

The Batangan (pine forest)

The *batangan* is the dominant pine forest in the municipality, covering about 8,484 ha. in total, some 45.5% of the total municipal land area.

The batangan – © *E. Bang Oa*

The *batangan* are privately-owned, wooded lots and are a major source of timber and firewood. A *batangan* may be individually owned, but most of the *batangan* in the area are owned by the clan. This is known as *saguda* or 'family / clan inheritance'. All clan members have equal rights to the timber resources in the *batangan*, based on rules that vary from clan to clan, depending on the availability of resources. Ideally, a member is allowed to cut down about 3-4 trees at a time for personal and immediate use only. A member is expected to plant trees to replace those he has cut down. This same member will only be allowed to draw timber from the *batangan* again

after about 25 years, when the next generation of trees is expected to have matured.

Protection and day-to-day management of the *batangan* are the responsibility of the whole clan, where each member keeps a mental note of access and use. Where clan members have migrated out of the Besao, the *batangan* are left in the care of the elders, or any member remaining in the area. The caretaker takes day-to-day decisions, ensuring that no member abuses his own or another's rights. Abuse of rights, conflicts, punishments and other matters may be taken up during clan reunions. Cutting trees from individually or clan-owned pine lots without the permission of the owner(s) is considered theft. Owners can demand payment or confiscate the wood that rightfully belongs to them. Non-members can borrow lumber from *batangan* owners. The loan is repaid in the form of trees or lumber, without interest.

Pagpag (mossy forest)

The mossy forest remains a public domain in Besao and is used primarily as hunting grounds. Food supplements like honey, medicinal herbs, and raw materials for basket weaving, wooden utensils and implements may be gathered from the *pagpag*. The mossy forest covers some 4,379 ha., mostly in the higher and steeper slopes of the distant mountains. Most of these areas remain free from agricultural expansion, but the municipality reports that biodiversity is decreasing, due to unregulated hunting. Scattered within the forests are cultural sites, such as ritual grounds, sacred sites and areas believed to be the dwelling places of supernatural beings.

Emerging trends and issues

Depletion of the water supply

Besao has 51 sources of potable water, with a total average daily discharge of 448,530 l. during the wet season and 353,470 l. during the dry season. At the present total average daily consumption requirement of 402,680 l., the municipality experiences a deficit of about 49,210.1 l. per day during the dry season which is felt most in the municipal centre.

	Average Discharge (litres/day)	Surplus (litres/day)	Deficit
Wet season	448,530	45,850	—
Dry Season	353,470	—	49,210

The iBesao have identified the following factors as contributing to this situation:

- **Failing to appease the *nakinbaey* through the *legleg:***
As noted earlier old people in Besao attribute the progressive depletion of the water supply to a failure to carry out appeasement ceremonies for the water sources. Over the past 60 years people in the municipality have adopted other, non-traditional beliefs or religious systems.

In recognition of traditional practices and values, however, there is increasing community support for the revival of the *legleg*, as is reflected in the proposed ancestral domain management plan.

- **Forest clearing:**
The main causes of the depletion of forest resources are forest fires and indiscriminate logging. Farmers may accidentally create forest fires when they start burning for *kaingin*. Farmers who graze animals also deliberately burn the forest cover in the mountains to facilitate the growth of grasses for forage. There are reportedly some 104 ha. of critically denuded areas in Besao. (Municipal Profile, 2000).

There is also increasing demand for wooden housing materials and other commercial products, both within and outside the municipality. This leads to unregulated logging, exacerbated by the ready availability of chainsaws. Some owners are simply irresponsible. Unresolved boundary conflicts between the Besao and the municipality of

Tadian have also contributed to unregulated logging by people from Tadian forest areas traditionally managed by Besao.

To curb this progressive trend towards deforestation, formal and traditional initiatives have been undertaken. Local government decrees ban the transport of timber outside the municipality, and prohibit the burning of mountainsides, with fines for violators. Inter-*barangay* policies have also been drafted, so that each *barangay* has its own area of responsibility in terms of fire prevention and logging control. A *barangay* is accountable for any forest fires that can be proven to have started from its side or territory. This is a reinforcement of the *mendepdep* ('putting out fires') or the traditional voluntary effort among community members to be vigilant about forest fires, especially when properties like granaries, timber, fruit trees, animal fences and houses are involved.

Planned reforestation and other actions that encourage the natural regeneration of trees in forest and *batangan* areas are traditional practices among the iBesao. A local government program started in the 1930s has lent institutional support to these traditions. The Mayor at the time, Abundio Gawigawen, encouraged the planting of tree seedlings near settlement areas to provide firewood, as shown in the timeline above. Inter- or intra-*barangay* communal forests have also been established. One of these is the Lagat communal forest, established, co-owned and co-managed by the Lacmaan, Ambagiw, Gueday, Agawa and Tambuan *barangays*, under agreed rules and regulations.

These initiatives, however, continue to be challenged by the prevailing need for cash income to support socio-economic needs like education, health and shelter. Development initiatives, such as mining and tourism pose other challenges.

• Expansion of commercial vegetable production as a promising source of cash income:
Commercial vegetable production has extended the use of agricultural lands, therefore intensifying the demand for water. Commercial crops grown in the municipality are temperate vegetables, such as carrots, cabbage, beans, peas and green peppers, which are marketed either in Benguet or in the Isabela provinces. Other high-yield crop varieties have also been introduced in the area as promising cash crops.

• Inadequate and inefficient infrastructure support:
This refers to a lack of water reservoirs and a comprehensive distribution system, with resulting inequalities in the supply of domestic water, in particular. With the depletion of the water supply in the dry season, domestic water supply scarcity is felt especially in the built-up area of Kin-iway. Kin-iway serves as the municipal centre, and is where the municipal government offices, hospital, two schools, the market and business establishments are located.

In addition, the relocation of people to Kin-iway from the interior and other areas for jobs and other opportunities also contributes to the high water demand there. Though supplied by one of the biggest water sources in the municipality, water loss is believed to be high, given the distance it has to travel.

• Overlapping claims:
The people of Besao, like most indigenous peoples in the country, are denied their right to fully own and manage their ancestral lands under the Regalian Doctrine, which is the framework of national policy. In addition, the whole Cordillera region has been declared a forest reserve, through the enactment of Presidential Decree 705 (Philippine Forest Act) in 1975.

At the local level, there are disparities between the territorial definitions of local governments and the areas traditionally defined and managed by the people. With the implementation of the Indigenous Peoples Rights Act (RA 8371) of 1997, these conflicts have become very pronounced. Besao claims ownership of the Buasao and the Banao water sources, stating that they lie within its ancestral territory, based on traditionally managed areas and the natural water flow. This claim is being contested by

the neighbouring Sagada municipality, in its own efforts to delineate its ancestral lands.

• **Proposed development of tourism, logging and mining in the area:**
The municipal development plan has identified tourism, logging and the mining industry as "alternative development strategies". These activities will mean increased competition for water and other resources. Without peoples' conscious and vigilant participation in the development processes, their rights may be usurped. The community's free and prior informed consent should therefore be sought before any development initiatives are undertaken.

Recommendations

Based on the observations and discussions in this paper, I propose the following recommendation.

Among us indigenous peoples, let us strengthen our organizations and networks from the local to the international levels to:

- Defend our lands and resources from encroachment and the usurping of our rights to determine our own development;
- Define and promote an indigenous perspective on water and water development;
- Strengthen existing indigenous peoples' global networks to act as a watchdog for water resources and concerns;
- Build on our skills and capacities to document our territories, practices and values in view of a more intensified educational campaign about our rights to own, manage and control our land and resources. In this regard, we should establish a database of indigenous traditional technologies and management methods, as well as rights and access to our water resources;
- Develop our traditional institutions and skills, to negotiate and pursue our rights of access to our water sources and their development, based on our own plans.

Thus, for the remaining watersheds and natural resource areas to be sustained in the light of securing food production, contributing to curbing the progressive climate change phenomenon and furthering its commitment to upholding human rights, the government of the Republic of the Philippines and its agencies should:

- Fully recognize indigenous peoples' right to self-determination and their inherent right to their ancestral lands by strengthening the IPRA and having the political will to implement it fully;
- Institutionalise the recognition and strengthening of traditional water ownership, rights and management systems and the local initiatives for sustainable development of water and other resources;
- Provide appropriate support services for sustainable economic activities that do not contribute to unbalanced natural resource depletion and extraction;
- Ensure that development interventions build on the capacities of indigenous peoples for participative planning and governance.

At the international level, we call on governments, financial agencies, donor communities, the media, academia and civil society organizations to:

- Ensure that the water agenda is not treated merely as a stakeholders' concern. Water, as a non-renewable, natural resource and the basic element of life should be included under the rubric of human rights. In this regard, the United Nations should adopt the Universal Declaration on the Rights of Indigenous Peoples;
- Recognize indigenous peoples' right to own and manage their ancestral and traditional lands and territories, including all resources therein;
- Support the strengthening of indigenous peoples' organizations and networks to define and promote an indigenous perspective on water and sustainable water development;
- Promote indigenous peoples capacities to manage their own territories sustainably, through research and documentation of effective practices and technologies;
- Build capacities of indigenous peoples to carry out research and to document their

experiences and duplicate their good practices with regard to water;
• Develop economic programs, activities, and alternative technologies that promote water sustainability;
• Stop trade and privatisation of water. Instead, develop equitable and efficient water supply and distribution systems and services without prejudice to the prior rights of the owners of land on which the resource is found;
• States, banks, finance agencies and donor communities should institutionalise water sustainability by refraining from funding water extraction and polluting development initiatives. In line with this, a participative review of existing development initiatives affecting water quality and quantity (e.g. mining, tourism and commercial agriculture) should be undertaken towards the creation of more sustainable development directions and reforms. Governments, private corporations and any other entity responsible for the destruction or pollution of water and its sources should be held accountable.

ENDNOTES

(1) the reading of the gall bladder is one of the characteristic features of Igorot rituals where the position of the gall bladder in relation to the liver is considered an omen. In the *legleg*, a *delway*, where the gall bladder is not covered by the liver, is the best reading. This indicates continuous water supply for the season.

(2) *Dap-ay.* Refers to a ground level structure which serves as the physical base of the council of elders where community rituals and ceremonies and public i.e social, economic and political functions are performed. The dap-ay also serves as a men's dormitory where young men are taught by the elders mainly through story telling.

REFERENCE LIST

Besao Municipal Profile 2004 (draft).

Besao Municipal Profile, 2000.

Brett June Prill, *Stonewalls and Waterfalls: Irrigation and Ritual Regulation in the Central Cordillera, Northern Philippines.* Hutterer KL, Terry Rambo A and Lovelace G eds., Cultural Values and Human Ecology in Southeast Asia: Papers on South and Southeast Asian Studies 27, University of Michigan, USA.

Besao Ancestral Domain Management Plan, 2000.

SRA-MBN Operationalization Plan, Besao, Mt. Province, 1997.

Primary sources

Ag-a Bagayo, March 2003, 69 years old, Suquib, Besao, Mt. Province.

Anosan Galeled, Februaru 2003, 85 years old, Besao East, Besao, Mt. Province.

Anosan Joaquin, February 2003, 68 years old. Suquib, Besao, Mt. Province.

Dao-ey Elena P, February 2003, 62 years old. Besao West, Besao, Mt. Province.

Kinaud, February 2003, 64 years old, Besao West, Besao, Mt. Province.

Mangangey Annie, February 2003, 55 years old, Suquib, Besao, Mt. Province.

Martin Mariano, February 2003, 78 years old, Besao West, Besao, Mt. Province.

Sanãmahi – Pãkhangba: a living relationship of the Metei with water

Nong-Goubi! Nong-Goubi!
Saari Kambong
Tuirel Leinaasé

(Nong-goubi! Nong-goubi! Engrossed in house-keeping, come let's make our water-way.)

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The ancient rhyme and folk-story reminds the Meitei of Manipur, India, of the *Nong-Goubi* ('rain-thirsty bird' or crow-pheasant) – a totem bird of the Meitei Nation (Manipur) – who was too busy looking after her children to take part when all the animals, birds and people were working to maintain and clean the ancient waterways (*tuirel, khong, khongbaan*) and dykes (*torbaan*) system. These made human habitation and agriculture possible in the Manipur or Imphal valley – the ancestral lands of the Meitei, occupying a central watershed in the Indo-Burma region. In the story, *Nong-Goubi* was punished and prohibited from using the water and had to wait for the rains each year.

The 2000 square km. Imphal valley, originally a lake fed by numerous rivers from the encircling hills, is drained by a single river, the Imphal river, to the South of the valley. Over a period of time, according to the oral histories of the Meitei, the valley partially dried itself out and was settled permanently by people of the surrounding hills, who later evolved into the Meitei people. Over a period of decades, settlers then proceeded to harness the waters of the valley, channelling the major rivers into more permanent courses, deepening the permanent courses of the water channels and constructing massive earthwork dykes. The subject is dealt with comprehensively in an ancient treatise called *tutenglon* (the science of waterways management).

Some lands were reclaimed as permanent dry land for agriculture and habitation, some were left open to seasonal flooding so as to facilitate wet rice agriculture, and some areas retained as *pat* or reservoirs of water, with the capacity to absorb the annual monsoon floods and conserve the source of water through the dry months.

The greatest such reservoir is the Loktak-pat to the South of the valley, from which the Imphal River drains the entire valley. This is now almost the only such wetland left, though there were more than two hundred recognized and named wetlands in oral and written history. The Imphal valley is therefore not merely a natural feature of great environmental importance but one of the greatest artifacts of the Meitei nation.

Water is not only an everyday preoccupation of the Meitei. It is a central element of the *Sanamahi Pakhangba* ancestral belief system, that the Meitei have been practicing for millennia. The belief is based on ancestor worship with strong elements of animism.

Sanamahi and Pakhangba were brothers, ancestral deities of the Meitei. Together and individually, these two ancestors occupy the supreme male positions in the Meitei pantheon along with Ima Leimarel, Yumjao Lairembi, Panthoibi, Phouoibi, Emoinu (Chahong Ngahongbi, the munificent and bountiful) and other female ancestors.

Pakhangba is revered by the Meitei because of his political and social significance, particularly for the development of the Meitei as a nation of several different tribes towards the end of the first millennium, according to the estimates made using the western calendar system. The first chiefs of the Meitei, called *Meidingu,* were named Pakhangba (as a title).

The first Pakhangba, also known as Nongda Lairen Pakhangba (the Dragon or Serpent) is believed to take two forms, one divine and one human. The human form had significance in the political history of the Meitei nation, in the making of treaties, agreements, and alliances between the many indigenous tribes of the region.

The divine form is significant to the spiritual life of the Meitei as individuals and as a society. Pakhangba in its divine form is a water serpent or a dragon. His element is water.

The link between water and important ancestors who presided over political, social and religious matters, is significant. A very brief overview of the aspects of Meitei life, lands, waters and our environment is useful for understanding its significance.

The Meitei nation was forged by alliances and treaties between more than nine different tribes, who still maintain their individual identity, but in a subdued form – subsumed under the pan-Meitei nation. Some of these clans originated from separate tribes whose initial settlement of the valley by legendary ancestors is marked along key waterways. For example, the Pleiades, the seven

sisters of the sky, journeyed along the Iril river with Iril and gave birth to the ancestors of the Sarang-Leisangthem clan, one of the component clans of the Meitei nation and also a precursor of the Kabui people in the nearby hills.

The Meitei established its ancestral domain in the central region of what is Manipur today in a broad high valley that used to be entirely covered by lakes and wetlands (*paat*) and water channels or *tuirel*. The settlement of this valley involved sophisticated hydraulic engineering, informed by a deep understanding of the hydro-dynamics of the valley, which was extremely hostile to human habitation and cultivated food production.

The precise origins of human habitation of the valley have not yet been determined, but it is clear that there were several waves of occupation at different periods, many of these pre-historic, some ancient and some of later date.

Extensive settlement and what may be clearly identified as a civilization and culture, was achieved at the latest by the 7th and 8th centuries during the time of Taothingmang and Naothingkhong, two brother chiefs, who together devised and engineered an extensive system of canals and dykes throughout the valley. This of course made intensive settlement possible. The canals and dykes were designed in a grid, running precisely from North to South across the valley and with connecting channels from East to West. The only deviations are where large natural features like hills in the middle of the valley intrude in the line of the dykes or when the natural course of the rivers strongly deviates from a straight line.

Meitei architecture, therefore, traditionally did not only encompass house or building design and precepts, but laid down strict norms for the planning and layout of settlements, in relationship with the ubiquitous grid of canals and channels. Meitei longhouse settlements were built with every house facing east. Every house therefore had direct access to flowing water for domestic needs as well as for maintenance of kitchen gardens and fishing. Maintenance of this system required very careful and regular attention, which was achieved again through the spiritual, cultural and social institutions of the Meitei. These institutions are entrusted primarily to the *Maibi*, the institution of Meitei shaman priestesses that also occupied a high political profile by advising the chiefs on temporal matters, revenue, war and peace negotiations, domestic arrangements, and as oracular advisors of individuals and the collective.

The *Maibi Loisang*, a formal college or institution of the Maibi, is the repository and vehicle through which the Meitei cultural, spiritual and social – including traditional – knowledge is transmitted from generation to generation. This is done in many ways but the most important is the prolonged annual ritual worship, called the *Lai Haraoba* or the 'Happiness of the Ancestors'.

During the *Lai Haraoba*, different clan and tribal ancestral deities, called *Umang Lai* or forest deities, are worshipped through complex and strictly ritualised ceremonies and devotional acts. The community participates as a whole, but women, men, youth and children also participate as segregated groups. It is through these segregated groups, partaking in the *Lai Haraoba*, that the *Maibi* impart traditional cultural and technological knowledge and values.

The deities are always derived from and return to the waters, channels and wetlands at the beginning and end of each *Lai Haraoba*. The spirits of our ancestors are in communication through the vehicle of water and rivers. This is one of the core elements of the Sanamahi Pakhangba worship among the Meitei.

In every household, a place is kept sacrosanct and special for Sanamahi, the revered brother of Pakhangba. An earthen pot filled to the brim with water from the rivers or canals is always kept in the *Sanamahi kaa-chin* (corner) of every home. As a symbol of the great mother Leimarel, an earthen pot filled with water and covered with fine sacred muslin is placed at the second third of the length of the Meitei longhouse, at the main support pillar.

Not only is water a sacred symbol to the Meitei as a core element in every ritual from the domestic and social to the greater public festivals, but water bodies themselves are held to be the manifestation of deities. Thus, to the Meitei, the Loktak is

not merely a sacred lake, but the embodiment of the goddess (*lairembi*) Loktak herself. So too are the various waterways, such as the Iril or the Nambol. Natural conjunctions of hills and water bodies are held to be particularly sacred and the traditions require the complete protection of flora and fauna in such spots. Even minor harvesting of produce is strictly taboo, except for ritual or specially sanctioned medicinal purposes.

The ancient waterways and dykes of the Imphal valley served many important purposes in addition to land reclamation and water management processes. Up until less than a hundred years ago it was possible to cross the valley, foothills to foothills, north to south, by water. Considerable cultural and social interaction between clans and tribes otherwise separated by extensive, inconvenient wetlands – which are even more difficult to negotiate in the long wet seasons – was fostered by this transport system.

The importance of this system is marked by the annual boat festival, *Heikru hidomba*, held in the moat encircling the one square mile of the Kangla fort. This is the most sacred site of the Meitei people, and the seat of many of its shrines and traditional governance institutions, the heart of the water channels network. The ceremony of the boat race dates from the 9th century and is held towards the end of the rainy season, when the waterways are at their highest. There is an ancient treatise on boat building, including the construction of ceremonial boats, which deals not only with the craft, but also with the art of boat building and navigation. In times of drought the chiefs of the Meitei and Angom clans are required to perform rituals from sacred ceremonial boats in order to propitiate the deities responsible for rain. Depending on the severity of the drought, various ceremonies of different elaborateness are performed in and with regard to the ceremonial boats, to invoke adequate rain.

Water plays an important role in the humbler rituals of day-to-day life as well. Potable water for the household is generally fetched every evening by the marriageable girls of the Meitei household. Since such water sources have not traditionally been distant or inaccessible, the chore is not generally considered a task of heavy labour. The young girls perform it after bathing and dressed in fresh clothes with fresh flowers in their hair. They usually go in groups, making it a semi-recreational activity. Preliminary courting between young men and women frequently takes place during this chore.

Bathing itself is a social ritual, with pleasant recreational overtones, again given the proximity of good water sources. Traditionally, young women also perform this ritual in groups, typically helping each other wash their hair.

The maintenance of water bodies, both ponds and streams, including canals, is also extremely important because fish is an integral element in the Meitei diet. Until a few years ago even in the capital of Imphal, the smaller canals around the households were well maintained and women's fishing nets could be seen placed in the water to catch a few fish for the next meal. In addition to the fish, a wide variety of water vegetables and insects, including rare mosses and fungi complemented the traditional diet. The traditional Meitei household was therefore comfortably self-sufficient in food, which required little effort in harvesting and none in cultivation. This wealth from the waters of the valley might have contributed to the development of the complex and sophisticated culture of the Meitei people, in this small valley which is almost inaccessible, except to the determined traveller.

Another element is the maintenance of water biodiversity and prosperity through worship. The indigenous *ngamu*, a small fish, is very significant to the Meitei. The *ngamu* is very sensitive to unclean water and cannot survive in polluted waters. Every year, the Meitei perform a ritual called *Ngamu üssin sin-ba* (he replacement of the *ngamu),* when fingerlings are released in every water body to bring prosperity to the people. The *ngamu* thus symbolizes renewal and prosperity, making it an important item in the medico-nutritional practices of the Meitei. The ill and aged, expectant and new mothers, weaning infants or children who are not thriving eat this fish as a healing food since its nutritional and medicinal qualities are highly prized. Maintaining water bodies for this food alone is therefore critical to preserving the traditional pharmacopoeia and diet of the Meitei.

The system of watercourses, earthen dykes and wetland reservoirs was maintained through a dual system of taxation and voluntary community labour. The most important traditional tax of the Meitei was the *lallup*, misinterpreted by the British as a slave system and abolished. According to this tax, every able-bodied man between 16 and 40 years of age was required to contribute 40 per cent of his annual labour to the chief. In times of war, this labour usually implied military service. Some, particularly those who were gifted or skilled in a particular craft or art, were required to make those particular skills available. In times of peace, the vast majority were required to contribute their time to developing and maintaining the major earthworks and de-silting the main water courses. Youth in each locality were required by custom to volunteer their efforts annually for repairing, extending and cleaning the smaller parts of the system in their own communities.

The previously well-preserved wetlands each had their own well-known and beloved characteristics. The Loktak-pat of course, with its unique floating islands of grasses and once-thriving, flora, fauna and aquatic species, is the home and birthplace of an exquisite sub-culture of the Moirang people, who retained political independence from the Ningthouja chiefs until the 13th century. Epic poems have been written about the heroes and heroines of this exeptional place. It may be emphasized that, despite the Loktak being declared a Ramsar site in danger by the World Conservation Union (IUCN), despite annual flooding that wreaks havoc among the agricultural population and more recently the urban population, the government has devised no policy for the protection of wetlands, nor does there appear to be any intention of doing so. Regretfully, this is now almost the only such reservoir that remains even partially. Others have fallen prey to land claims for unplanned urban expansion in the last few decades, or fallen into neglect because of the feeder channels that replenished them.

Other *pat*, such as the Khonghampat were famous for the miles of pink, white or purple lotus flowers that bloomed in their seasons. The social rituals of going to view the lotus in bloom in these *pat*, rather like the annual viewing of the cherry blossom in Japan, has now died with the destruction of the wetlands themselves. The poetry and songs have become irrelevant and meaningless to those who have never seen the blooming courses.

The growing distancing from, neglect and erosion of these daily and annual cyclical practices of the spiritual and cultural basis of Meitei and water relationship has threatened our society and environment, and led to the severe and apparently irremediable crises we face today, culturally and economically.

The degradation and destruction of this unique valley is not merely the story of neglect and population pressures. Inappropriate government policies as well as disregard and callousness in political attitudes actively promote it, whether or not this is conscious or deliberate. Constant appeals and pressures from concerned environmental groups and heritage lobbies are disregarded. The wetlands of Manipur are being rapidly and ruthlessly destroyed by a political and economic elite backed by government policy, however inexplicit, to 'reclaim' as much land as possible for urban and agricultural expansion.

The indigenous Meitei religion, with its strong animistic and ancestor worship elements has always maintained extensive natural groves as shrines to various deities across the valley. These have been important ecological assets, since most of the lands are primarily grasslands and marshes rather than dense forest. These groves represent the major tree cover in the valley. Both grasslands and shrines of trees have been, in the last few decades, carelessly destroyed with a total ignorance and disregard for their cultural, economic and ecological value.

The value was and is priceless. Many of the grasses provide raw materials for the construction of shelter and furniture, as well as to provide food for humans. The grasslands and groves are the habitat of a variety of wildlife, now extinct in the valley or close to extinction, such as the tiger, elephant, boar, wild buffalo, and several species of deer, including the rare *sangai* or brow-antlered deer of Manipur.

The valley is an important wintering area for many migrant birds, and the wetlands are home to an immense variety of fish, minor fauna, insects and plants, that have great value to inhabitants as a source of food and medicine.

These are just a few examples of the Meitei's spiritual relationship with water, a relationship that is in essence a cultural system of water management, maintenance, purification and constant affirmation of water as a core element of Meitei life.

There are many reasons for this dissolution of the water management systems. Recognition of indigenous governance systems and authorities has invariably been faulty and selective on the part of first British, and subsequently Indian governments and policies. The primary motivation of such policies appears to be the revenue interests of a select class, simplistic and inappropriate administrative procedures, accompanied by lack of investment and upkeep at whatever cost to the colonized. There have also been many genuinely blind spots due to the overwhelming feudal, hegemonic and patriarchal characteristics of European and Indian political authorities, which are fundamentally in contradiction with indigenous norms. The combination of neglect and vested interests by the Indian government in this region is destroying one of the most unique ecological and cultural areas in the world.

REFERENCE LIST

Alderete W, 1999, *The Health of Indigenous People.* WHO, Executive Summary.

Bhagyachandra Singh L, *A critical study of religious philosophy of the Meeteis before the advent of Vaisnavism in Manipur.*

Centre for Organization Research and Education, *Right to land and water in Manipur.* A report of the violations of the rights of the Indigenous peoples in the north east region of India.

Centre for Organization, Research and Education, 1999, *Criticism and constructive submission regarding the study on treaties, agreements and other constructive arrangements between States and Indigenous Populations.*

Chadda Iaihui (archival document).

Cheitharol Kumbaba (archival document).

Gangumei Kamei, *A History of Manipur.*

Govt. of Manipur, 1996, *Manipur Forest at a Glance.* Forest Dept., Imphal.

Kabui C ed., 1993, *Ithai Barrage.* All Manipur Ithai barrage people's organization, Manipur.

Kangleirol (archival document).

Kirti Singh M, *Religious Developments in Manipur in the 18th and 19th centuries.*

Manipur Association for Science and Society, *Releasing Ngamu in Wetland Systems in Manipur.*

McCulloh M, 1857, *Valley of Manipur.* Mrs. J.D. Marg, Delhi.
Ningthourol Lumbaba (archival document).

Pinto Anna, 2000, *Common property rights of indigenous women, north east region of India.* Seminar paper Women's Studies Conference 2000.

Pinto Anna, 1997, *Gender and Sustainable Economics in Manipur.* Nitya Rao and Luise Rürup eds., A Just Right, Friedrich Ebert Stiftung, India.

Roy Burman BK, 1995 *"Indigenous" and "Tribal" Peoples and the UN and International Agencies.* Rajiv Gandhi Institute for Contemporary Studies, New Delhi.

Singh N, 1976, *The Manipur Administration (1708-1907).* Friends and Co., Singjamei, Imphal.

Singh NT, Singh NK, 1975, *Manipur and the Mainstream.* Imphal.

Singh RK Ihalajit, 1965, *A Short History of Manipur.* RK Ihalajit Singh, Imphal.

The legend of Khamba Thoibi (oral archive).

Tutenglon (archival document).

the flow of water and the continuity of culture: water imagery in the landscape and rituals of a mountain desert oasis in Ladakh (Indian Himalaya)

As a product of culture, the symbolization of water makes it possible to transform vulnerability and unpredictability into interdependence and continuity. The water imagery described in this paper expresses the fragility of life in a mountain desert oasis. Rituals make it possible to translate an effective vulnerability and dependence on water into a concept of mutual interdependence between people and water. In the example described here, the villagers and ritual participants perceive water as a response to people's attitude towards nature. They believe that people can make springs rise up from the desert, mainly through agriculture. Farmers are therefore not only the recipients of water and interpreters of its meaning, but they also create this meaning through their agricultural work and by performing folksongs, ceremonies and rituals.

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Introduction: the symbolic meaning of water

This paper describes the symbolic meaning of water in an oasis village called Tagmachig, in the Buddhist part of Ladakh in the Indian Himalayas. It illustrates the role of ritual in attributing meaning to water in the landscape, throughout the annual agricultural cycle, and at times of drought or flood.

In the context investigated here, the main symbolic meaning of water is threefold: water is understood as a mirror in which people see their own projections in clear, sacred lakes; in response to people's behaviour, nature provides water or reveals springs in the desert; and water symbolizes the interdependence of people and nature, and the fragility of the existence and maintenance of the oasis ecosystem in its desert context. Applying the approaches of Lévi-Strauss and Victor Turner to this analysis enables us to understand the symbolism of water in a living culture, from both a structural and an actor-centred perspective.

The symbolic meaning of water here displays the genuine composition of a living culture, tailored to the local ecosystem. The specificity results from combining local symbolism or 'little tradition', relating the experiences of daily life and village deities with the worldviews and cosmogonies of 'great (written) traditions'. The local imagery of water displayed in the landscape and in ceremonies is discussed in the historical context of the cultural exchange between Tagmachig and the major cultural centres of Central Asia before the advent of Islam. For more than two thousand years, caravans passed near the village, coming along the southern Silk Road. Shamans, yogins[1] and monks were common companions of the tradesmen and have contributed to the local symbolism of water that is transmitted as oral tradition through songs, hymns, mask-dances and other rituals. The study is based on fieldwork carried out in 1997 and 2003 with two Ladakhi scholars: Tashi Rabgyas and Nawang Tsering Shakspo.

Tagmachig, an oasis on the Silk Road in Ladakh

Tagmachig is an oasis of 480 people on the southern Silk Road that links Tibet and China, through Ladakh, with India. At the same time, it links India – through Ladakh and the Takla Makan Desert – with Central Asia and Eastern Iran. The village is located near the current border between India and Pakistan in Kashmir, in the upper Indus valley in the Buddhist part of lower Ladakh. Before the India-China border in Eastern Ladakh was closed in 1962, when the Indus is frozen in winter, the Tagmachig people used to cross the river in winter when the Indus was frozen and join the caravans with their two or three dozen Bactrian camels, donkeys and yaks. They could barter spices, tea and precious stones for wheat, dried apricots and fodder. Some local entrepreneurs and pilgrims also ventured up to Tibet[2] and Kashmir. But the closing of the border interrupted these two thousand year-old cultural and economic links. For the past two generations, Tagmachig village has become a dull, remote place. Situated in a military restricted zone and in a narrow gorge between high barren mountain slopes and the roaring Indus river, the village has very few tourists and visitors today, and many men work in the army to complement the meagre income from sales of dried apricots at the central market places of Ladakh.

According to a local stone inscription translated by Francke (1907), the name Tagmachig or 'Tiger stage'[3] refers to the decision of the Tagmachig villagers united under a local chief in the 17th century, to surrender themselves to the Ladakhi king, rather than join the neighbouring Dard villages which were integrated into Baltistan and forced to become Muslim in the great Ladakhi-Balti wars (1560-1640). Seng-gerNam-rgyal, the Lion King of Ladakh and his Tiger lama thus became the patrons of this oasis. Ethnically, the 480 Tagmachig villagers are either Indo-Iranians, Mon or Dard, or they belong to the Mongol people, who all became Ladakhi and Mahayana Buddhists (of the Drepung Kagyupa sect) while continuing their traditional folklore, beliefs and rituals related to Bon shamanism[4], animism and local ancestor cult. The background of these different traditions, intermingling in Tagmachig, inspires the symbolic meaning of water.

Like many other oases in Central Asia, Tibet and the Indian Himalaya, Tagmachig relies on the seasonal melting of high altitude snow for its irrigated agriculture in the four short summer months. It has severe cold winter months, with temperatures below -20 degrees Celsius. The main crops grown are barley, wheat and pulses. Apricots and walnuts are the principal cash crops. The main village is situated at 2800 meters above sea level on the delta of a small seasonal tributary of the Indus, which is Tagmachig's main water source. Four additional portions of arable land used by the villagers are situated higher in the mountains. Additionally, at 6000 metres above sea-level, yak, sheep, horses and *dzo* (cow-yak hybrids) graze in summer. Tagmachig's only water source derives from a small glacier lake in this area, fed by the seasonal snow melt.

Hymns and folksongs are the main sources of the history and beliefs of the people of Tagmachig. One of their folksongs[5] tells of a mythical lake up in the mountains, and a cosmogony with three worlds.

> "If a white glacier on the upper end of the valley is not formed, why should there be a blue lake at the lower end of the valley?
> If a lake is not formed at the end of the lower valley, why should a tree of sandalwood grow there?
> If a tree of sandalwood is not grown there, what shall a cuckoo, the king of birds, sit upon?
> If a cuckoo will not come and sit on a tree, who will hear its melodious songs?"

The bird represents the fairy, which brought the original seed-grains from the gods to the people, and thus abundance, wealth and happiness. The sandalwood tree is the Tree of the World, which links the upper world of the gods, with the middle world of human beings and the lower world of the water deities. The symbolic meaning of water is transmitted in Tagmachig in the landscape along the watercourse and in the oral tradition, including songs, village ceremonies, and religious rituals by the people and by the specialists[6].

Tagmachig village is situated at a silk route branch along the Indus river in Ladakh, Indian Himalaya. Apricots, wheat and barley are dried on the roofs for winter. – © *C. Wacker*

The meaning of water displayed in the landscape

Leaving the roaring Indus river behind and walking uphill towards the Tagmachig spring, one passes first through fertile barley and wheat fields, bordered by hundreds of apricot and walnut trees, and traverses the village with its cubic houses. One walks around the small Buddhist monastery and the dwelling of the village goddess, situated at the top of the village, and follows a footpath leading to a narrow gorge. One then reaches the two springs of the roughly two kilometre-long watercourse of Tagmachig.

The holy lake

The springs of Tagmachig are fed by a seasonal glacier lake on the high mountain, behind the village. The lake is considered sacred because those who are lucky can see a *swastika* sign in its clear water. One of the myths of creation told in Tagmachig explains the origin of the world as a result of a strong whirling wind, which formed the holy sign of a *swastika*. Creation is understood in this myth as separation from an original unity through a whirling force.

The springs, dwellings of water deities

The river once came straight from the glacier lake to the village. But about two generations ago, a landslide interrupted the flow of the river. Luckily, two springs rose thereafter from a pile of fallen rocks behind the village – these are the two springs of Tagmachig. A wild rose bush grows at the place where the first spring comes out of the ground. The rose bush is said to be the dwelling of an eight-meter long, black, zoomorphic water deity, with the lower body of a snake, a *Lhu-mo* (feminine). The second spring emanates from a rock near the roots of a fallen willow tree, some 30 meters below. It is said to be less reliable than the higher spring and inhabited by a red *Lhu* (masculine). Two offering-places (*Lhu-bang*[7]) are located at this spring. *Lhu* and *Sa-bdag*, zoomorphic spirits of the land, are vulnerable to the interferences caused by farming, mainly from the iron plough[8], construction works and pollution. Together with juniper, a bush used as incense in all major rituals to purify the body or a site, the rose bush and the willow are the only wild trees growing in Ladakh. The two water spirits thus dwell in the wilderness.

Water and the tree of the world

Some twenty steps below the spring a huge, fallen willow tree lies across the valley. Its roots are more than five meters in diameter. The trunk indicates that the tree must be more than two hundred years old. It is a *Lha-chang* tree and nobody uses its wood. The second spring rises from a rock behind the roots of this tree. The *Lha-chang* willow tree symbolizes the Tree of the World. In the cosmogony transmitted by Siberian, Mongol and Tibetan shamans, the Tree of the World is understood to have grown out of the primordial waters, from which the cosmos was created. With its roots in the lower world of the water deities, its stem in the middle world of humans and its branches reaching up to the world of the gods, the Tree of the World transcends the three spheres of existence[9]. In some folksongs, collected by Francke (1923) in Tagmachig, the earth was formed from under the ocean. Similarly to the cosmogony found among the ancient Vedic and Siberian peoples, three worlds were created, and a Tree of the World, or pillar of creation, links these worlds together.

A large willow tree grows near the spring of Tagmachig
© *C. Wacker*

Each of these three spaces, *Lhayül*, *Miyül* and *Ogyül*, is inhabited by both malevolent and benevolent creatures. The middle world is seen as a lotus-shaped space, inhabited by human beings and ghosts, while the upper world is inhabited by protecting deities, the sun, moon and stars. The lower world is inhabited by the water spirits *Lhu* or *Lhu-mo* and the *Sa-bdag* spirits of the land, which take the form of snakes, lizards, or zoomorphic humans, with a lower snake body when seen by humans. They relate the middle world of the humans with the lower water world, while the *khyung* bird relates to the upper world of the gods.

Water in the Buddhist creation myth

The water from the first spring forms a stream, bordered by wild lavender, grass and shrubs. Some fifty meters down the mountainside, it is diverted into a short canal, leading to a hydraulic prayer mill, in which 120 prayer wheels are turned clockwise by the flow. Each wheel contains hundreds of small pieces of paper inscribed with the

Buddhist prayer *om mani padme hum* ("oh jewel in the lotus flower"). In Indian mythology, in the Purana and the Mahabharata as well as in the Buddhist and Jain cosmogony, before creation there was an endless ocean of primordial water in the cosmic night. A bud of creation floated on this water. Out of its centre the Tree of the World, or a lotus flower, grew, and out of that the creator god came into existence, and then created the world. The prayer "oh jewel in the lotus flower" refers to this creation myth. The jewel is the creation, the consciousness, coming into being from the centre of the bud, which floats on the primordial waters.

Monks prepare offerings to the water deity – © *C. Wacker*

In this creation myth the *Naga* (in Sanskrit) or *Lhu* (in Tibetan) snake deity of the water holds the water of the ocean back, by forming seven coils around the world with her body. The world floats like a raft on the primordial water. In the ancient Indian (Vedic) literature the *Naga* snake deities are the protectors of water, fertility and land. They can bring wealth as well as hunger, rain or drought, purification or disease. Kings can only reign by adhering to their laws. In the Buddhist Jataka stories Lord Buddha converted the snake deity and convinced her to use her powers to protect Buddhism. In Ladakh it is understood that the Tantric yogin, Padmasambhava, subdued many local deities, which then became protector deities of Buddhism.

This background is visualized in Tagmachig with the hydraulic prayer mill. The water, or symbolically, the water deity *Lhu-mo*, 'powers' the Buddhist prayer wheel and runs then in a smooth, regular flow to be used by the people below. Returning once again into the stream, the water flows downhill, gains speed and spills into side channels, which drive hydraulic mills to grind barley and wheat into flour. Each of the six main families of Tagmachig has its own hydraulic grinding mill besides the stream running through the village. When the water flow is too great, the mills may be washed away; when the flow is too small they may be rendered useless.

Below the spring, a Buddhist prayer mill is powered by the water – © *C. Wacker*

The main staple crop in these Himalayan oasis villages is barley. Quickly roasted on the fire, barley is ground into flour and then consumed in various dishes without further cooking or baking. The water mill is therefore the point at which the 'raw' is transformed into the 'cooked' (in the sense of Lévi-Strauss). In Ladakh, the water mill is rich in marriage symbolism and is a technology of central importance to the subsistence agriculture of the village. By passing first into a Buddhist prayer mill, the initially chaotic, wild power of

the water deity *Ihu* is symbolically disciplined and becomes a force allowing human civilization and life in the Himalayan oasis.

Water rights: equity and purity is controlled by all

A side canal brings water to the fields belonging to the Mon families of the village before it reaches the main irrigation pond[10]. Reinforced by stone walls and consolidated by the red roots of willow trees planted along its banks, the stream flows into an oval reservoir, which collects the water over night and makes it available to the villagers, who then distribute it to their respective fields. The irrigation system is the common property of the villagers. It has been built, is maintained and owned by them and the water is divided equally between them. Below the villagers' common reservoir, a vertical stone divides the water into the two main irrigation channels of Tagmachig. The villagers control the water distribution system below the reservoir by putting a small heap of stones on the dividing stone, which nobody is allowed to move, except the two users entitled to water for that day. One of the two main canals flows as an open and perfectly clean water-course through the village, and is used as drinking water. Below the village, another stone marks the place where washing is permitted. The other channel leads directly to the farming terraces. Within the fields, flat stones and small elevations direct the water to each plant.

Flood protection, cyclic time and the renewal of the world

At the edge of the irrigated area, a cliff separates the cultivated land from the wild Indus River. The cliff is bordered with Buddhist *stupas* and *mani* walls, with small heaps of white stones piled on them, which the villagers deposit at New Year when circumambulating the village. The place marks a boundary between the civilized village (culture) and the untamed Indus (nature), and the end of the water-course landscape of Tagmachig. This place is related to the cosmogony, which is the subject of the mask dances, songs and hymns of the New Year celebration.

The meaning of water in the village rituals

Myths are narrated at special occasions. When myths of creation are recited, both the narrator and the listener fall into a particular state of consciousness. Through story-telling the narrators re-establish the fantastic time of creation, and listeners become witnesses of these events. They thus transcend linear, chronological time and enter into mythical time. Lévi-Strauss compares the structures of myths to a musical composition, which follows another logic to that of modern sciences.

In Tagmachig, the holy lakes with the swastika and the Buddhist prayer mill powered by the river both depict the creation of the world out of primordial water. At the bottom end of the village, the wild Indus water symbolizes death, suicide, miscarriages, and the end of creation. In the New Year myth, the linear causality of the flow of water from the spring to the bottom end of the village is transformed into a cyclical concept of time, through creation, destruction and recreation of the world. *Losar* (New Year) is celebrated according to the Mongol (Tibetan) calendar in January or February and includes the ritual circumambulation of the *mani* walls and *chörten* (stupa) along the Indus. For every ten rounds of prostrations from the village to the last *chörten*, some two kilometres below, the Buddhist devotees deposit a white stone on an altar pointing towards the Indus River. The villagers explain that these piles of white prayer stones protect the village from infertility, child miscarriages and suicides. These have happened frequently in previous centuries, they say, and are believed to be caused by the furious sound of the Indus[11].

New Year is the time for multiple village festivals, weddings, beer-drinking visits and pilgrimages. One such pilgrimage is to the head monastery of Tagmachig, in Lamayuru, where the monks perform mask dances, explaining the coming into existence of the world from the primordial waters; the cohabitation of the gods, humans and ghosts; their separation into the upper, medium and lower worlds; and how Padmasambhava, the Buddhist Tantric yogin, conquered the demons and gods and transformed them into protecting deities of the Wheel of Law.

The year is structured along the solar and lunar calendars, with festivities and ceremonies throughout the year. They ritually display the symbolic meaning of water and, at the same time, also structure the agricultural work and water management tasks. Referring to the solar calendar, the ceremonies for the first two months after the New Year highlight the ordering of the life-giving quality of water for agriculture. At first, the water is channelled and distributed fairly and equally among the villagers. Water is then celebrated as the main provider of fertility, with a ceremony requesting forgiveness for interfering with the forces of nature and accompanied by the symbolic gift of a child to the spirits of the water and the earth[12]. These ceremonies are related historically to the first inhabitants of Ladakh, the Mon, the Dravidians and Indo-Iranians and to their pre-Buddhist folklore from Eastern Iran and India before their migration. With twelve days of prayers, the whole village of Tagmachig celebrates the *maney* ceremony for enough water and a good agricultural season. At the *zochul* ceremony, the astrologer defines the auspicious day for the start of the agricultural season. Then there is a merry beer-drinking village festival, when two families, designated on a rotational basis, offer *yur chang*[13] barley beer.

All the villagers are then called to participate in the repair work on the irrigation system. At this event, the older people play a major role, narrating the history of the village and transmitting knowledge and skills related to the construction and maintenance of the water system[14]. On *saka* day, the villagers gather at the common irrigation tank, which is freshly repaired and filled with its first water. A ballot is held, in which pairs of families are identified, to share the water from the village tank according to a twelve-day rotating system. The first water is then brought to a designated family[15], which has the traditional role of opening the watering period. After the *saka* celebration all villagers manure and plough their fields, start watering the land and sowing barley, then wheat and later also vegetables. The first three rounds of water distribution during the twelve-day rotational pattern each have a name: *dolchu*, *rakchu* and *nonchu*. After these rounds, the system has become established and some family members prepare to move to the *dok*, the land at higher altitudes, where the ground is beginning to thaw.

With the arrival of Spring and abundant water from snow melting in the mountains, the deities of the water and of the earth are worshipped in ceremonies which relate fertility to ritual pollution[16]. Other ceremonies are held to keep diseases away from the crops[17]. In these ceremonies, the villagers recall the rules for maintaining the purity of the water: the spring, the water-course, the land around the spring and the land as territory. After this, the *lustor* or *sarak dondol* ceremony takes place for the deities of the water, the *Lhu* and *Lhu-mo* and the lord of the land *Bonu Pati* or *Sa-bdag*. At this season, the deities can be perceived by humans in the form of lizards, as they wake up from their winter sleep. A powerful monk or yogin is called to perform this major water ritual for the village. A ceremonial pot, a *bum-pa*, filled with prayer rolls, sweets, milk, incense and barley is offered to the *Lhu*. It is either deposited in a *lhu-bang* near the spring, or the offering, brought ceremonially by monks, is dispersed into the water at the spring. While some family members spend the month of June at the high altitude pastures, others stay in the main village to water the plants and to weed the crops. This work is carried by pairs of women – often neighbours – who do farming work together throughout the year. The monks hold another ceremony, *storlok*[18], to keep diseases away from the crops, while the families celebrate neighbourliness with a specific prayer, *chosil*[19].

When the barley is ripe, the goddess of abundance is worshipped at the *shrubla* ceremony. The whole village joins together to offer grains to the goddess and ties straw stalks to the central pillar of the kitchen of each house. People sing, dance and drink beer. Monks recite holy texts about the origin of the world, according to which a pigeon, symbolizing a fairy, brought the original grain to the human beings from heaven. After this important ceremony, harvest starts. All families join in the work, moving together from the fields of one family to the next. Nobody uses any iron tools to harvest the crop, to ensure that no harm is caused to those dwelling in the earth and the water, the *Sa-bdag* and the *Lhu-mo*. The spirits of the earth and water are also celebrated at harvest time with rituals at family level[20]. In October, the night temperatures are already below freezing point and the last month with water is used intensely to grind the barley and

wheat in the water mills before winter. By December, the winter season has come. It is a period of festivities, merry-making, visits, and weddings, until *Losar* marks the beginning of the New Year once again.

The protecting village deity at the hermitage of Tagmachig
© *C. Wacker*

The relationship between water and agriculture

In Tagmachig village, every morning before the day starts, the monks and families offer seven cups of water to the protecting deities. When we visited the monastery to document this daily water ritual, the young monk asked us whether we 'really' wanted to know the meaning of water in Tagmachig. When we said that we did, he advised us to consult the hermit, and showed us the way to his retreat[21], about an hour's walk from the main village. A large stone with an old inscription guides the way. The hermit told us he had been living in Tagmachig for more than ten years, and, laughing with joy, showed us a small spring behind his hermitage. After ten years of meditation, he said, he had managed to draw water out of the desert and to create first a spring and then the apricot orchard around the hermitage. Water, he explained, is a result of the attitude of the people; they can call the water out of the desert through their work and rituals. When water is scarce, some powerful head lamas or yogins make a *bum-pa* ceremony at the spring to call up the water. If the ceremony is successful, the spring will bring forth more water.

The symbolic meaning of water in Tagmachig, said the hermit, lies in agriculture. He advised us to go back to the main oasis and to walk once again by the ripe wheat fields and under the apricot and walnut trees full of fruit. As we approached a group of villagers harvesting wheat, we noticed some children picking fruit. A young girl ran towards us to offer us apricots and apples, nicely presented on a plate. As we thanked her, we noticed the gracefulness of the other children as they picked fruit, and the beauty in the smile of one of the young girls playing with other children. In good English, this girl told us that she went to secondary school in the capital and was spending her holidays at home to help with the fruit picking. She then explained that she is the oracle of the village and is in training under a senior oracle in the capital, besides going to school. At times, she told us, she is possessed by the protecting village goddess of Tagmachig, *Urbis-Chomo*, and has the power to communicate with the water spirits. These spirits speak through her in a Tibetan dialect and can cure diseases. In case of water scarcity or health problems, like skin diseases, the villagers call on her to intervene.

When asked about the meaning of water, she laughed and – with a similar gesture to the hermit's – pointed to the trees, the ripe fields and the people harvesting the crop, singing traditional harvest songs together. It is their work, she explained, that brings forth the water in the spring. When water is scarce, some villagers go on pilgrimage to the sacred lakes in the high mountains, where the water comes from. There they might see the holy *swastika* sign in the perfectly clear water. And, during a serious drought, they call a high lama or a *yogin* to per-

form a *bum-pa* ceremony at the spring, first investigating in the village to see if human-caused pollution might have disturbed the *Lhu*, and then offering gifts to the water deity to bring forth water.

Wheat is harvested by hand, without any use of iron to prevent harming the soil and water spirits – © *C. Wacker*

Cultural pluralism and the local uniqueness in the symbolic meaning of water

The regional history of Central Asia has been formed by the interaction of nomadic steppe peoples, who domesticated the horse, and by farming peoples with irrigation skills, who lived along the water-courses and in desert oases. There is evidence of trade and cultural exchange along river courses and over mountain passes between Eastern Iran, Afghanistan and Northern India since the Neolithic, some four thousand years ago. Through conquest and amalgamation, new civilizations arose with a mixed agriculture, providing a surplus for the development of towns and long-distance trade.

The cultural exchange, which has taken place over the centuries, can be seen in the ceremonial calendar of Tagmachig. The calendar structures the main tasks in water management and agriculture and relates water, agriculture and the symbolic meaning of water to each other. Indeed, four different systems are used to structure time in Tagmachig: the solar calendar, the lunar calendar, the astrologer's definition of auspicious days for ceremonies and observations of the sun. By defining which calendar is used for a given water-related ritual or ceremony, it is possible to identify the cultural context to which the symbolic meaning displayed in the ritual refers. For example, the New Year festivities as well as ceremonies related to purity and pollution refer to the lunar calendar. Ceremonies to do with farming, fertility and thanksgiving to a goddess of plenty are related to the solar calendar (e.g. *saka*, the beginning of the growing season and *shrubla*, the harvest ceremony). According to Khoo (1997) the solar calendar might have been brought to Ladakh by the original Indo-Iranian (or Aryan) settlers. The lunar calendar[22] originated in Mongolia and was introduced into Tibet in the 13th century, and later into Ladakh.

Over the centuries, Tagmachig village has been settled by Mon, Dards and Tibetans. They brought with them ideas about the symbolic meaning of water, which have amalgamated through time into locally-shared knowledge about water that is related to the immediate oasis environment. Originally of Indian and Iranian origin, the Mon, ('dwellers of the water') are related to the early Bronze Age and to the urban centre of the early Indus civilization, Harappa, in the lower Indus valley[23]. These early civilizations in Eastern Iran venerated fertility deities and the four agricultural seasons. They also had irrigation skills[24] and used a solar calendar. On their southward migration, they might have settled in the upper Indus, near or in Tagmachig, along the Silk Road through the Himalayas. According to Man (1986) and Ribbach (1940) they may have settled in the first centuries A.D. or even earlier. They also might have converted to Buddhism during the first wave of Buddhist expansion along the Silk Route, after the reign of King Ashoka in Kashmir during the Kushan empire (Francke 1907).

The largest population group is of Dard origin. They later adopted the Ladakhi language, a Tibetan dialect, but maintained many of their beliefs and rituals from the Dard tradition, such as the village goddess of Tagmachig, *Urbis-Chomo*[25]. Originally from Central Asia, the Dards

were hunters and pastoralists, and knew how to manufacture iron. The Dards maintained an elaborate complex of rituals around pollution that was related to their ancestor belief and to shamanism. After their conquest of the Graeco-Bactrian Empire in the lower Indus valley, they are said to have adopted Buddhism and both an urban and an agrarian mode of living. They then moved to today's Kashmir and along the main Silk Road routes across the Himalaya to the Taklamakan desert and up to China (UNESCO 1992, vol. I and II). Rock inscriptions and drawings on the banks of the Indus River near Tagmachig refer to this early medieval period of settlement and long-distance trade along the Indus (Puri 1987, Dollfuss 1989).

Tagmachig is situated on the delta of a small side river of the Indus in lower Ladakh, Indian Himalaya – © *C. Wacker*

The area was invaded by the Tibetans in the 7th century, and the Tibetan inhabitants of Tagmachig settled there in the 17th century[26] or earlier. A powerful kingdom is reported to have existed in western Tibet, which expanded to the Kashmir lowlands. Known as *Shang-shung,* it was the centre of Bon Shamanism in western Tibet, a one-week caravan route from Tagmachig (Snellgrove and Richardson 1968, Baumer 1999). The village monastery of Tagmachig is related to Lamayuru, to the Drepung Red Hat sect, one of the 'old schools' of Tantric Buddhism, which maintains many of the shamanistic beliefs and practices today[27]. Examples include the conception of the world as having three layers, represented symbolically by the mythical tree at the spring of Tagmachig and the tradition of yogin hermits.

The type of irrigation practiced in our example, in the upper part of the Indus river, in Ladakh, has existed since the Neolithic in various places all over Central Asia – in Eastern Iran, Uzbekistan and Afghanistan, in the Tarim basin along the southern Silk Route, and in Tibet. And some of the symbolic meanings of water in Tagmachig today can also be traced to the ancient civilizations it came into contact with. For example, water is related to the creation and destruction of the world, which is understood as a cyclical process of regeneration. And zoomorphic deities relate people to nature, as well as being associated with fertility. The contrast between the complex, closed oasis system and the vast steppe or mountain pasture is a central theme in water imagery of this region. Additionally, Buddhist symbolism associates water with the rise of consciousness, including awareness of the impermanence of existence.

Water symbolism in Tagmachig: an interpretation

Tagmachig is a small oasis, where the water management system is built and maintained traditionally, with stones, mud and local vegetation. Its remoteness, subsistence economy, cold winters with temperatures far below freezing – and therefore unsuitable for the iron pipes of modern water management systems – are all reasons why the traditional system has not been modernized. The ceremonial calendar of Tagmachig displays the symbolic meaning of water and relates the 'little tradition' of the local culture to the 'great traditions' of distant cultural centres, like Iran, India, Tibet and Mongolia. The rich symbolism of water in Tagmachig has borrowed concepts from various cultures and periods of history and blended them into a locally unique ritual system, adapted to the local ecosystem of the oasis. This ritual system highlights three main symbolic meanings of water: vulnerability, interdependence and continuity. We looked at the rituals and analysed the qualities attributed to the water deity in the community. The water deity is described as unreliable and short-tempered; it can be furious and destructive, or generous and

fertile; it can be intolerant against real or ritual pollution as well as easily seduced when approached with purity, sweet food, jewels and fragrant incenses.

The vulnerability of people in the desert oasis is thus symbolically transferred to a water deity, the *Lhu-mo*. It makes it possible for the people to achieve a shift from effective dependency on water to a relationship of reciprocity and mutual interdependence with water. This widens the scope for the people to play a part in determining their own livelihood. The rituals and different forms of co-operation result in fostering a community that shares its risks and increases its chances of survival.

Fresh water is the most precious of the offerings in the daily ritual performed at the monastery of Tagmachig
© C. Wacker

Nature is unpredictable in the place where this case study was done. Below the village, the Indus carries rocks, silt and ice, which sometimes block its passage and create floods. Heavy weather in the mountains, or a cracked glacier, can bring catastrophes. Sharp temperature changes can create earthquakes and stone hails which, in turn, can bury the springs upon which life in the oasis depends. The altitude, temperature and availability of water set narrow limits upon agriculture. For example if the crops are sown too late, the snow-melt might not last long enough for two crops a year. If sown too early, frost might destroy the crop, etc.

White stones are ceremonially deposited at New Year at the edge of the irrigated land towards the Indus – *© C. Wacker*

The ritual calendar structures agricultural work, and, as most tasks such as defining the day when watering should start, are collective, the risks and responsibilities are also collective. This symbolically introduces an element of predictability and controllability to counterbalance the inherent unpredictability of Nature here. At the New Year ceremony, the fundamental theme is the continuity of cosmic existence. And it is from this basis that predictability and perpetuity are symbolically constructed. While a new year and new agricultural season are anticipated according to the calendar and the sun (i.e. the shortest day of the year), the cosmogony performed at the New Year's ceremony explains how the world appeared, how it will also one day disappear, and how a new creation will arise once again. By associating the symbolic continuity created through rituals with water, and water with fertility and thus with procreation, water in itself represents the continuity of culture, and the continuity of the individual and collective identity of a village or a community.

ENDNOTES

(1) Sanskrit spelling of yogi

(2) The Tagmachig people were bartering salt and fine wool from the nomads in Rupshu (Chang Tang) at the Sakti autumn fair in upper Ladakh for dried apricots from Baltistan, and home grown barley and walnuts, before the ice cover of the Indus river melted again in spring and the village was cut off from the international trade route during the agricultural months. Some villagers even went on six-month caravans up to Gerge in Tibet and also sent relatives to study in Tibetan monasteries.

(3) *sTag* means tiger in the Tibetan language. The village name is also written Tag-ma-gic or sTagmachig.

(4) *Bon* in Tibetan means "to invoke". In Bon Shamanism, religion was transmitted mainly in the form of myths, recited by invoking priests, recounting the origin of existence of all beings including gods, spirits, humans and others.

(5) The folksong is sung by the men of Tagmachig. It has been recorded and translated by Tashi Rabgyas, 1997.

(6) Before the advent of Buddhism in Central Asia and Ladakh, knowledge about water was transmitted orally. No religious buildings were constructed. The main means of transmitting symbolic knowledge are religious rituals and village ceremonies, as well as the rituals performed by religious specialists, such as oracles and shamans. In Mahayana Buddhism, the cult of local gods and the tradition of oracles and divination techniques were maintained. Villages such as Tagmachig, related to the 'old school' of the Red Hat sects of Mahayana Buddhism, have also maintained the tradition of the yogin way to enlightenment. In Tagmachig, a yogin and a village oracle are today relevant specialists in water management.

(7) A *lhu-bang* is a small, cubic construction of about one meter per side, decorated with juniper twigs and small white stones in the shape of a stupa. The building symbolically represents the cosmos. The juniper twigs at the centre of the roof symbolise the cosmic tree of the world. The *lhu-bang* is a ceremonial place for offerings to the water deity and contains a *bum-pa*, a ceremonial pot with offerings.

(8) The iron-tipped plough was introduced to Ladakh in the 2nd century AD, according to the Ladakh Chronicles (Dollfuss 1989).

(9) In the Dard tradition of some villages neighbouring Tagmachig, the King Willow is the Tree of the World, from which the bird brought the initial seeds (Vohra 1989).

(10) The fields of the Mon families are watered upstream before the water is collected in the reservoir, probably because the Mon were the original settlers. It is possible that later settlers built the reservoir below their lands. Drew (1875) states that the Indus portion below Tagmachig was once a lake, which gradually drained and made more land available for cultivation.

(11) The symbolic relationship between the sound of the river and human life refers to the myth of creation of the world in the Bon cosmogony which explains the coming into existence of the world from a primordial ocean, out of which a furious dragon arises and then, eventually, releases some of the water to allow the formation of land and then the world.

(12) The beginning of the agricultural year is celebrated with the *Saka* ceremony in March. Bulls with decorated (anointed) horns are allowed to run in the fields as they start to turn green; then a child masked with white flour opens the land for the initial ploughing and the village goddess is worshipped.

(13) *Yur* means "water canal", *Chang* means "beer".

(14) In Tagmachig the irrigation canals are built only with natural materials found nearby: stones and shrubs, which are held together with sand and silt, by the fine roots of a form of millet grass planted in the silt, and by the roots of the willow trees planted along the irrigation canals.

(15) The family has no special privileges and has this role designated by tradition. It is probable that in the time before the village belonged to the Ladakhi kingdom, with its land and water rights registration system for taxation, the land was also a common property of the village and was also allocated at the *Saka* ceremony each year to the families, as described by Vohra (1989b) for a neighbouring Dard village.

(16) Rites of passage in human life such as birth and death and the uncontrolled presence of foreigners ignoring the rules for maintaining the purity of the water and the marriage rules of the village, can pollute the water and cause skin diseases. Pollution, it is believed, leads to a reduction of the water volume, to infertility of the land and to diseases.

(17) At the *Jing-tsrak* ceremony, the monks throw rice and mustard seeds into an open fire, where they are ceremonially destroyed.

(18) *Storlok* is a ceremony performed in the monastery by the monks. They make figures out of barley representing evil spirits and burn them, thus removing them from agriculture.

(19) Chosil prayers are performed at family level in summer, connecting households to each other. Three monks read holy texts in one family at a time for two to three days and continue the reading in the next family, and so on.

(20) To keep the wealth in the homes until the next harvest comes, another ceremony takes place at family level in September, in honour of the spirits of wealth, called *Skansol*. A handful of barley, wheat, corals, some money, copper and silver are tied together in a sack to attract the spirits of wealth and to pray for enough water. The sack is stored in the house for the next year in the presence of monks reciting prayers for the family.

(21) The hermitage of Tagmachig village, the Tseamskang (isolated place) was the meditation site of a famous Tibetan *Khanpo* (Buddhist title). It is inhabited today by a hermit monk from Bodhgaya (near Benares).

(22) In the lunar cycle, the months follow the phases of the moon and the weeks are reckoned on a seven-day cycle related to the planets. According to this calendar the first month corresponds approximately to the month of February or March.

(23) Having a written script, this urban culture was also involved in sea trade and had some cultural exchange with Mesopotamia and ancient Egypt.

(24) The irrigation technique was introduced into Tibet by the Pontian migration from the Black Sea through central Asia in the 9th and 8th century BC.

(25) At the highest place of the village there is a major Lhato shrine for the village goddess *Urbis-Chomo* and five smaller ones with *bum-pa's* (ceremonial vessels) for water and wealth. The village goddess of Tagmachig is the chief of 'the Seven Sisters', the protection deities of the neighbouring villages of Domkhar, Skurbuchan, Ledo and others: Hagnis-Chomo, Foka-Chomo, Dagmar-Chomo, Dag-nag Chomo, Yakra-Chomo, Shukpa-Chomo.

(26) The settlement of the two Tibetan families in Tagmachig might date back to the invasion of this Silk Route passage by the Ladhaki king, Seng-ge rNam-rgyal, who also brought Tantric Buddhism and established or rebuilt major monasteries, e.g. Lamayuru, the head monastery of Tagmachig and also built the long row of chörten and mani walls bordering the trade route at Tagmachig village. Lamayuru is the most ancient religious building in Ladakh, a place having many names (e.g. also known as Gyu-ru or Yuru Sen-ge-sgan) and many monasteries. It existed before the advent of Buddhism in Ladakh and was turned into a Buddhist monastery in about 1050 A.D. (Hassiani 1973).

(27) Many of the early head monks of the Drepung sect in the 13th and 14th century were from Mongolia. Altaic beliefs and shamanistic practices from this context have an important place in this Buddhist sect (Snellgrove and Richardson 1968).

REFERENCE LIST

Baumer Christoph, 1999, *Die lebendige Ur-Religion Tibets.* Graz: Akademische Druck- und Verlagsanstalt, Bön.

Bechert Heinz, Richard Gombrich, 1984, *The World of Buddhism.* Thames and Hudson, London.

Bellezza John Vincent, 2002, *Antiquities of upper Tibet. An inventory of pre-Buddhist archeological sites on the high plateau.* Findings of the upper Tibet circumnavigation expedition, 2000, Adroit Publishers, Delhi.

Bloss Lowell W, 1973, *The Buddha and the Naga: A Study in Buddhist Folk Religiosity.* History of Religions 13, n° 1, The University of Chicago, USA.

Carrasco Pedro, 1974, *Land and polity in Tibet.* Monograph 32, the American Ethnologial Society, University of Washington Press, Seattle and London.

Cohen Alvin P, 1978, *Coercing the Rain Deities in Ancient China.* History of Religions 17, 1977/78, The University of Chicago, USA.

Conze Edward ed., 1954 (1995), *Buddhist Texts Through the Ages.* Munishiram Manoharlal Publishers Pvt Ltd, Delhi.

Crook John, Osmaston Henry, 1994, *Himalayan Buddhist Villages. Environment, resources, society and religious life in Zangskar, Ladakh.* University of Bristol, Bristol.

Dargyay Eva K, 1988, *Buddhism in adaptation: ancestor gods and their tantric counterparts in the religious life in Zanskar.* History of Religions 28 (1988), pp 123-134. University of Chicago.

Dollfus Pascale, 1989, *Lieu de neige et de genévriers. Organization sociale et religieuse des communautés bouddhistes du ladakh.* CNRS, Paris.

Drew F, 1875 (1976), *The Jummo and Kashmir Territories.* Delhi.

Eliade Mircea, 1949, *Traité d'histoire des religions.* Bibliothèque historique Payot, Editions Payot, Paris.

Eliot A ed.,1976, *Mythen der Welt.* Bucher Verlag, Luzern und Frankfurt/M.

Engler Ivan, 1989, *Entstehung des Wassers.* In Ders. ed. Wasser, Polaritätsphänomen, Informationsträger, Lebens- und Heilmittel, Sommer Verlag Gmbh, Teningen.

Francke AH, 1907 (1978), *Ladakh, the Mysterious Land.* Cosmo Publications, New Delhi.

Francke AH, 1923, *Tibetische Hochzeitslieder, übersetzt nach Handschriften von Tag-ma-cig.* Hagen/Darmstadt.

Grist Nicky, 1985, *Ladakh, a trading state.* Acta biological montagna 5, pp 91-102.

Gyaltsen Jamyang, 1997, *The introduction of Buddhism into Ladakh.* Osmaston Henry and Nawang Tsering eds., Recent Research on Ladakh 6, University of Bristol, Bristol.

Hassnani FM, 1973, *Buddhist Kashmir.* Light and Life Publishers, Delhi.

Kaltenmark Max, 1970, *Religion de la Chine Antique.* Encyclopédie de la pléiade, histoire des religions 1, Éditions Gallimard, Paris.

Kaplanian P, 1983, *Quelques aspects du mythe et des structures mentales du Ladakh.* Kantowsky D and Sander R, Recent Research on Ladakh.

Kaplanian P, 1995, *L'homme dans le monde surnaturel Ladakhi.* Osmaston Henry and Philip Denwood eds., Recent Research on Ladakh 4 and 5, School of Oriental and African Studies, University of London.

Khoo Michael, 1997, *Preliminary remarks concerning solar observation, solar calendars, and festivals in Ladakh and the western himalaya.* Dodin Thierry and Heinz Räther eds., Recent Research on Ladakh 7, Ulmer Kulturanthroplogische Schriften, Band 9.

Lévi-Strauss Claude, 1958, *Anthropologie structurale.* Librairie Plon, Paris.

Lévi-Strauss Claude, 1971, *Mythologiques IV. L'Homme nu.* Librairie Plon, Paris.

Lévi-Strauss Claude, 1983, *Le regard éloigné.* Librairie Plon, Paris.

Malla BL, 1998, *Water Resources and their Management in Kashmir.* Baidyanath Saraswati ed., The Cultural Dimension of Ecology, Indira Ghandi National Centre for the Arts and DK Print World (P) Ltd, New Delhi.

Man RS, 1986, *The Ladakhi. A study in Ethnography and change.* Anthropological survey of India, Ministry of human resource development, Calcutta.

Petech L, 1939, *A study of the Chronicles of Ladakh, the "rGyal rabs", (Indian Tibet).* Oriental Press, Calcutta.

Puri BN, 1987 (2000), *Buddhism in Central Asia.* Motilal Banarsidass publishers private Limited, Delhi.

Phuntsog Sonam, 1997, *Sacrifical Offerings to Local Deities in Ladakh.* Osmaston Henry and Nawang Tsering eds., Recent Research on Ladakh 6, University of Bristol, Bristol.

Rather Ali Mohmad, 1997, *Discrimination in Ladakh Society. A Study of Mons and Bedas of Ladakh.* Osmaston Henry and Nawang Tsering eds., Recent Research on Ladakh 6, University of Bristol, Bristol.

Riaboff Isabelle, 1991, *Les Lha, une catégorie Zanskari à géometrie variable. Ou, que sont les dieux devenus?* In: Dodin Thierry and Heinz Räther eds., Recent Research on Ladakh 7, Ulmer Kulturanthroplogische Schriften, Band 9.

Ribbach SH, 1940, *Drogpa Namgyal: ein Tibeter Leben.* Otto Willhelm Barth Verlag, München.

Rizvi Janet, 1999, *Trans-Himalayan Caravans.* Oxford University Press, Oxford India Paperbacks, Oxford.

Shakspo Nawang Tsering, 1985, *Songs of the Himalaya, Ladakhi Folk Songs.* Ladakh Ecological Development group, Leh.

Snellgrove David, Richardson Hugh, 1968 (1980, 1995), *A Cultural History of Tibet.* Shambhala, Boston and London.

Stolz Fritz, 2001, *Weltbilder der Religionen.* Pano Verlag, Zürich.

Turner VW, 1964, *Symbols in Ndembu Rutial.* Closed Systems and Open Minds: the Limits of Naivety in Social Anthropology, Gluckmann Max ed., Alchum Publication Company, Chicago.

Turner Victor, 1969, *The Ritual process: Structure and Anti-Structure.* Cornell University Press, New York.

Turner Victor, 1982, *From Ritual to Theatre: The Human Seriousness of Play.* Performing Arts Journal Publications, New York.

UNESCO, 1992-2003. *History of Civilizations of Central Asia.* Volumes 1-5, Paris.

Vohra Rohit, 1989, *The Religion of the Dards in Ladakh. Investigation into their pre-Budhist 'Brog-pa Traditions.* Himalayan studies, Ladakh series, Ettelbruck, Luxemburg, Skydie Brown International SA, Grand Duchy of Luxemburg.

Vohra Rohit, 1989b, *An ethnography. The Buddhist Dards of Ladakh. "Mythic lore – Household – Alliance System – Kinship".* Himalayan studies, Ladakh series, Ettelbruck, Luxemburg, Skydie Brown International SA, Grand Duchy of Luxemburg.

Wacker Corinne, Fröhlich Urs, 1997, *Traditional Water Management System in Ladakh, India.* University of Zurich: Institute of Ethnology, Switzerland.

Williams Paul, 1989, *Mahayana Buddhism. The Doctrinal Foundations.* Routledge, London and New York.

"we all care": the water for food movement in rural South Africa

Many citizens in our rural areas still remember the indigenous Communal Food Security program, but the generation gap is huge. Our elders can remember, but our youth have no idea. This traditional history of food security practices cannot be a blueprint for these modern times. But for change to happen, both the local government and the house of chiefs should be mobilized to take up this challenge seriously. This is why we created the Water for Food Movement.

Tshepo Khumbane has worked in many positions and places in South Africa, as a social worker, development activist and volunteer community development worker. Currently she lives on a smallholding at Dewagendrift near Cullinan and keeps records of every action, cost and benefit of her food production activities to motivate the groups of rural women she regularly leads from despondency. In 2002 she initiated the Water for Food Movement, which is also supported by the International Water Management Institute.

Introduction

This presentation aims to raise concerns around the problem of food insecurity for many people living in arid, rural, communal areas. Although South Africa has a large sector of commercial farmers and food processors producing an abundance of food, many marginalized rural communities live in poverty with very little money. Food is therefore inaccessible because of the cost.

It is a great pity that we have lost the history of food security that previously existed at the household level in all rural communities, carried within the basket of social systems that mobilized individuals and families to take responsibility for their own survival. I grew up during times when those systems still existed. I remember well how we produced food. Currently, I have seen women and men losing hope and retreating into a deep pit of apathy. In order to overcome these problems I believe the Water for Food Movement provides a vision to change the individual mindset and stand up to fight hunger and malnutrition.

Indigenous traditions and rituals for food security

South Africa used to have many rural communities that survived on the land through farming. They had developed social systems and rituals in support of food production and food security for all. These systems acted as the guardians of land use management systems and ensured commitment to communal farming activities to keep food production a first priority.

The system of land cultivation was simple and caused very limited soil erosion. Rivers still had banks and there was no silting to the level we see today. The rivers provided numerous sources of food. On the riverbanks there were reeds, grass, and water vegetables (morogo) and we also had fish from the river. Sand in the river filtered the minimal pollution, providing us with drinking water directly from the river. The river flowed throughout the year and we dug wells at household plots so everyone had their own access to water. When the water table dropped, the community dug protected wells next to the riverbanks so there was plenty of water for all.

To ensure proper sanitation, the elders told a story about a man who broke the community rule about squatting next to the drinking well. He developed a tail that grew so long he could no longer wear trousers. He became a joke in the village because he could only wear silk aprons. Through the teachings of our elders we learn how to respect water.

Every year, before the rains would start and mark the beginning of the New Year farming calendar, an environmental cleansing ritual was performed. The chief, counsellors and traditional doctors were responsible for ensuring that the environment was purified, so that when the rains started, the dirt was removed from the forest and veld, and the water did not carry carcasses into wells and rivers. It was also a ritual for rain and to divert insects.

The current situation

Things have changed so much, that it is hard to know where to start looking at issues of food security. South Africa's poor majority nowadays depends on social grants for survival, creating a syndrome of apathy and helplessness. Our present youth have no idea how to produce food at the household level. They only know about buying it daily from markets.

I will not go into detail about the apartheid government's legislative apathy. There are piles of documentation throughout the country, but much more has not been documented: how removals from their original settlements not only displaced people, but psychologically changed their attitudes; how removals dispossessed them of their livelihoods – the loss of their land and accessible water resources, grazing land, their woodlots, the wildlife that they so dearly depended on. Our little village at Tshukudung was dismantled in 1957, when all satellite villages were destroyed and people moved to the big settlement next to the chiefs' kraal. This scheme was packaged as part of the government's so-called 'Betterment Scheme'. 'Betterment' meant changing land allocation and losing housing. It also

meant that river water and wells were now far away from people's homes. Inevitably, people's lifestyles changed, migratory labour became more prevalent and social systems collapsed. Crime moved in and households sank into poverty. People who used to cooperate became helpless.

For present grassroots rural inhabitants, work is interpreted as being employed for a salary. This mindset is very different from the time when I grew up. People have lost the power to value themselves and value the land and water systems around them. Nowadays, not even one of the rivers flows throughout the year. The big Mononong River is dry and silted. Hlaafele River has no water, the riverbanks are untraceable. People are buying water from those who have boreholes in their homesteads; the communal water supply is inadequate or non-existent in certain sections of the village. It is a nightmare to live in that area. The silent messages pumped into our heads by all the devious laws of apartheid are still a reality today. The country is free but the people are not yet free.

South Africa's new local government has been born into a period of great challenges. To me, the great challenge we face during this era of new civilization is whether we have suitable strategies to deliver on the promise of 'a better life for all'. Everyone is looking forward to the promised dream. We should recognize that the strategy of 'self-targeting' works for those already on their feet. But what about the many that are still trapped in apathy? While we all recognize the necessity to share the water of rivers and boreholes in the country and in the Southern African region, we have failed to provide the poorer people of our country with adequate water even for household use, let alone for food production.

The Water for Food Movement

Many citizens in our rural areas still remember the indigenous Communal Food Security program, but the generation gap is huge. Our elders can remember, but our youth have no idea. I realize that this traditional history of food security practices cannot be a blueprint for these modern times. But for change to happen, both the local government and the house of chiefs should be mobilized to take up this challenge seriously. This is why we created the Water for Food Movement.

The Vision of the Water for Food Movement is: active households in communities taking responsibility for their own livelihoods, starting with food as a priority to liberate the minds and rebuild the family as the primary institution for the re-socialization of youth.

The Water for Food Movement aims to break the cycle of apathy so common among insecure families, and to lead them from helplessness towards self-confidence and creativity; to enable them to face the challenges of rebuilding their lives through their own initiatives. This process enables them to see the opportunities that are open to them to change their situations, and not sit back and wait for someone to do it for them. The Water for Food Movement stimulates co-operation and inter-personal support within communities, so that community values and norms can regenerate. The process helps eliminate self-pity, idleness and negative perceptions in the powerless section of communities. There is a packaged training program to help make this happen.

- To ensure food security, the targeted households become conscious of water – capturing, storage, manual pumping and utilization of rainfall run-off, roof water and recycled grey water on homesteads. Conservation of potable domestic water will become a priority through wastewater recycling.
- Through a land- and water-management design for the homestead, these families become conscious of run-off water catchments. This involves creative initiatives within the homestead, and low-cost methods for intensive, sustainable, homestead land use for vegetables, fruit trees, grains, etc.
- Rebuilding arid soils and managing waste at household level and in surrounding areas are priorities. Environmental health is not just a matter of legislation and by-laws. It is a people-driven program that makes local government effective in its approach to reconstruction.

- Fruit tree planting at household level is part of social reforestation initiatives – to build long-term food assets at household level, with an impact on nature conservation. This helps to raise awareness about environmental care that is based on social values and norms at village level, which local government can support through by-laws, rather than legislating policy from top-down.
- Festivals improve broad-based community awareness and mutual support, sharing of skills and information. Government representatives can be invited to share information and also become exposed to the people's power, to create a positive working partnership.
- Youth are not passive participants at these festivals but instead re-socialized. And there is a Youth Day celebration, where they can test the skills they have gained at home. They can also see a range of skills during the fun-filled festival, which will help them to think positively about their lives. Children from disadvantaged homes, where apathy still dominates, will be motivated to help their parents change the situation. Creative and fun activities, like recycling waste material to produce useful articles, help them combine play with work, to build a working nation for the future.
- Time management at household level will stimulate greater awareness of time and how to use it, as an asset to self-empowerment. Children growing up in disadvantaged homes with illiterate parents will start helping them to learn to write and read. By making adult basic education and training fun at the household level, a spirit of cooperation will develop, smoothing out tense relationships at home.

The training program starts with the participants' own empowerment within their homesteads. There, they are in control of their lives. From the homestead, the program moves into the village community, with continued support of the Water for Food Movement. The sequence of the program is as follows.

- **Self-reflection, motivation, and design workshops**

  An analysis of the present situation helps individuals to reflect on their situation and share the pain and frustrations they face. This sharing helps people realize that there is a way forward. Apathy is turned into hope – changing the mindset. At the end of the self-reflection workshops, each participant has a draft design for land and water management in his or her homestead.

- **Implementation of the design at home**

  Participants are told to start changing and implementing their land and water management designs in their homestead. They are told that they need the support of their neighbourhood for their initiative, and that their own effort alone cannot defeat apathy in the community. Mobilization helps to create an enabling environment for each person to achieve his or her vision.

- **Community mobilization**

  Through informal groups each person shares his or her hopes with their neighbours and others in similar circumstances. The Water for Food Movement is there to help influence and change the mindset of the rest of the community, to shape new values for cooperation and caring. Festivals boost hopes of success, promote skill-sharing and demonstrate what has been achieved.

- **Follow-up training and input by resource persons**

  The Water for Food Movement motivates the initial target families to continue working. Skill-sharing is expanded to improve skills for land design, soil preparation, crop planting, educat-ion, irrigation, etc. Other stakeholders are brought in to share other skills and techniques.

Once food security has been achieved, the family is ready:

- Confidence has been rebuilt
- Relationships are harmonized
- The neighbourhood respects their initiatives and has bought into the strategy
- The family works as a unit – and has developed business skills
- The family is ready to go forward. They can start a small business, find jobs and sell their land design skills to the middle class, learn irrigation and water harvesting technologies. They can do this for others, for modest financial rewards.

A history of water resource access in the southern Kalahari: San perspectives on the role of modern technology in dispossession and poverty

Introduction

Centuries ago the San (Bushmen) were the only inhabitants of the semi-arid Kalahari area in southern Africa. They lived in family groups as hunter-gatherers tied to their territorial area termed *N!ore* (plural *!Noresi*). The size of a *N!ore* is based on the available natural resources such as game, edible plants and water, ranging from approximately 5000 to 30,000 ha. The migrations of the San were mostly determined by the seasons.

The various San family groups respected each other's territorial boundaries. However, they assisted each other by permitting the visiting San to collect food in their area if it had become scarce in another *N!ore*. In accordance with the San's customary law it was considered a serious crime to collect food from another group's *N!oresi* without permission.

Water, being an essential resource for the San living in the harsh semi-arid environment of the Kalahari, was never refused to anyone. A San settlement within a *N!ore* was commonly located next to a reliable water source. San moved only to other places when their water source was drying up.

Traditional water sources

When I interviewed my own people the Hai//om of northern Namibia and elders of other San groups such as the Ju/'hoansi and Naro, I learned that for centuries the San used various natural water sources and even invented a technology to pump water out of the ground.

The very old technology of sucking water out of sip wells might still be used in the Kgalagadi District of Botswana today. Sip-wells were places where San sucked water through the sand using long or short straws, depending on the water level. These places were often situated north of the salt pans, which had a sand dune at their southern end. To obtain water the San shovelled the upper layer of the whitish sand with their hands to the side. They prepared an approximately 60cm hole with their digging stick, into which they inserted a straw cut from the Kalanchoe plant, with a grass filter attached to its lower and upper ends. The sand around the straw was compacted and left for half an hour to accumulate moisture. By using their mouths to produce a kind of vacuum, the San sucked water out of the sand. They then stored the water in ostrich eggs and sealed and buried them in the sand for later use.

The San also knew of rare artesian springs which appeared in more rocky areas and provided fresh water all year round. Rainwater, which collected in depressions of rocky areas, was used by the San but not appreciated as it was often greenish or had a brackish taste. Other water sources used by the San were pan-like areas which stored rainwater for 3 to 9 months. The water was commonly only used during the cooler season of the year, when the mosquitoes were decreasing and the danger of catching malaria limited. Melon fields in the Kalahari (Tsamma melon contain 90% water) and water-bearing tubers were and are still collected by the San of all language groups

throughout the year. Trees such as Marula and Manketti have holes where rain water and dew collects easily. The San sucked this water from the holes using straws.

The dispossession process

For centuries the San fed on natural resources such as game, edible plants and water. A drastic change occurred when Bantu groups and European settlers invaded San territories with their livestock during the 17th century. It is ironic that the San's habit of sharing resources, thus providing assistance to the new settlers in finding good pasture and water for the people and livestock, was the beginning of the San's almost entire dispossession of their natural resources. The melons, the water-bearing tubers, edible berries, fruit and plants from the bush were eaten by the livestock. Wild game was pushed out of the *N!oresi* or hunted with firearms. The San realised their dispossession only after the ever-increasing livestock numbers of the intruders had depleted the scarce water and food resources. Without these natural resources at the basis of their livelihood, the San were forced to work for the intruders, who established a feudal relationship.

The new settlers not only depleted the San's resources but also introduced new technology such as drilling and sinking boreholes. They pumped masses of water from deep in the ground and became the owners of the water, the most precious natural resource of the Kalahari. Subsequently the sip-wells of the San dried up. Within a short period the San were not only entirely dispossessed of all their natural resources but lost control over their ancestral land. The new settlers' concept of individual land ownership disempowered the San completely. Now they were forced to live on their ancestral land as servants dominated by others who used and controlled the land.

Some anthropologists have also contributed to the San's dispossession. By designating the San as 'nomadic' they provided governments of the southern African region with the argument that San should not be allocated land or services. Government officials argued that, being 'nomadic', the San would not be able to utilise land and services as they were roaming around from one place to the next.

Although we have been dispossessed of our land, disempowered and marginalized, we are organized. We also see that governments are noticing that we have a voice. For example, the government of South Africa has returned a substantial piece of land to the San within their land restitution programme. The government of Namibia has granted a conservancy to a group of San, which makes it possible for them to manage natural resources in their area. Only the government of Botswana continues to move people out of their *N!oresi* to make space for the tourism industry in the Central Kalahari Game Reserve. We will not give up, we will continue to unite and exchange our experiences with other indigenous people in Africa and from around the world, so that we can learn from each other.

Joram / Useb is a member of the Hai//om community residing in Outjo, a small town near the Etosha National Park, once the Hai//om's ancestral land. Born in 1975, he obtained an International General Certificate of Secondary Education in 1996. Since 1999, he has been appointed the assistant to WIMSA*-coordinator. Joram / Useb is committed to assisting the Hai//om community, one of the San groups in Namibia, to resolve problems in a democratic and transparent manner.

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* WIMSA (Working Group on Indigenous Minorities of Southern Africa) was established in 1996 at the request of San in South Africa, Botswana, Namibia, Zambia and Zimbabwe to serve as a platform for communities to express their problems, needs and concerns.

! haa - water
some reflexions on water
in the southern kalahari

When the political leadership of the ǂKhomani San Association sat with three of the most fluent speakers of the ancient N/u language and asked them for guidance on the land claim and restitution process, the elders identified the three most important resources of their aboriginal culture in the Southern Kalahari: water, land and truth. This short summary document is based on the work that SASI has been doing with ǂKhomani San elders from the Southern Kalahari in a Cultural Resource Auditing project. It aims at bringing together dispersed elders thereby helping the community to transmit valuable traditional knowledge to the younger generation.

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This short summary document is based on the work that SASI has been doing with ǂKhomani San elders from the Southern Kalahari in a Cultural Resource Auditing project. The project aims at bringing together dispersed elders to help audit their traditional knowledge. This auditing has helped the community reintegrate itself and its sense of identity and history, as well as transmit valuable traditional knowledge to the younger generation. This community is in the difficult situation of having been in diaspora for fifty years. Their ancestral languages have almost gone extinct. Only about twenty-eight people are full or partial speakers of the language(s). These language varieties are from the !Ui branch of the Southern San languages, related to ǀXam. Today the San generally consider themselves to be ǂKhomani. However the elders and the ethnographic research show there were several ethnic and linguistic groups. The broadest group called themselves Nǁng !e (or Home People), and included the ǂKhomani as a subgroup. There were also neighbouring groups speaking related languages, the ǂ'Auni and ǀHaasi speakers. There were also probably some southerly !Kung people in the area, speaking an unrelated language.

When the political leadership of the ǂKhomani San Association sat with three of the most fluent speakers of the ancient *N/u* language, they asked the elders for guidance on the land claim and restitution process. The elders identified the three most important resources of their aboriginal culture in the Southern Kalahari: *!haa, !ão, //kx'am*. That is: water, land and truth[1]. Water, and access to water, has been a key variable in the defence, conquest and colonization of the Southern Kalahari.

The oldest members of the San community remember a time when there were no boreholes in the Southern Kalahari. There was no surface water available except during the rains. The people lived off those plants that absorbed water, including the all important tsamma melon (*Citrillus lanatus*), a favoured wild food with plenty of liquid. During the 19th century, settlers could not penetrate the interior of the Southern Kalahari (where the present borders of South Africa, Namibia and Botswana come together) without using the traditional technology of the San people.

When this region became engulfed in the Nama-German war (1904-1908) that spilled over from neighbouring Namibia, the humble tsamma melon became critical to all parties. Simon Koper's horse-mounted Nama troops swept down to Rietfontein, then up through the Auob and Nǂosob dry river beds, surviving only on the water of the melons. They were soon followed by the German imperial army that had to water its men, horses and camels entirely on desert food. This all took place in the peak of summer when temperatures soar up to 50 degrees in the shade – and there is very little shade. Both sets of aggressors kidnapped San trackers to help them through the endless sand dunes and find all the crucial plants to feed and water them. Elderly San still recall hiding in the dunes for fear of being shot by German troops. (Source: Keis Brow and Elsie Vaalbooi)

The San themselves had a number of techniques for capturing and managing water. Ostrich eggshells would be cleaned out and buried deep within the red sand dunes during the rainy season. Water would percolate down through the sand dunes, weeks after the rains and the surface water were gone. The eggs would be recovered when necessary and plugged with a wax stopper. To this day the practice continues on some farms, though people now use plastic bottles (Source: Petrus Vaalbooi).

The government of Britain and the Union of South Africa were deeply disturbed by the sovereignty issues involved in the German invasion of the Southern Kalahari, and soon Britain was at war with her previous ally. The South African government of the day decided to recruit white settlers to fill up the frontier and consolidate the border. Boreholes had to be sunk to achieve this. During the early 1920s, the government sponsored white farmers to sink boreholes, particularly along the riverbeds (the Auob, Nǂosob, Molopo and Kuruman) where subterranean water was easily accessible.

The sinking of the boreholes had a drastic effect on the Southern Kalahari. Firstly, the seasonally nomadic San people lost all of their territory in a matter of a few years. Fences were put up and people were not permitted to move freely. Secondly, as elsewhere, the settlers went on killing sprees, devastating the wild animal population. By

1927 there was a famine throughout the area, as game had become so scarce. This drove the San to live and work on farms where they would earn a meagre income to afford to buy food that had once been theirs for the taking and managing. Farmers banned the San from practicing their traditional religion, including the powerful trance dance that was used for healing. The San identity was ruthlessly suppressed. First there were scientific efforts to determine authenticity, that involved measuring the heads, noses and genitalia of people. Later, all San were forcibly reclassified as being of mixed race. During this time much of the culture, language and traditional knowledge was not passed down to the younger generation for fear of stigmatising them. All of this because of borehole technology.

Some areas of the Southern Kalahari could not be accessed in the 1920's, as the water was too deep below the surface for the wells to reach. This area, particularly in what was once designated as the Old Kalahari Game Reserve, remained an open territory. San families would use this area for emergency food relief, and would traverse it while seeking new work opportunities and visiting relatives. After the 1950's, however, new technology led to the fencing and partition of this last wild area.

The area of the Kalahari Gemsbok National Park used to be the traditional territory of the Southern Kalahari San. Most of the San were forced to leave the park in 1936. A few families who helped the warden with game management were allowed to stay, and even to hunt and gather, up until the beginning of apartheid in the late 1940's.

The Southern Kalahari is composed of a number of different soil types, but the predominant type is that of red sand dunes, that run for up to several hundred kilometres. These are permanent, unshifting dunes. When it rains, water runs down between two dunes. This is called a 'street'. Where several streets meet and the water cannot run off anywhere a 'pan' is formed. A pan is a flat indentation in the earth where water collects and sits until evaporation is complete. A pan can be as small as 500m, or wider than 30km. Some of these pans may have been in place for up to a million years. According to the San (and confirmed by scientists), the chemical composition of each dune and pan is distinct. Some pans are now mined for salt. The San know which streets produce the best plants, and which pans have potable surface water after rains. The water in some pans will cause immediate diarrhoea or can even be poisonous to humans. However, there are traditional methods for purifying some of the water. The San give names to pans to remember this, such as Large Diarrhoea Pan (*Xausndi ǂgas*).

During the process of the land claim against the Kalahari Gemsbok National Park (now Kgalagadi Transfrontier Park), the Park officials argued that there was no potable water in the park. A mapping project has demonstrated that not only is water available through the plant life, but there are also a number of sites where water can be found on the surface or just below the surface. These water sources were already pointed out seventy years ago to the settlers and the warden, and are still known to some of the older people.

On 21 March 1999, the South African government awarded the Southern Kalahari San almost 40,000 ha. of land outside the national park, and 25,000 ha. inside the park as restitution and redress for their losses. On the day that Thabo Mbeki gave the land back, the N/u speaking elders gathered and prayed to their ancestors to send rain. As Mr. Mbeki climbed into his limousine to depart, a large rain cloud moved over the land settlement site and rained huge drops of rain in the otherwise hot and dry desert. For many of the westerners this was a marvellous and inexplicable phenomenon.

After the transfer of the first farm to the San in December 1999, a great rainy season began, with the highest rainfall since the early 1970's, when the last San were expelled from the park. The new rains have restored all of the wonderful plant life and replenished the animal life. Some of the elders are back on the land and are taking their grandchildren out into the dunes to collect tsammas, gemsbok cucumbers and desert onions. So much rain fell that the streets filled like reservoirs and both the N‡osob and Auob began to flow for only the third time in a hundred years. Ironically, the massively irrigated agriculture along the Orange River, land that was taken from the indigenous peoples by the settlers, was swamped with water and the crops started rotting that year.

ENDNOTES

(1) Later Ouma /Una added a fourth, *ll'ā'a*, meaning to love one another with respect.

The guardians of trees and water
E chajinel rech le che' ruk le ja'

The fact that the forests of Totonicapán are still in a good natural state is because of the collective control and resistance that the Maya-Quiché culture has exercised. It is safe to say that it would not be possible to deal with this natural resource without alluding to the community organization. Moreover, in some communities, forest and water issues determine the forms of local organization, based on specific collective relationships. For example, the indigenous council is the most important community political organization.

In addition, the Totonicapán forests are not only natural ecosystems, but also constitute a cultural benefit, to such a degree that they strengthen the collective identity of the Maya-Quiché communities. These forests fulfill a transcendental hydrological function for the local and regional areas of Guatemala. The communities understand the importance of the water-forest relationship, and the seriousness of the consequences that they could face if they place at risk an element so vital to the survival of their people.

In each of the communities there is a water source committee, whose fundamental function is the conservation of the water resources. To accomplish this, the people contribute a large number of work hours, called *faenas*, which represent sacrifices, hardships and economic expense, given that the work is done *ad honorem*. This process is not understood or supported by state agencies, which create obstacles and politicise the actions taken to protect water sources and sustainable forest use (for example, to prevent deforestation).

There is a committee for each water source and the members constitute the general assembly. The board of leaders is composed of nine people (women and youth participate) who serve for two years. The board conducts activities that include the maintenance of the entire distribution system, the organization and distribution of work crews (*faenas*) to clean up the area around the water sources and water containment tanks, and reforestation. They prevent tree-cutting, identify new water sources and evaluate their capacity. In communities where the committees are well organized, there are regulations for the use of this vital liquid. The board of leaders establishes monetary quotas subject to previous consultation and consensus, which they are responsible for managing transparently. In addition, a member who does not fulfill his or her *faena* responsibility must pay a monetary fine, and if the person fails to attend a committee meeting he or she will suffer the same penalty. Some visionary committees have opened bank accounts or have deposited their funds in a local cooperative.

Periodically, the community celebrates a Mass, a worship service or a Mayan religious ceremony to show their appreciation to God for the benefits received through this natural water source.

Thus, the communities fulfil the role of guardians of the forest and the water sources. And, in keeping with this fascinating reality, the people connect practices with community values, such as mutual assistance (TOBANIK), communal autonomy, common law, community organization,

consultation and consensus, and community service, among others.

A majority of the committees have joined an organization called ULEU, CHE', JA', which means "Land, Tree, Water" respectively, and they have achieved the development of a very important management capacity.

Finally, we cannot fail to mention the problems that these communities face, the advance of the agricultural frontier due to uncontrolled logging, and the pressure of population growth. Totonicapán has a population density of 315 inhabitants per square km., while the national average is approximately 115 inhabitants per square km. The politicisation of the community organizations by the governing political party, and the process called modernization which translates into the Plan Puebla-Panamá, reveal some of these issues. Faced with these situations, we are strengthened by our culture and its values and social identity.

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water development and spiritual values in western and indigenous societies

The spiritual connection to water that indigenous societies maintain as an integral aspect of their culture is a basis for countless water conflicts with outside, predominantly Western, forces for development. While Western cultural values do give some attention to a spiritual dimension of water, it is very much a minority view. The dominant value system determining how water is utilized in Western culture is basically an economic one. In indigenous societies the situation is reversed. The dominant cultural perspective places great importance on spiritual aspects of water and water bodies. Internal debates revolving around development options nonetheless often reflect economic considerations promoted by the outside dominant society. More explicit understanding of indigenous value systems by the Western world would help relieve cultural pressure on indigenous societies, and to the extent that the West might emulate indigenous notions of humanity's role vis-à-vis nature, could benefit the cause of sustainable development worldwide.

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Do indigenous perspectives on water represent a type of spirituality that is absent from Western societies, or are they fundamentally similar? This paper explores the nature of water and spirituality in the 'West' as contrasted to indigenous societies[1]. Two interconnected arguments are put forth in this paper. The first is that Western views on water reflect significantly distinct values, which contrast and clash with indigenous value systems. While there are spiritual traditions within Western society that resonate with indigenous values regarding nature (and hence, water), these Western spiritual traditions identify less completely with Nature, and externalise a deity that is seen as separate from Nature. The second argument is that even the more naturalistic themes that are found in Western religions occupy minority positions within Western society. By culturally relegating the spirituality of nature to that of a minority tradition, Western society has set the stage for economic exploitation of water and other natural resources, without the environmental restraints attached to a more dominant spiritual perspective.

While these two arguments may sound like familiar criticisms of Western society, my intention is not to criticize, so much as to suggest some constructive implications, namely that indigenous societies have much to teach us about the profound religious and philosophical relationship of man and nature, as well as about the practical relationship of human societies with natural ecosystems. Indigenous views about water are much more than cultural curiosities that add an interesting dimension to international discussions of water. Indigenous perspectives about water are simultaneously a warning and an insight that can help us all – together – to find a development path that is environmentally sustainable.

The Western cultural theory of water

Let me begin this section by asking the reader's indulgence in my choice of terminology. I am trying to capture broad meanings, and this requires broad categories to which the perceptive reader can find many exceptions. The category of 'the West' has been noted[1], and my claim that there is such a thing as Western culture is perhaps easily challenged. And even if there is such a culture, does it have a theory about water? On this point, I will simply assert that there are broadly-held assumptions in Western culture about what water is and is not, and to maintain simplicity, I refer to these assumptions as a cultural theory of water.

Water, in Western cultural theory, is a resource. It is not alive, it is inert, and it can be fully defined in terms of its physical properties. It has no consciousness, and it has no life. It is neither plant nor animal; it is a type of mineral, a liquid one (usually) but very much a mineral. It has no value in itself, but has great potential value in being applied to some productive purpose. There is no benefit from water's existence other than the extent to which humans can benefit, directly or indirectly, from the water itself, or the environments that water supports (e.g. stocks of food fish that depend on the viability of a lake ecosystem). Water is a resource, much like coal or oil or phosphate or gold. It is not only culturally permitted, but actually culturally preferred to make use of the resource by 'mining' it, or recovering it in whatever way is technologically feasible. Choosing not to recover the resource, electing not to utilize the potential benefits of the resource, is considered to be wasteful and in this sense, even sinful.

The environment within which water is found is also a resource, which can be utilized for productive benefit. Recent views about the water environment have changed to accord greater economic value to the environmental services of the ecosystems that water supports, such as a riverine environment that includes fish, birds, wildlife, wetlands and the associated plants and microorganisms, etc. This recent appreciation of the biological aspects of river systems, and the associated economic benefits of water ecosystems, has led to reconsiderations about the desirability of water diversions for irrigation, and reanalysis of the costs and benefits of hydropower dams. But while the equations have changed with the new values accorded to biological and ecological factors, the cultural theory underlying the equations has stayed the same: the value of water is defined in economic terms[2].

Minority views on water within Western culture

Western culture masks many minority voices that provide richness and depth to the total cultural experience. The bubbling of minority discourse also serves to define the position of the dominant culture, by constantly challenging it and forcing clarification – and sometimes successfully injecting reforms into the dominant position. Within the contemporary Western discourse about water, there is a lively debate about the extent to which water is an economic good or a social good. The World Bank, for example, calls for borrowing countries to treat water as an economic good, that can be bought and sold, and that has economic value (measured in monetary terms). Against this dominant view is the liberal minority perspective that water is a social good that is necessary for survival, and should be made available to all. This debate between pure economic valuation and that of a blended economic-plus-social valuation, constitutes much of the policy discourse about water. Other minority views, particularly spiritual ones, can also be found within Western society, but these have little chance of gaining serious attention when the focus is on the battle between the proponents of economic thinking versus those of more social thinking.

Historically there is a long tradition of environmental spirituality within Western culture, which has always remained safely marginalized from the mainstream. The followers of St. Francis of Assisi fit into this category. In the United States, the 19th Century Transcendentalist writers, notably Henry David Thoreau and Ralph Waldo Emerson, articulated a spiritual interpretation of the natural world. The reaction of mainstream American society to spiritual interpretations of nature was to treat these as metaphors, without acknowledging a true spiritual aspect of nature. The virgin pine forests of Wisconsin were awe-inspiring ecosystems reminiscent of European cathedrals, perhaps, but were not accorded the status of sacred places in the eyes of the 19th century white settlers who encountered them. Nor were the streams and rivers – which were abundant with fish and supported a complex array of wildlife – considered sacred to these white settlers. Clear-cutting the forests and upsetting the hydrology of the streams was a form of manifest destiny that took on a sense of religious duty. Today the only patch of forest in the state of Wisconsin that has not been clear-cut is the reservation land of the Menominee Indians (Davis, 2000). The streams running through these lands still contain some fish, but they can be eaten only sparingly to avoid build-up of dangerous carcinogens, the result of 20th century industrial development.

Contemporary calls for a new environmental ethic have received little attention in the rush for economic exploitation of natural resources. Compared with indigenous spirituality, the Western ethical approach to nature is an emasculated form of spirituality, having a moral authority but lacking a religious one. The religious authority that is part of Western culture – in the form of the Catholic, Protestant, and Jewish religions – lacks a credible environmental message. Indeed, Christianity is often cited as being part of the problem (e.g. White, 1967). Efforts are being made, however, to promote a new environmental ethic, not only inside organized religions, but also outside the Church, through an environmental ethos rooted in various traditions, including 19th century American transcendentalism. For example, the National Catholic Rural Life Conference (NCRLC) is formulating a 'water ethic' that seeks to respond to the appeal of Pope John Paul II for Catholics to undergo an 'ecological conversion', a moral call to protect the environment and make the earth a place where all life is valued and can grow in harmony (Kautza and Grontsky, 2003).

The Earth Charter initiative promotes an environmental ethic that reveres water bodies as intrinsically important, independent of their economic value to people[3]. The Charter reflects diverse traditions, both religious and secular, brought together in a consensus statement that avoids spiritual assertions to render it palatable to believers of any faith, as well as atheists. The moral imperative is to honour the Earth as our mother, which can be interpreted religiously, or through evolutionary rationality in the sense that human life, as well as all other life, is derived from a family tree originating with the Earth itself. The Earth Charter seeks to use this kinship between people and the Earth as a moral basis for protecting the Earth's natural resources.

In both Christianity and within the environmental movement, there are strong currents of kinship with the Earth, and a spiritual perspective on the nature of water itself. While water is not viewed as a form of life, it is viewed as something sacred, in the sense that it is a basis for life, and it is a major shareholder in the stock of Earth's resources. To the extent that the Earth itself is sacred, then water too is sacred.

If Western culture contains these sacred views of water, then why is water so abused in practice? There are two parts to this answer. First: the spiritual message about water is a qualified one, that does not explicitly acknowledge water or water bodies as having a spirit quality. Rather, water is sacred through a logical framework of the earth and all creation, as representing a sacred trust from God (Christianity) or from evolutionary history (Earth Charter). The spiritual message, in other words, is muted. It is there, but it is weak. Secondly, the spiritual perspective about the environment (including water), even in this muted form, is very much a minority voice within Western culture, and even within Western religions. The mainstream religious expressions within the United States, for example, view water as a secular commodity that can be exploited without religious or moral compunctions. Proponents of environmental ethics represent minorities within the organized religions of the West, as well as within Western society generally.

Case study: the Silvery Minnow

The Rio Grande River, which forms much of the border between the United States and Mexico, has become intermittently dry in parts of its upper basin in New Mexico (US), because of diversions for agriculture and urban/industrial use. All the waters of the river are legally owned by the various water users – farmers, private companies, and municipalities – and the federal government has constructed a network of dams to regulate the flow and ensure that water is available to the owners. Not only is there no water allocated to environmental flows, but the water is actually over-subscribed and is supplemented by an inter-basin diversion from the adjacent Colorado River system.

The fact that a major river has gone dry due to water diversions caused no particular alarm until environmental groups brought a lawsuit to force the federal government to release water stored in the dams, in order to provide an environmental flow. The legal basis for the suit was to protect an endangered species of small fish, the Silvery Minnow (*Hybognathus nuchalis*), whose habitat coincided with the stretch of river that had become dry. Under environmental laws already in place, water withdrawals from federal projects were not allowed to endanger the survival of a fish (or plant) species.

The initial outcome of the legal action was a court order instructing the concerned government agency (the Bureau of Reclamation) to release water to preserve the fish habitat, even if it meant cutting contract-water deliveries to farmers and municipalities. This legal decision was quickly circumvented by political action in the federal Congress, where both the Republican and Democratic Party senators from New Mexico joined forces to push for an exemption in the federal Endangered Species Act. The final result is an attachment to a Congressional bill that expressly forbids the government agencies controlling the Rio Grande water to reduce allocations to water rights holders (the various municipalities, farmers, industry, etc) for the purpose of saving the habitat of the Silvery Minnow.

What cultural values are being expressed in the Silvery Minnow debate? Private ownership rights to water are viewed as sacrosanct – literally sacred – so long as there is water that can be diverted. The survival of the Silvery Minnow and the health of the riverine habitat are also seen as important, but these concerns cannot match the greater priority of meeting the water commitments made to legally recognized water customers. The Mayor of Albuquerque, the largest city along the upper Rio Grande, was enthusiastic at hearing the news that the city's water allowances would not be cut to create an environmental flow for the Minnow. "I'm a very happy mayor this afternoon," he said. "All of Albuquerque should be dancing in the street"[5]. Water for nature is seen as a luxury to be addressed only after the human customers have been fully served.

Water and spirituality in indigenous societies

For indigenous societies, the natural, spiritual connections linking humans, water, fish, and the river itself preclude the option of placing human desires for an unreduced quota of water ahead of nature's needs. In contrast to Western culture, the indigenous spiritual perspective of the environment is clearly articulated and directly experienced. It also provides a more dominant 'voice' within the society, than is the case in the West. The introductory words of the Indigenous Peoples' Water Declaration[6] very clearly demonstrate the identification that indigenous spirituality makes between people and Nature:

- "We, the Indigenous Peoples from all parts of the world assembled here, reaffirm our relationship to Mother Earth and responsibility to future generations to raise our voices in solidarity to speak for the protection of water. We were placed in a sacred manner on this Earth, each in our own sacred and traditional lands and territories to care for all of creation and to care for water.
- We recognize, honour and respect water as sacred and sustaining. Our traditional knowledge, laws and ways of life teach us to be responsible in caring for this sacred gift that connects all life.
- Our relationship with our lands, territories and water is the fundamental physical cultural and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations…"

Water is not only an aspect of Indigenous spirituality, but a very major component of that spiritual world. Water, whether as a substance, or in the form of water bodies (rivers, lakes) and meteorological phenomena (rain, snow, fog, clouds), is seen through a spiritual – not an economic – lens. Water is not viewed as a way of making money any more than children are seen as sources of revenue. Money can, of course, be derived from the labour of children, and from water projects, but this is not the dominant motivation for having children, or for protecting water. The spiritual perspective of indigenous people is one that is challenging for Westerners to appreciate, given our own peculiar cultural perspectives as outlined above.

But if indigenous people view water as such an important spiritual aspect of life, then how is this reflected in the actual decisions they make about water development? When money is at stake, are these spiritual values strong enough to over-ride the monetary values? Does water development within indigenous territories reflect the values articulated in the Indigenous Declaration on Water? This question is not entirely fair, since indigenous societies are normally in a position of political disadvantage vis-à-vis a dominant society which seeks to impose, even with good intentions, its own value system – which is generally Western in its broad features.

Water development projects within Indigenous areas typically are imposed on the indigenous communities by outside forces of government and/or private industry. Many of the papers in this present volume document cases of outside political, economic, and even military pressure on indigenous communities to force particular forms of water-related development. Perhaps the most familiar examples of forced development are hydro-power dams built on indigenous lands for the purpose of exporting power to non-indigenous areas. The injustices of dam development have been carefully documented by the recent World Commission on Dams, and recommendations adopted for empowering indigenous communities regarding dam-related development decisions[7].

But what about cases of indigenously controlled development, where indigenous communities themselves decide whether and how water development will occur? When indigenous communities themselves are in charge, do spiritual values become evident in the decisions made about water development? Here we encounter complexities of meaning and debates about assigning responsibility for water development decisions. If an indigenous community agrees to allow a dam to be constructed that forever alters the riverine environment that has nourished that community for generations, is this an example of free decision-making? Was the decision made by the entire community or by a political minority that has usurped control? Did spiritual values pertaining to the river enter the decision-making process? When confronted with actual cases where indigenous communities have literally sold their natural

resources to outside developers, it is easy to presume that spiritual values are really superficial, and that money has far greater power than spiritual considerations. Do indigenous societies really hold the spiritual values that their leaders claim? Or are these values only tools for political negotiations and international statements?

The Case of Black Mesa (Arizona, USA)

The Peabody coal mine that straddles the tribal lands of the Hopi and the Navajo in the high arid plateau of northern Arizona, has a contract with the Hopi tribal government, to extract pristine groundwater for its mining operations. The water is mixed with the coal to form a slurry, which is conveyed by an open aqueduct nearly 400 kms to an electrical generating plant serving the cities of southern California. The contract allows Peabody Energy (a subsidiary of Lehman Brothers) to pump water from an aquifer, which feeds the springs and few streams that comprise the sole source of water – other than infrequent rainfall – for the entire Hopi tribe, and for the Navajo communities in the vicinity. As a result of the pumping, which has gone on since the 1960s, the Hopi streams are starting to dry up, and the ceremonies that have always been integral to Hopi religion can no longer be performed. It is possible (though expensive) to bring drinking water in by truck, but the religious base of the tribe is now at risk of being permanently lost.

How has the Hopi tribal government allowed this to happen? There is, of course, a history. The tribal government is a relatively recent (1947) creation, imposed by the federal Bureau of Indian Affairs (BIA) partly for the purpose of having a convenient body to consent to a coal-mine lease. There are legal barriers to breaking the contract and stopping the mine, and most importantly, there are financial considerations. The vast majority of the tribal government's budget derives from the royalties and fees collected annually from Peabody. The tribal council is not in favour of rescinding the contract, apparently for this financial reason. And what of the spiritual considerations? Both the springs, and Black Mesa itself, have always been considered sacred to the Hopi, and yet here is a Hopi tribal council that votes to continue the contract, in exchange for its operating budget. Has the Hopi tribe sold its spirituality to the coal-mine?

If we analyse the Black Mesa case in terms of outcomes – the coal-mine is operating with the consent of the Hopi government – then we could say that spirituality has lost out to financial pressures. But if we look at the process by which this outcome has resulted, then we see a different picture of spiritual values. There is strong opposition to the mine within the Hopi communities. Indeed, there is suspicion of the tribal government itself, seen by traditionalists as colonial tampering with traditional Hopi institutions. Hopi opposition to the mine is formalized in Black Mesa Trust[8], an organization dedicated to the preservation of the water supplies that the Peabody coal mine is depleting. The organization is headed by a formal tribal chairman, who has changed his own views about the mine since leaving office, and who has galvanized many Hopi to speak out.

The approach of Black Mesa Trust is to appeal to people's spiritual values about water in general, and particularly the sacred springs which are now going dry from over-pumping by the mining company. The argument is not based on economics (although the argument could be made that the tribe's contract with Peabody coal drastically underprices the water), nor is it based primarily on environmental considerations (though the deterioration of the aquifer is an important concern). The message of Black Mesa Trust is primarily spiritual and cultural: the sacred springs are suffering just as the language is suffering. The next generation is in danger of being left without Hopi water and without Hopi language. This message resonates with the Hopi people because their spiritual view of water remains largely intact. They are losing their water, but not their values.

Comparing Western and indigenous spirituality about water

Indigenous societies, in general, hold spiritual values about water that are not found in the mainstream of Western culture. In the discussion above, I have tried to show that Western culture

does contain some minority views about the spirituality of water, but these views do not shape actual decisions about how water is used. Rivers are protected in the West only where there is an economic reason to protect them. Even Western environmental movements subscribe to economic values. In IUCN's recent publication about the importance of environmental flows (Dyson et al 2003), for example, the rationale presented is based purely on economics – environmental economics to be sure – but without any appeal to spiritual or even aesthetic argumentation.

Indigenous societies, in contrast, invariably view water and water bodies as spiritual phenomena. They might fail to protect those water bodies from external forces, and even from internal forces, but such failures should not be misinterpreted necessarily as failures of *values*; rather these are more likely to represent *political* failures. For most members of indigenous society, their spiritual values about water are still very much intact. It is the minority voices of secularism within indigenous societies that find powerful friends among outsiders with vested interests in exploiting indigenous water resources. These are the forces that drive water development in indigenous areas.

It has been the presumption of both outside water experts as well as the more secular members of indigenous societies, that Western-style water development has much to teach indigenous societies. The future of indigenous societies, according to this view, will be the adoption of Western approaches. Certainly history points in this direction; that indigenous values will eventually fall in line with the Western values, as Western technology dominates the world scene. Yet Western technology is not doing very well with managing water. The long-term prognosis for the world's water suggests that an accommodation needs to be made with the environment in the interests of long-term food production.

Does indigenous spirituality regarding water have a future? Is it destined to succumb to Western concepts of secular rationality? There are many reasons to suggest that indigenous value systems do indeed have a future, and that as alternatives to Western culture become fewer and fewer, the importance of valuing diversity is also becoming more appreciated both inside and outside indigenous societies (Groenfeldt 2003). Within indigenous societies, this process is one of cultural revitalization. From the outside, i.e. from the Western perspective, an appreciation of indigenous values comes from education. This was the basic intention of UNESCO's co-sponsorship of the sessions on Water and Cultural Diversity at the 3rd World Water Forum.

Western appreciation of cultural diversity regarding water, however, needs to go beyond the level of, for example, appreciating tribal art in a Paris gallery, to one of *respecting* a society's cultural *right* to a diversity of thought and values. It is the lack of genuine respect for cultural diversity that lies at the foundation of many controversies about water development. Does the US Bureau of Indian Affairs respect the Hopi view of their springs as sacred places? Did Hydro-Quebec respect the Cree view of the animals they hunted as sacred beings? Does the World Bank respect indigenous views of sacred river spirits? It is probably safe to say that a position of 'appreciation' of indigenous spirituality is easier for Westerners to adopt than is genuine 'respect'. *Appreciation* of the river spirit means that the dam can still be built, while *respect* for the spirit implies that the dam might not be built.

The differences between Western views on water and the more spiritual, indigenous values about water suggest great potential for conflict, but, with education, there can also be cooperation. The emerging Western approach to water management that accords greater economic value to healthy aquatic ecosystems offers particular reason for hope. The European Union's recently adopted Water Framework Directive, for example, requires restoration and maintenance of riparian habitats. The survival of the Silvery Minnow would be assured if the state of New Mexico adopted the same policies. By agreeing on the importance of healthy water ecosystems, a major potential for value-based conflicts can be reduced.

The purpose of learning more about indigenous spirituality of water goes beyond environmental strategies, however. The West has much to learn – or to relearn – from the indigenous view of man's spiritual relationship with the rest of nature. The ethical perspective embedded in indigenous views about nature and water is largely missing

from the Western toolkit on water management, and we Westerners need to acquire some ethical tools. It is in everyone's interest that Western society learns from indigenous peoples what it means to feel a kinship with the earth, with the land, and especially, with water.

ENDNOTES

(1) The 'West' refers in this paper to the industrialized, so-called 'developed' countries, whose centre of gravity is in North America and Europe (the geographic 'west') but which also include many Eastern countries (e.g. Japan, Korea). I use the term even to refer to many so-called 'developing' countries which are embarking on a materialistic development path borrowed from the West, including China, India, Brazil and the economic elite of most developing countries.

(2) Economic analysis can include 'non-economic' variables such as landscape value, cultural heritage value, and even religious value, but only if they can be reduced to a common currency which, in economic analysis, is monetary. This type of analysis has been applied to the multi-functional benefits of agriculture and the same approach could be applied to multi-functional benefits of water.

(3) The text of the Earth Charter is available at www.earthcharter.org.

(4) In water conflicts, nothing seems to be 'final' but this is the situation as of November 2003.

(5) Taken from the on-line edition of the newspaper, The Santa Fe New Mexican, 7 November 2003 (www.santafenewmexican.com).

(6) The full text of the Declaration, which was drafted by indigenous participants at the 3rd World Water Forum in Kyoto, Japan, in March 2003, is available in this volume, as well as at www.indigenouswater.org.

(7) The report of the World Commission on Dams was released in November 2000 and is available for download at www.dams.org.

(9) For details about Black Mesa Trust, see their website: www.blackmesatrust.org.

REFERENCE LIST

Davis Thomas, 2000, *Sustaining the forest, the people, and the spirit.* State University of New York Press.

Groenfeldt David, 2003, *The future of indigenous values: cultural relativism in the face of economic development.* Futures 35(9), pp 917-929.

Dyson M, Bergkamp G, Scanlon J eds., 2003, *Flow: the essentials of environmental flows.* IUCN Water and Nature Initiative (www.waterandnature.org).

Kautza Tim, Gronski Robert, 2003, *A water ethic to renew the earth.* National Catholic Rural Life Conference website (www.ncrlc.com/WaterEthic-RenewEarth.html).

White Lynn Jr, 1967, *The historical roots of our ecologic crisis.* Science 155, 1203-7.

water rights and national legislation

pluri-, multi-issues in the reform process: towards new water legislation in Bolivia

"Here, poverty is widespread, but when we make proposals, they treat us like subversives. The thing is that the government doesn't understand reality. They tell us that this is politics. Of course it is. Do we have a right to politics, or can only the government talk about that? We have our own thoughts – is that a crime?"
(Villager from Ajllata Grande, Bolivian Altiplano, in PULSO No. 38)

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Background

Over the past few years, demonstrations by indigenous peoples have shaken a number of Latin American countries and led them to the brink of serious crisis. This has prompted social scientists and political analysts to attempt to understand what is going on, since something crucial is obviously happening – but what?

Since the 1990's, the struggle for land and natural resources has been a key issue for Latin America's indigenous movement. However, we must remember that this "is not a right to be achieved in a vacuum, nor limited to purely symbolic aspects – the Earth and its resources are its material support" (Toledo, 1996). It is precisely for that reason that the main demands during these last few years have involved control over and management of these key resources. The strategy of struggling for territorial ownership has been displaced by the quest for immediate recognition and respect for the rights to control and manage certain resources. Obviously, this shift in strategy does not mean that indigenous peoples have given up on territorial demands, but they are acting with 'political realism' and are responding to concrete situations that call for urgent action to avert the day "when indigenous rights are finally recognized, if such a day ever comes, [but] only a few resources will actually be under indigenous control" (Toledo, 1996).

This position, which some consider more pragmatic and focused on the short term, attempts to achieve protection for natural resources that are located in territories belonging to, or that are under the control of indigenous peoples and rural communities, so that their rights will not be affected by third parties. Accordingly, proposals have been formulated and measures taken, including:

> "(…) protection of vulnerable groups and areas, positive discrimination, safeguarding of the ecological balance. Concrete legal strategies may be assertive, such as demanding exclusive concession, or mild, such as applying for preferential rights, with mid-range options such as prohibiting concessions in certain areas or resources". (Ibid.)

Although significant headway has been made in achieving recognition for the rights of indigenous peoples and rural communities, in most cases they "(…) have to overcome a series of hurdles, as a result of the complexity and high procedural and/or enforcement costs of norms and procedures to operationalise their rights" (Marinissen,1998). This has a negative impact because, if we add to the bureaucratic difficulties the lack of political will, we can envision a serious threat to respect for and actual fulfilment of these rights. Moreover, in some cases, this recognition also poses various dilemmas, some of which we will explain below.

So, in summary, we could say that the process of recognizing diversity, based on the right-to-be-different approach, is just getting off the ground. And, like any beginning, this poses a series of challenges that must be addressed. Considering pluri- or multi-national issues leads us to think more seriously about other issues, such as participation and societal oversight, democracy and autonomous governance on different levels (local, ethnic, etc.).

In the more specific domain of water resources, the debate begins with the legislative amendments undertaken by several countries in the region. In some, such as Ecuador, Peru and Bolivia, governments have put forward proposals, that include de-authorizing the rights of indigenous peoples and rural communities who had rights and had been managing water since pre-Conquest times. In certain cases (Ecuador and Bolivia) legal counter-proposals have even arisen, with the main feature of emphasizing the essentially community-based, social and ecological nature of water, without denying its economic importance. The voices raised in several places to defend this latter vision have led to reconsidering previous approaches and recognizing the existing rights of indigenous peoples and rural communities, as well as guaranteeing their participation in institutions created to manage water resources. However, most current proposals are still insufficient, in the context of the scope required by international standards, such as the ILO's Convention No. 169. For example, if these proposals recognize the rights of indigenous peoples to water sources located in their territories, they do so only in terms of 'actual use', or they also

consider the rights acquired by powerful stakeholders, which limits the scope of this type of provision.

In Bolivia, this situation is even more complex, since unlike other countries even in the Andean region, we have a government that is weak and plays a negligent role in water management. Accordingly, water management has been handled autonomously and independently, with only occasional outside intervention (except for development projects), especially in rural zones. It is only recently and in response to pressure from international co-operation agencies, that the Bolivian government has attempted to play a more active role in water management, mainly by enacting laws to regulate water use rights.

This unique feature of Bolivia's situation has enabled local management and water rights to evolve[1] based on different cultural principles and values such as the 'uses, customs and rights-of-way' wielded by rural and indigenous people and used for negotiating changes in laws and government institutions, even for making demands regarding territory.

Nevertheless, most indigenous and rural communities and peoples have no documents or records attesting to their rights over water sources. Recently, with recognition from the Community of Origin Territories (which have been authorized mainly in Bolivia's Amazonian region) some official rights have been granted. However, these are very limited, since rural folk are basically granted water supply for domestic use and in exceptional cases for fish farming. Moreover, the possibility always remains open for these resources to be reassigned for other uses.

However, in many places, there are still references to so-called 'historical rights' – that is, those rights granted to communities (formerly Royal Indian Peoples) during the colonial period. These rights were, in principle, exclusively rights of possession. But after independence they were confirmed and expanded to include rights of ownership, granted to provide access to land. Indigenous and rural organizations demand these rights even today:

"On the basis of these ownership rights, irrigation water users feel that they own the water they use. This feeling is also reinforced because the government, despite the constitutional provision giving it 'original ownership' of natural resources, at least regarding water resources, has never enforced this in practice.

(…) most irrigation water users' organizations can back their water use rights with documentation that is valid in any legal system; these rights are also clear in terms of water source(s), the zone of influence of the irrigation system (which, among other aspects, is also a territorial phenomenon), social organization and their own management norms. It goes without saying that, when these are Quechua indigenous communities and rural organizations, these norms are grounded in their own organizational culture."
(Proposal to be considered in drafting the Water Resource Law, 21 August 1998)

The thorny road to formulating a new water law for Bolivia

The first legal reference since independence in Bolivia dates back to 1879, when a Decree was issued (8 September 1879) on Water Ownership and Use, and raised to the status of a Law on 28 November 1906. Several parts of this 1906 law have been repealed by later rulings, so although its provisions are still currently in effect[2] they are not enforced, mainly due to negligence and because sectoral laws and regulations have superseded its norms with different ones.

YEAR	LEGAL INSTRUMENT
1953	Law of Agrarian Reform
1967	National Constitution
1967	Regulations on Water for Irrigation, Ministry Resolution No. 210/67
1975	Code of Civil Procedures
1975	Decree-Law on River, Lake and Maritime Navigation (DS 12684)
1975	Decree-Law on Wildlife, National Parks, Hunting and Fishing (DS 12301)
1977	Regulations on Water Sector Institutional Organization and Concessions (DS 24716)
1990	Regulations on Fishing and Aquaculture (DS 22581)
1993	Law on Public Participation
1993	Law on Exports
1994	SIRESE Law
1994	Law on Electricity
1996	Forestry Law
1996	INRA Law
1997	Mining Code
1997	Regulations on Protected Areas (DS 24781)
1997	Regulations on the Use of Public-Domain Property and Water Service Right of Way (DS 24716)
1998	Regulatory Standards for Water Use and Utilisation for Irrigation, Bi-Ministry Resolution 01/98
1999	Law on Municipalities
2000	Law Nº 2066 on Water Supply and Sewerage Services

(Situation by end of 2003)

Table prepared by the author.

So, the laws in effect regarding water resources in Bolivia, along with some general principles in the national Constitution, provide a complex maze of norms regulating concrete sectors. For this reason, a bill has been under discussion for the last 30 years, to fill the gaps left by the 1906 Law. But it has not yet materialized, despite 32 draft versions by the government and several alternative proposals by civil society organizations.

Such strong social forces opposed the new Water Law (September and October 2000) that the government was forced to withdraw and shelve the draft being scrutinized at the time by the National Congress, thus 'freezing' discussion on the topic. Agreements signed at the time bound the government to set up a commission to prepare an alternative draft, amending the norms contained in other laws and rulings that jeopardized smallholder, indigenous and settler rights to water. Moreover, until this commission finished its work, "no other norm or concession regarding water resources would be enacted"[3]. Finally, as part of these agreements, the 1906 Water Ownership and Use Law was repealed.

Several years have passed since these agreements were signed, but until now (end of 2003) no headway has been made in complying with the above points, or in formulating new legal norms for Bolivia. This has meant that in the absence of any general norms enabling new rights to be granted, specific laws, sectoral provisions and administrative contracts are being used, often ensuring optimal conditions for investors that disregard social and even environmental considerations.

Nevertheless, despite the time that has gone by and the difficulties encountered, water resource legislation is still on the public agenda and is a working priority for international co-operation agencies because of the implications for investment in development projects (in irrigation and domestic water supply). These agencies have been pressuring and funding the government to finalise a new legal framework. But this has not happened yet, partly because the issue is so polemical and complex, and because sectoral interests prefer to maintain the current situation (mining, industry, hydropower). In many cases, this gap in the legislation enables other legal provisions to guarantee them major rights and few responsibilities.

In a change of approach to that initially taken to modify the legislation in Bolivia, and to make progress in formulating a new law, two consultation processes began in 2000. One aimed to draft regulations for Law No. 2066 on Water Supply and Sewerage Services (financed by the World Bank and facilitated by GTZ), and the other concerned Irrigation Norms for Bolivia (financed by the IDB and facilitated by the Commission for Integrated Water Management in Bolivia and the National Irrigation Program). Both processes have had extremely interesting results in proposing legal alternatives for a more social consensus-based water management, but they have run up against a lack of political will[4] to put them into practice.

During the process of constructing the Irrigation Norms, representatives from the watersheds where work had been carried out prepared proposals for norms to create a Water Authority and to regulate the irrigation sector. These were presented to government authorities and international agency officials. On the basis of this experience, it was decided to begin systematizing proposals from other water-use sectors, and generating dialogue mechanisms to attempt to build consensus for a Water Law based on an actual water policy. Mainly with support from the Ministry of Agriculture, Livestock and Rural Development, the Inter-Institutional Water Council (CONIAG) was promoted and finally created through Supreme Decree N° 26599 of 20 April 2002. It aims to:

> "Open up dialogue and consensus-building among the government and economic and social organizations in order to better adapt the legal, institutional and technical framework regarding water issues, to put in order and regulate water resource management." (Article 1)

To achieve this aim, the Council has three years, during which time it will:

- "Build consensus and propose actions for the country's water resource use, management and conservation.
- Promote preparation and implementation of a consensus-based action plan for legal and institutional organization of the country's water resources."

The Council comprises four ministries as well as representatives of Bolivia's municipalities, of irrigator organizations, rural organizations, indigenous organizations, private enterprise and academic and research institutions. Council members receive no compensation for this work. For operational purposes, the Council has a technical secretariat to facilitate, co-ordinate and systematize the whole process.

At the time of writing (2003), the Council had met a few times and was moving toward preparing a water policy, on the basis of consultation and consensus-building with the country's societal and economic organizations.

The issues

As part of the above process of legal and policy amendment, several questions have arisen regarding the issues discussed in this article, including the following:

What should be recognized?

The latest proposals for the Water Law maintain the idea that it is necessary to establish minimum indispensable requirements to obtain recognition of water rights according to 'uses and customs' prevailing in each region (Article 53, draft law N° 32), indicating that these rights (in situ or derived) must be demonstrated and accredited by presenting some suitable document (Article 56-III). This poses a problem that even legal anthropology has been unable to resolve: that is, it is practically impossible to define what the contents of indigenous/rural 'customary law' are. They include concepts, principles, practices and customs which have tremendous diversity in their formulation, application and reproduction. Consequently, the fundamental feature of this type of normative repertoire is that it is dynamic, continually changing and therefore quite different from the relatively stable positive-law provisions.

How to achieve this recognition, i.e. by what procedure?

Most proposals are not clear about this issue. Official proposals have included preliminary procedures similar to those pertaining to agrarian rights, whereas societal organizations have emphasized that any procedure must be free of charge, swift and simple, without outlining any further details.

Nevertheless, we could make the following remarks about existing procedural proposals:

The idea of using regulation to define 'uses and customs prevailing in each region' implies, on the ground, a sort of inventory or codification of 'valid', 'official' and 'legitimate' uses and customs according to government criteria:

> "this recognizes a right, but for indigenous and rural communities to exercise it, they must accredit that they are entitled to enjoy that right. (…) such accreditation and demonstration will most surely entail the presenta-

> tion of documents showing legal status, documents dating back to previous times (…) referring to water sources used by communities, anthropological and ethnological studies by some cognizant body or some agency, or custom-made by the rights-holder to verify that there are uses and customs".
> (Orellana, 2000: 11)

At the same time, this entails a risk:

> "if some community does not have the uses and customs that meet the standards set in each region according to the Regulations, it may be assumed that they will not have customary-law rights to manage, use or access their water". (Orellana, 2000)

So, users might not 'qualify' for their rights to this vital resource to be recognized. This is the case of several indigenous peoples and communities in Chile, who do not have any recognition of their indigenous status and are therefore not entitled to water source concessions.

In the case of 'community irrigation systems', which have a different arrangement, official proposals would have them "demonstrate ownership of their land by any suitable means". This is almost a cruel joke, since Bolivia is only just now undergoing the process of straightening out agrarian property records.
Other issues, such as the need to have legal status, procedural costs or timeframes for example, have also been questioned.

Indigenous farmers, Bolivia – © *R. Bustamante*

What subject / object is to be recognized?
In general, official proposals are so ambiguous that they can be stretched to cover, under the same rules, not only the rights of indigenous peoples and rural communities, but of anyone – individual or corporate entity – that has water use and utilisation rights "arising from traditional, customary uses and customs" (Article 64-II).

Accordingly, the indigenous / rural proposal[5] stipulates that social, collective and beneficial uses of water resources are more important in recognizing rights. These rights are connected to organizations considered indigenous or rural, but could also cover urban and peri-urban sectors. So, the nature of the organization matters, but so does the way the resource is managed. As a central argument, they say that 'indigenousness' should not be the main criterion for recognizing their water management rights and approaches, but rather indigenous principles and values characterized by 'collective' interests.

What is the legal validity of this recognition?
A number of official proposals speak of recognizing 'uses and customs' by granting a Water Title, the legal value of which is not clear, and is severely questioned by stakeholder organizations.

> "What kind of title of ownership do these customary owners have? How can they defend their rights from any conflict? Where is that right registered, under what system? Are there two or more classes of legal governmental recognition of usage rights? Which is the over-riding right? The draft proposal explicitly states that the concession must be made in clear, stable terms, granting rights to use, enjoy and dispose of the resource granted under the "Water Title". From this, we conclude that any other form of access, aside from administrative concession, creates legal insecurity for hypothetical beneficiaries." (Orellana, 2000: 11)

That is, although the law recognizes 'uses and customs' of different indigenous peoples and rural communities, the procedure to follow, the legal security to be obtained, and the contents of those rights are not clear enough.

What are the consequences of this recognition, the desired and undesired effects?

All official proposals state that rights based on 'uses and customs' will be included in the general concession system, establishing only a few exceptions such as the non-payment of registration fees. It was only with the enactment of Law No. 2066 (Provision of Water Supply and Sewerage Services) that a different legal arrangement was established for rural communities and indigenous peoples (Registration) although it is limited for the time being to domestic use and consumption.

Although this form of recognition has not yet come into effect because there are no regulations to establish the procedures to follow, a polemic has arisen regarding its consequences. For example, rights will be registered only "in terms of actual use of water resources", which implies that, with the same way of thinking as during colonial times, water that is declared 'surplus' could be granted to third parties. This way of thinking would also establish all concessions by unit of volume per unit of time, which has been seriously questioned by societal organizations, since this ignores the traditional ways of allocating rights. Moreover, there is also the issue of revoking rights granted. The causes for revocation have not yet been clearly established, since the Law indicates only a limit on the 'lifetime' of the service.

Therefore, counter-proposals by societal organizations clearly state that, although "registration of community water rights have the same legal value as any other type of usage authorisation" and priority status over any other sort of right, they also include special conditions for putting rights into practice, such as over-riding other rights, multi-use, non-transferability, protection against seizure, perpetuity and exoneration from payment of fees.

In summary, the crux of the matter is still: How to achieve recognition of local, indigenous and rural rights without thereby curtailing them? And how to make headway in more integrated, equitable, sustainable management in the current context of local, indigenous and rural people's rights?

The new context and the challenges it poses

During the last few years, dialogue sessions have been organized on several occasions, regarding natural resource management issues in general among indigenous and rural organizations and the Government, although almost always as the result of a social conflict. These discussions have made significant progress in recognition of indigenous and rural peoples' and communities' rights – however, not precisely through consensus-building, but due to the pressure of social action.

The social conflicts of April (the Water War) and September 2000 in Bolivia have generated a 'time-out' in the process of formulating a new Water Law, in order to think through the proposals and relate them to a Water Policy. Conflicts have also placed this discussion in a context that is essentially different, in which it is important to have opportunities for dialogue and consensus-building, not only with social organizations, but even within the government itself. Even international financial institutions such as the Inter-American Development Bank and the World Bank now feel that it is important to take societal demands into account more systematically and responsibly. Along these lines, the process of formulating the Water Policy, facilitated by the CONIAG, has been planned to involve water use sectors more effectively. However, although this is a step forward, making decisions in bodies such as the CONIAG also poses questions regarding how to resolve issues of representation, representativeness and legitimacy – in sum, the most democratic ways to involve society in policy- and law-making.

Furthermore, formulating new laws and policies is only the beginning of a lengthy process. As we have seen, although many issues have norms now, even very precise ones, the problem of effectiveness lies in how they are implemented. Procedures established so far for other sectors are complex (overly technical), costly and do not really guarantee recognition of rights, since they always leave loopholes through which the government can limit and even infringe on these rights to favour economic interests. Often, provisions favouring societal sectors are evaded or

ignored, especially when they involve investments by economically powerful sectors. As Marinissen puts it, "there is a relationship between economic interests and the poverty of social norms" (Marinissen, 1998). Regarding the topic of this paper, this has happened, for example, in the several attempts to approve a norm to make it possible to export raw water from the Sud Lípez region in Potosí to the neighbouring Republic of Chile, and more generally in the signing of free-trade agreements (such as the FTAA) that treat water as a tradable commodity.

Final reflections

What is going on? This was the question with which we began this paper. It is difficult to give a satisfying answer yet. Some analysts have attempted an explanation:

> "(...) The strikes in 2000 and 2003 show unequivocally that political stability, legitimacy and governmental order cannot be constructed without taking into account the recognition of the indigenous cultural identities of the majorities, their power structure and their eagerness to govern themselves. Indians are now the core of social struggles, of discourse about change and of the forces for this country's moral and intellectual renewal. Recurring indigenous uprisings, such as the present one, have rendered visible the failure of society and government to see eye to eye. What is new is that, in addition to the radical resistance of insurgent indigenous people and the real capacity to take de facto political control of sizeable territories, there is an indigenous intellectual elite with a sufficiently penetrating discourse that they can make indigenous demands into a full-blown national indigenous advocacy movement. And experience with de-colonizing nationalism (as opposed to large-power nationalism), once unleashed, is that it is irreversible and can be resolved only by creating multi-national states or setting up independent states."
> (Alvaro García-Linera, 2003 in El Juguete Rabioso No. 89 and PULSO No.218 respectively).

More modestly, we feel that, to achieve integrated, sustainable, equitable development of indigenous peoples and rural communities, these must be granted a number of rights:

- to be able to co-exist, according to their own culture, traditions and customs (with the implications that this has for education, law, health, etc.)
- to have territory that will meet their current and future needs, which also means that they must have the right to utilize and/or take part in the benefits of utilizing natural resources in their territory; and
- to decide autonomously regarding their own development priorities and alternatives[6].

It is essential to guarantee indigenous peoples' participation and a certain degree of control within power structures (national, sub-national and local governments) and to ensure there is political will (amongst governmental officials, leaders and the public) to make these rights a reality.

Recognition of these rights for indigenous peoples and rural communities, moving towards greater autonomy, ultimately poses the greatest challenge of all: deciding what to do with pluri-/multi-national issues in our countries. How to address these issues in order to make them the foundation of development? This requires us to seek out a difficult series of balances, between:

- the right to equality, and the right to difference;
- autonomous systems, and the State per se.

Some progress has been made in this direction. For example, it is clear that indigenous peoples' demands for autonomy do not entail seceding, setting up independent States or anything of that nature (although different positions arose during the latest conflicts in Bolivia, that were more 'regional' than 'ethnic'). Rather, their proposal is mainly to build pluri-national states, that is:

> "Not to create 'islands' of segregation, but to respect – and even encourage – different cultural identities, to create or enhance other elements of national or governmental cohesiveness, with tangible correlations in terms

> of equity. The State should willingly allow adjustments in the persistent asymmetries built up over our common, indissoluble history, but – in order to move toward a desirable future for the many – it must reduce, or completely eliminate that shameful correlation between being indigenous and peasant (even worse if we include the variable of "women") and being poor." (Albo et al., 1995)

This is a way of building democracy, by co-ordinating different ethnic and social identities.

> "Fighting for our future as peoples, we maintain our traditional lifestyles, which underpin our survival as a people. And we must be selective, introducing into our lifestyle what will enrich us and confronting that which destroys us.
> Autonomy of territories makes it possible to carry out development processes based on concepts, traditions and proposals of our own. We aim to promote and reinforce sustainable management of renewable natural resources, without excluding economic growth."
> (Sergio Javivi, Member of the CIDOB, 1997)

This thorny 'balancing act' poses a challenge: "(…) for everyone, for the world and its norms, for countries and the way they see themselves, and for stakeholders and their discourse, which must be inclusive" (Urioste, 2000:9). It is important, above all, to take into account that these issues can be understood only in "(…) a completely democratic setting, leading to inter-cultural dialogue, to avoid positions that get tough and backslide into fundamentalism" (Assies, 2000: 9). This would take us toward transforming the State by 'making it more sincere', with a pluri-/multi-national reality that is increasingly difficult to ignore. In Garcia-Linera's words: "the idea is to achieve modernity as what we actually are, not by pretending to be what we will never be, and can never be".
(Garcia-Linera, 2003, in PULSO No. 218).

Women washing clothes, Bolivia – © *R. Bustamante*

ENDNOTES

(1) Bolivia's ecological, social, cultural, and ethnic diversity, expressed in local water management forms, makes it very difficult to generalize about these arrangements. However, research on this topic has helped us understand it better.

(2) Recently, some sectors have attempted to 'retrieve' norms from the old 1906 Law, e.g. to justify rights to underground water or to argue that municipalities have the cognisant jurisdiction to grant rights.

(3) Points of Consensus among government representatives and rural and indigenous organizations on 4 October 2000, as an outcome of the so-called "Water War".

(4) The same had happened before, with the Regulatory Standards for Water Use and Utilisation for Irrigation, which were to be drafted pursuant to the government's commitment in order to receive an IDB loan to implement the National Irrigation Program. The initial condition was to enact a new Water Law, but after several abortive efforts this was reduced to simply regulating the irrigation sector. Work for at least two years finally got these Regulatory Standards passed, which are among the first precedents for recognition of entitlements due to use and custom. However, although the standards established very short deadlines to put rights in order, institutional arrangements and procedures were not clear. This called for special regulations, which were discussed for about two more years and then discarded.

(5) Because of the experiences in how this recognition materializes in agrarian and forestry issues. For example, the INRA Law establishes the need to identify spatial needs, based on qualitative and quantitative criteria regarding the applicant people's lifestyle and production system, prior to granting them title to water rights.

(6) Convention 169 states:
"Interested peoples should have the right to set their own priorities regarding the development process, insofar as it affects their lives, beliefs, institutions and spiritual well-being and the land that they occupy or use in any way, and to control insofar as possible their own economic, social and cultural development. These peoples must also take part in formulating, enforcing and evaluating national and regional development plans and programmes that could affect them directly. Improving living and working conditions and health and education for interested peoples, with their participation and co-operation, should be a priority in overall economic development plans in regions where they live. Special development projects for these regions must also be prepared so as to promote such improvement. Governments must ensure that, whenever possible, studies be conducted, in co-operation with interested peoples, in order to assess the social, spiritual, cultural and environmental impact that development activities could have on these peoples. The findings of such studies must be considered as fundamental criteria for implementing such activities." (Article 7)

REFERENCE LIST

Albo Xavier, Ticona Esteban and Rojas Gonzalo, 1995, *VOTOS Y WIPHALAS, Campesinos y Pueblos originarios en Democracia.* Milenio Foundation, Modernisation Issues Series, CIPCA Research Notebooks 43, La Paz, Bolivia.

Assies Willem, 2000, *La situación de los Derechos de los Humanos de los Pueblos Indígenas en el Contexto latinoamericano*. Paper prepared for the event "United in diversity for our rights to territory ", organized Indigenous Peoples Programme under the Ministry of Justice and Human Rights, Santa Cruz, Bolivia. http://geocities.com/alertanet

Assies Willem, 2000, *Unas reflexiones sobre las contribuciones al Foro.* Paper presented at the First Forum on Legal Pluralism and Constitutional Recognition of Indigenous Rights. http://geocities.com/alertanet

Assies Willem, 2000, *El Constitucionalismo Multiétnico en América Latina: el caso de Bolivia.* Paper prepared for the 12th International Congress on "Customary Law and Legal Pluralism: Challenges of the Third Millennium", Arica, Chile, March 13-17 2000. http://geocities.com/alertanet

Assies Willem, 2001, *Jurisdicción y organización Indígena: una exploración.* Paper presented at the Second Forum on Proposals for Constitutional Development and Jurisprudence: Indigenous Law and Human Rights. http://geocities.com/alertanet

Boelens Rutgerd and Doornbos Bernita, 1996, *Derecho Consuetudinario Campesino e Intervención en el Riego.* Divergent visions regarding water and law in the Andes, SNV-CESA, Quito/Riobamba.

Boelens Rutgerd and Dávila Gloria, eds., 1998, *Searching for Equity. Conceptions of justice and equity in peasant irrigation.* Van Gorcum, Assen.

Boelens Rutgerd, Roth Dik and Zwarteveen Margreet,2002 *Legal complexity and irrigation water control: Analysis, recognition and beyond.* Paper for the 13th International Congress on Folk Law and Legal Pluralism, Chiang Mai, Thailand.

Bustamante Rocío, 2002, *Documento WALIR Bolivia: Estudio legislativo.* Wageningen University – CEPAL/ECLAC.

Bustamante, Rocío, 1999, *Legislación vigente y propuestas de Ley sobre aguas y riego en Bolivia.* Paper for the Specialisation Course on "Rural Management and Design of Irrigation Systems".

Bustamante Rocío, 1998, *Estudio comparativo de la legislación de agua en Bolivia y Ecuador con referencia a Perú y Chile.* paper for the Inter-Institutional Forum on Irrigation – Ecuador.

Bustamante Rocío, 1995, *Normas de la Gestión y Gestión de las Normas – Uses, Customs and Legislation in traditional irrigation systems.* Thesis for B.A. in Legal and Political Science, UMSS, Cochabamba – Bolivia.

Bustamante Rocío, 2000, *El difícil camino de la formulacion de una Nueva ley de aguas para Bolivia.* Lecture at the Workshop entitled "WATER FORUM", organized by CGIAC and CONDESAN, Cochabamba.

Bustamante Rocío, 2000, *Nuestras Aguas, Nuestra Vida", indigenous and rural rights in proposals for the Water Law in Bolivia.* (unpublished)

Bustamante Rocío and Gutiérrez Z, 1999, *Usos y costumbres en la Gestion de Riego: Caos u orden en la gestion de Agua para riego.* Chapter 7 in Agua y Municipios, Ed. Paul Hoogendam, PLURAL Editores, Cochabamba, Bolivia.

CIJ, 1997, *Derechos Humanos, Derechos de los Pueblos Indígenas.* International Seminar 4-7 March 1996, Cochabamba, Bolivia, *International Jurists' Commission,* France.

Decreto Supremo (Presidential Decree) N° 26599, 20 April 2002, that created the Inter-Institutional Water Council (CONIAG).

El Juguete Rabioso, 2003, Vol. 3 Number 89, 28 September.

El Juguete Rabioso, 2003, Vol. 3 Number 90, 19 October.

FEDECOR, 1998, *Propuesta a ser considerada para la elaboración del Anteproyecto de la Ley del Recurso Agua.* Cochabamba (mimeographed).

Fundación Solon, 1998, *El agua es la Vida-Análisis Critico del Proyecto de Ley de Aguas.* TUNUPA Boletín 1, Solon Foundation, Bolivia.

Gelles Paul H, 2000, *Water and Power in Highland Peru: The Cultural Politics of Irrigation and Development.* Rutgers University Press, New Brunswick, New Jersey.

Gelles Paul H, 2003, *Indigenous peoples, cultural identity and water rights in the Andean nations.* WALIR: CEPAL/ECLAC/Wageningen University/University of California, Wageningen and Riverside, California.

Gentes Ingo, 2002, *Estudio de la Legislación Oficial Chilena y del Derecho Indígena a los Recursos Hídricos.* WALIR: CEPAL/ECLAC and Wageningen University, Santiago, Chile.

Gentes Ingo, 2003, *Estudio sobre marcos normativos indígenas y consuetudinarios referente a la gestión del agua en Chile.* WALIR: CEPAL/ECLAC and Wageningen University, Santiago, Chile.

Gerbrandy Gerben and Hoogendam Paul, 1998, *Aguas y acequias.* PEIRAV – Plural Editores, Cochabamba.

Izko Xavier, Iturralde Diego et al., 1993, *Derecho, Pueblos Indígenas y Reforma del Estado.* Abya Yala Library Collection 2, Ed. Abya Yala, Quito, Ecuador.

Javivi Sergio, 1997, *Presentación de la CIDOB in Derechos Humanos, Derechos de los Pueblos Indígenas,* International Seminar, 4-7 March 1996, Cochabamba, Bolivia, *International Jurists' Commission,* France.

Lillo-Vera Rodrigo, 2000, *Conflicto, estado y Pueblo Mapuche: La interculturalidad como paradigma del Derecho.* Paper presented at the International Congress on Juridical Anthropology and Legal Pluralism. Arica, Indigenous Institute Foundation.

Marinissen Judith, 1998, *Legislación Boliviana y Pueblos Indígenas.* Inventory and Analysis in the perspective of indigenous demands, 2nd Edition SNV – CEJIS, Santa Cruz, Bolivia.

Mesa Técnica del Agua, 2002, *Plataforma para una justa y equitativa Ley del Recurso Agua.* Document from Cochabamba, prepared by the Inter-Institutional Technical Commission on Water Issues. (mimeographed).

OIT/ILO, 2000, *Convention 169, on Indigenous and Tribal Peoples in Independent Countries.* Defensor del Pueblo with support from Swiss Labour Assistance (AOS).

Orellana Rene, 2000, *Agua que no has de beber, no la vendas… dejala correr.* Privatisation and Commoditisation of water rights under the proposed law on water resources, Separata, special issue of Articulo Primero magazine, Vol. 3, N° 5, CEJIS, Santa Cruz, Bolivia.

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

Palacios Paulina, 2003, *Estudio sobre marcos normativos indígenas y consuetudinarios en la gestión del agua en el Ecuador.* WALIR: CEPAL/ECLAC and Wageningen University, Quito.

PEIRAV, 1998, *La guerra del agua; conflicto y negociación entre organizaciones campesinas y SEMAPA en el Valle de Cochabamba, 1977-1998.* (Final Report and Attachments), Cochabamba: PEIRAV, UMSS-UAW. (mimeographed).

PULSO, 2003, weekly, Vol. 4, N° 218, Friday 10 – Thursday 16 October.

Proyecto de Ley del Recurso Agua, 2000, (Version No. 32) *Final Document.*

Rivera C Silvia, 1997, *La noción de 'derecho' o las paradojas de la modernidad postcolonial: indígenas y mujeres en Bolivia.* Derechos Humanos, Derechos de los Pueblos Indígenas, International Seminar, 4-7 March 1996, Cochabamba, Bolivia, *International Jurists' Commission,* France.

Solanes Miguel and Getches David, 1998, *Prácticas recomendables para la elaboración de leyes y regulaciones relacionadas con el recurso hídrico.* IDB/CEPAL/ECLAC, Washington D.C.

Toledo Victor, 1996, *Todas las aguas, el subsuelo, las riberas, las tierras.* Notes about the (lack of) protection for indigenous rights over their natural resources and contribution to a public policy for defence, Temuco, Mapuche region. (mimeographed).

Urioste Blas, 2001, *La era post – nacional en Amerindia: la diversidad se oficializa.* DHIAL Magazine 16, Library of Ideas, International Governance Institute. http://geocities.com/alertanet

Van Cott Donna Lee, 2000, *Latin American Constitutions and Indigenous peoples.* Compilation, Department of Political Science, University of Tennesseee. http://geocities.com/alertanet

Yrigoyen-Fajardo, Raquel, 2000, *Pautas de Coordinación entre el Derecho indígena y el Derecho estatal.* MIRNA MACK Foundation, Guatemala. http://geocities.com/alertanet

Yrigoyen-Fajardo Raquel, 2000, *Perú, Constitución pluralista, Judicatura monista: Un balance de la pos reforma.* Pluri-cultural and Multi-ethnic: Evaluating the implications for State and Society in Mesoamérica and the Andes. Institute of Latin American Studies (ILAS), University of London, London. http://geocities.com/alertanet.

Local irrigation practices in indigenous communities, Ecuador – © *R. Boelens*

official water law versus indigenous and peasant rights in Peru[1]

In Peru, state law, public policy and the government bureaucracy responsible for managing water either deny or only barely recognize the validity of indigenous and peasant water rights and usages. Transforming this situation will call for, among other tasks, a dialogue between the government and indigenous and peasant organizations, and subsequent legal amendments.

To contribute to this dialogue, I examine some central concepts for revisiting relations between the official law and indigenous and peasant rights to water. My purpose is to clarify the meaning of such categories as 'indigenous peoples', 'Indians', 'rural communities', 'peasants', 'ethnicity', 'development' and 'legal plurality', in order to foster a debate that will help to transform the current legal framework. In addition to these issues, I present an overview of current Peruvian water legislation to illustrate both its particular orientations and constraints, and the potential for supporting indigenous and peasant demands.

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In Peru, as many Andean countries, failure to recognize the validity of indigenous and peasant water rights and uses is due to the pretensions of the modern nation-state and the market economy, which aspire to create a political and economic arena with universal 'rules of play' that are divorced from the cultural, social and ecological diversity native to the Andes. Transforming such a situation will call for a major political movement to reclaim indigenous and small-farmer rights to control water according to their own approaches. It will also require a theoretical foundation to underpin demands for change, dialogue with the State and subsequent transformations in governmental legislation (Assies et al., 1999; Boelens and Dávila, 1998; Gelles, 2000; Guevara et al., 2002; Urteaga and Guevara, 2002).

To assist in this task, I will examine below some central concepts to revisit relations between official law and indigenous/smallholder water rights. Beyond technical issues regarding the law-making process itself, it is crucial to reflect upon the foundations of this problem. Therefore, we must question the meaning of such categories as indigenous peoples, Indians, rural communities, peasants, ethnicity, development and legal plurality. Only by clarifying them can we propose a productive debate leading to transformation of the current legal framework. In addition to addressing these issues, this article concludes with an overview of current constitutional and international norms that illustrate particular orientations and constraints, as well as potential for supporting indigenous and peasant demands.

'Indigenous peoples' and 'Indians'

Since the early 20th century, scholars have used different viewpoints to analyse Andean reality. Whereas the term 'peasant' (*campesino*) is a socio-economic category often used by anthropology and rural sociology of Marxist inspiration, the term 'indigenous' is an ethnic, cultural category coined by indigenous and culturally-inclined anthropology. This fundamental difference in the way of categorizing the anthropological subject has inspired diverging public policies and agendas. At one extreme, we find the modernizers, liberals or progressives, who intend to change the agrarian reality at any cost, including cultural costs. At the other, radical Indianists and advocates of recovering 'Andean technologies' favour a romantic vision that places Andean people beyond history and very close to autarkic utopia (Golte, 2000; Pajuelo, 2000; Mayer, 1993). The conceptual range of viewpoints has generated unending arguments about the specific features of 'Andean life', the rural-urban relationship, rural economics, the current force of Andean culture, and the propriety of the terms 'indigenous' and 'peasant' or 'small farmer'.

In the political domain, the military reform government (1968-1980) tried to eradicate the word 'Indian' from official national vocabulary, because of its tremendous racist, exclusive, semantic baggage, replacing it by 'peasant' (Gelles, 2000)[2]. However, during the past decade this term has been re-appropriated and retrieved by the indigenous themselves. This trend is clearest in the Amazon, where the word 'native' ended up sounding more patronizing than 'indigenous', but this is also evolving in the political language of Andean communities. Moreover, since the administration of President Alejandro Toledo (2001-2006) has embraced the indigenous cause (e.g. Declaration of Machu Picchu, creation of CONAPA [National Commission of Andean, Amazonian and Afro-Peruvian Peoples]), it is to be expected that the Andean population will also process their demands by affirming their indigenous nature.

The reasons for revitalizing this concept are multiple. The first is the ethnic revival, experienced as a backlash against neoliberal globalisation (Falk, 1998; Favre, 1998). The second is the re-valuing of ethnic differences after decades of assimilation and integration policies that have caused only frustration and dismay. The third is political advocacy of indigenous identity to get government funding (Appadurai, 1997) and support from national and international development agencies (e.g. to qualify for poverty relief programs). The fourth is the assertion of an 'exotic otherness' that would make its mark in national and international images of Peru, to appeal to tourists and their money. Finally, one very impor-

tant reason is the possibility of grounding local discourse and demands in the headway made in international indigenous law and domestic law. International forums such as the ILO, the UN, and the OAS are lending their ear, albeit selectively and with a certain distance, to indigenous demands, and beginning to enact them in international treaties, conventions or declarations that then become incorporated into national laws. When they achieve normative status, these provisions may be wielded by the indigenous as support for their rights vis-à-vis the State and third parties.

To advocate recognition of indigenous and small-farmer rights to water, it will be necessary to analyse both the anthropology implicit in the official outlook and the different theoretical currents of Andean anthropology that have addressed 'indigenous' affairs.

The legal definition of 'indigenous peoples' and 'indigenous' in effect in Peru since 1995, when the International Labour Organization (ILO) Convention 169 *On Indigenous and Tribal Peoples in Independent Countries* was approved and ratified, states that indigenous peoples are those who descend from population groups who lived in the country at the time of the Conquest or the establishment of current borders, and who have preserved all or part of their own social, economic, cultural and political institutions. Additionally, a fundamental criterion to determine indigenous affiliation, and the domain for application of the Convention, is awareness of ethnic identity, i.e. self-recognition.

As for theoretical currents, there are two major schools of thought on indigenous identity (Field, 1994; see Degregori, 2000). The first is the school of 'cultural survival', which emphasizes the primary or essential traits of the groups studied. These attributes are spatially and culturally distributed, discretely and distinctively compared to other groups. Language, political organization, ritual, religion or ways of adapting to the environment are markers that set and typify the group's identity and become essential elements to define 'indigenous' lifestyles. From this standpoint, the degree of 'Indian-ness' is measured by the nearness or distance from the identified parameters, and the group's survival or assimilation is forecast as a function of the feasibility of continuing to practice the cultural patterns that are considered essential. This position flows from structural-functionalist theory favouring the study of internal homogeneity and equilibrium, while providing a very solid ideological and political foundation for the indigenous movement and national and international activists engaged in promoting indigenous peoples' rights.

The second is the school of 'resistance'. Here it is postulated that indigenous identity is an outgrowth of historical evolution and various cultural, social and political encounters experienced by the indigenous peoples over history (pre-colonial, colonial, post-independence). The current situation and identity is, accordingly, the outcome of the struggles against territorial deprivation, cultural assimilation, social marginalisation, ethnic degradation and impoverishment of aboriginal societies affected by external or internal colonialism. In this context, indigenous identity is fluid, relational and flexible, because it condenses as a function of the constant re-definitions and re-inventions that peoples must make to resist and adapt to external pressures.

This school emphasizes that pressure and influence by outside forces may be of such magnitude that contemporary indigenous societies are not necessarily much like their predecessors, because they have incorporated different socio-cultural forms over time, which have transformed them completely (e.g. the Catholic religion, local *cabildo* governing boards, literacy, law). Thus, the identity of the indigenous peoples is not defined by the presence of immutable essences or historical links to a primordial past, but by the dynamics of resistance and adaptation that they have developed under a position of ethnic subordination and social exclusion.

Within this perspective, 'Indians' are, in fact, a colonial and governmental creation. Without both referents, there would be no 'Indians' or indigenous or peasant communities. Indians and communities are not the vestiges of isolated native societies, suspended in time, but the result of historical processes of resistance to exclusion, subordination and incorporation into a greater political economy (colonial, national, international). The autochtonous peoples would

not have been 'indigenous' and would have had their own historical discourse, were it not for centuries of struggles against the dominant invasive society.

As already mentioned, another way to approach rural Andean societies comes from materialistic anthropology. This trend of analysis is not ethnic-cultural but socio-economic. The advantage of this approach is that it emphasizes the relational nature of categories such as 'peasant' and 'rural community'. The disadvantage is that, in most cases, the specific features of ethnic and cultural phenomena tend to be lost in materialistic, economic and social categories.

In any event, the theoretical and political problem lies in determining the best way to approach this radical other-ness (we/them) that has marked the history of Peru and the Andean countries, in order to design public policies and institutions that are truly inclusive and equitable.

Identity, ethnicity and multi-cultural policies[3]

Cultural groups and societies invent different ways to symbolize reality and distinguish themselves from 'others'. By so doing, they assemble an ethnic identity characterized by self-acceptance or self-recognition and membership of certain groups. In this dynamic, identities do not express primary bonds ('the Andean essence') but emerge from ethno-political processes of inter-group differentiation. The dichotomy between own and other is based on ethnic markers formulated to play the game of identities. These markers may be customs, occupation, forms of political organization, language, geographical origin or so-called 'racial' differences among groups.

The game of local identities and the historical and cultural assembly of Andean ethnicity (ethnogenesis) are examined, among others, by Abercrombie (1991) and Gelles (2000). Abercrombie emphasizes the role of colonial and neocolonial historical experience in giving form to Andean identities: "In the Andean case, centuries of colonial domination (and resistance to it) have produced many hundreds of small, community-sized 'ethnic groups,' centreed on 'county seats,' i.e. towns into which pre-Columbian populations were forced to settle. Within these rural towns, 'Indians' (as they are called, deceptively, by city folks) generally define themselves as members of a local group, co-terminous with town-territory, and beyond it, as citizens of the province and department defined by the nation-state to which they also belong" (1991: 95-96).

Based on this observation, Gelles proposes an 'emic' concept of ethnicity emerging from the propitiatory ritual practices that a social group (people, community) performs to link up with their sacred universe of guardian mountains and waters. The important element of his proposal is that the play of ethnic identities is not reduced to a differential use of such categories as 'Indian', '*cholo*', '*mestizo*/*misti*' or '*criollo*' but is enriched by the countless 'pacts' between population groups and their local deities (e.g. *apus*, *cabildos*). In turn, Andean peoples and communities as a whole are differentiated from the rest of society because they share this belief system: "Because of the ways that Andean religion and ritual practice atomise power among thousands of mountains, each of which has a subject population dependent on it (and a patron saint) for fertility and prosperity, there is an almost endless differentiation of ethnic identity among social groups in the Andes. [It] is the shared conviction that mountains and the earth possess spiritual properties which, among other things (e.g. language, dress, diet), differentiate indigenous peoples from *mistis* and mainstream *criollo* society, a society that denies the validity of these Andean cultural orientations" (Gelles, 2000: 44-55).

Both authors emphasize that Andean identities are particular and local, which makes the concept of 'indigenous' questionable, to refer to such differentiated, fragmented local identities. Is there 'Andean' or 'indigenous' ethnic identity, or are these processes of 'micro-ethnogenesis' emptying the concept of 'ethnicity' of all contents? What is the impact of local ethnic focus and loyalty to local identities on the community's self-recognition as 'indigenous' and on the Peruvian indigenous movement? If we assume that self-recognition is a fundamental requirement in order to qualify as

an indigenous person then it is hard to accept that because of the theoretical need to classify human groups, we attribute that status to people who do not assume it explicitly. Despite these theoretical and political issues with the category of 'indigenous', Gelles does feel that it should be used as a broad label for the diversity that he himself documents: "The fact is that millions of Quechua-, Aymara-, and Spanish-speaking indigenous peoples living in the highlands of Ecuador, Peru, and Bolivia, while participating in diverse social and cultural worlds, also have similar beliefs and ritual practices that are distinctly Andean and are tied to fundamental notions of community and ethnic identity. These beliefs and practices, forged in a colonial context and today ignored or denigrated by dominant cultural discourses and policy-making in the Andean nations, are fundamental components of local systems of agricultural and pastoral production" (2000: 11-12).

Following Gelles, ethnicity in the Andes goes beyond the Indian-white dichotomy and is fleshed out by the multiplicity of local indigenous identities. Both extremes are sources of conflict (i.e. inter-community conflicts). In general, the common denominator in ethnic conflicts is that accentuating identities and differences hardens boundaries between groups, bolsters internal solidarity vis-à-vis the 'other' and denies the possibilities for intercultural understanding. This produces a spiral of symbolic and physical violence that may reach extremes, from discrimination and prejudice to persecution and 'ethnic cleansing'. Thus, it is fundamental to imagine and construct sensitive, sensible policies on diversity, reinforcing cultural communities' autonomy and proposing 'more sophisticated forms of political co-existence among cultures, forms respecting pluralism and the identity of universes in conflict'[4].

In general, ethnic conflict does not entail a simple dispute over the imposition of a system of collective representations, for the supremacy of a primary identity or the affirmation of one worldview over another. The struggle also involves control over or creation of an alternative political opening (e.g. state, autonomous region) or reconfiguration of economic and social power relations among the ethnic groups involved. As anthropologist John Comaroff (1992: 54) describes it, ethnicity originates in the asymmetrical incorporation of structurally differentiated groups into a given political economy.

In the contemporary world, the structural asymmetries of ethnicity are expressed in multicultural scenarios with diverse roots and directions. They may be the outgrowth of colonial experience or of a subsequent process of internal colonialism (Stavenhagen, 1990). They also come from modernizing, liberal or socialist national projects, that collide with the resistance, vitality and heterogeneity of the different cultural groups that they meant to homogenize (e.g. Latin American countries, former Soviet block). In this situation, Mexico has been the first Latin American country to acknowledge the limits of integration and postulate a policy of 'ethnic management' (Favre, 1998: 142). Other causes of multi-culturality are trans-national migratory flows, which have completely changed the ethnic and cultural make-up of vast regions of the planet, driven by globalisation (e.g. north-Atlantic countries) (Kottak, 1997; Kymlicka, 1995; Giusti, 1999).

Under the label of multi-culturalism, there are various political currents, not all truly counter-hegemonic, but rather paving the way to political subordination of indigenous peoples. That was the case of the 'Republics of Indians and Spaniards' in the Andes, where cultural differences were used to set up a hierarchical, excluding, segregated colonial order. In the case of structural State reform in Latin America and Africa, multi-culturalism acquires a distinctive connotation. The aim is for the new neoliberal State to stop providing the public goods and services that the development-oriented or intervening State attempted to give the public, and generate geographical and political fragments, to guarantee "indirect control at the lowest possible cost over population groups and territories that it can no longer directly administer" (Favre, 1998: 146). Favre distinguishes between integration of the indigenous under populistic governments and the ideology of 'Indianism' promoted by neoliberalism, observing that the margins of autonomy achieved do not transform the nature of the State, but just relieve it of obligations. For example, "the people bequeathed these territo-

ries must make sure that law and order reign there, and learn to live in their reservations with autonomy, that is, without any public services, which have run dry" (ibid.).

Along with these neoliberal reforms, multi-culturalism acquires hegemonic properties, when official discourse on globalisation makes structural differences and inequitable international relations the subject of a cultural other-ness meant to be respected and acclaimed (Degregori, 2000: 58-59; Golte, 2000: 222). However, the interesting thing is that multi-culturalism can also be associated with the emergence of counter-hegemonic discourse, since, as Giusti stresses, it is driven by the "process of de-legitimizing the western model of civilization" by rejecting "the supposed moral, political or epistemological universalism of the liberal paradigm" (1999: 222).

The problem for modern States, and Peru claims to be one of them, is to balance the principle of equality with that of respect for difference in a plural, open, democratic setting (Kymlicka, 1995; Kukathas, 1997). The old chimera of the national project must be left aside, to transform the 'problem' of ethnic and cultural multiplicity into the pivot of a new way of organizing the State, upgrading from the 'nation-state' to the 'multinational' or 'pluri-ethnic' State. This does not entail creating a sealed compartment for each culture, ethnic group or rural community identified by anthropological analysis. Rather, the idea is to affirm the identity of each, through intercultural dialogue. The fecund hybridisation produced by inter-ethnic contacts and by overcoming one's ingrown conceptual structures, can reveal 'our own solutions to new problems' as the key to unleashing the emancipating potential of multi-culturalism (Golte 2000: 223; Degregori 2000: 59-61). This task will call for refining the interpretative tools that will enable us to "meld horizons of meaning"[5].

In the case of indigenous and peasant water rights, it will be necessary for the dialogue with the State to be informed by the political philosophy and theory of multi-cultural law. This will make it possible to suitably underpin proposed laws for recognition of customary practices and indigenous law. It will be important to go beyond present-day 'common sense' about multi-culturalism and ethnicity, to enrich the discussion about the changes we need to make in State structure, in the nature of inter-ethnic relations and in relations between State and community or State and indigenous peoples. This will mean devising counter-hegemonic forms of multi-culturalism and inter-culturality that will be able to soften the conceptual and institutional rigidity of governmental law.

Rural communities in Peru

In Peru, rural communities and Peruvian anthropology maintain an "(almost) eternal love affair" (Urrutia, 1992). This leads to over-concentration on topics involving 'peasants' and their 'communities' (Monge, 1993). It is imperative to avoid reducing rural society to the 'peasant' community, to recover an overview of all stakeholders and processes in the countryside, to pose – for instance – the appropriate unit of analysis to study Andean irrigation (for a discussion, see Guevara et al., 2002; Urteaga and Guevara, 2002). The core issue is to determine what we mean by 'peasant community'. Some authors question the existence of the 'magma' described in scholarly papers, and the lack of ongoing, consistent reflection about this topic. Therefore, we do not have an adequate typology of communities and, paraphrasing the title of a famous Peruvian novel, Urrutia concludes that "we are actually not talking about 'one but many communities" (1992: 11)[6].

Mossbrucker is also skeptical, saying that "due to the great variety of functions and contents that the community assumes in different peoples, a clear, single definition of its *contents* is not currently possible, nor would it make much sense" (1990: 100). Even so, he proposes a series of abstractions to orient specific research:

- "It is an administrator of resources.
- It is an association of families who have the goal of utilizing resources placed under the institution's management.
- At present, when it exists, it is generally one of the conditions for the rural people to belong, in order to be able to participate in

the market.
• It is an instrument for rational problem-solving for members. Explanations that see irrational or purely spiritual motivations in the community, such as clinging to traditions, keeping the Andean culture alive, and so on are not explanations; at least, not scientific ones" (Mossbrucker, 1990: 101).

Golte (1992) presents a very interesting suggestion of approaching the problem from the standpoint of political practice and rural economics versus the colonial and post-independence State. He, like Arguedas and Fuenzalida, maintains that 'community' is a juridical concept originating in colonial legislation to handle 'ordinary Indians'. This social aggregate had a differentiated political organization and acquired customary rights to the land. This concept was picked up by early 20th century indigenous advocates in order to 'protect the indigenous race' and, more importantly, was selectively adopted by the rural people themselves, eager to qualify for exceptions and the State's protection. "The fact that, over the decades, many rural peoples found multiple, diverse reasons to seek coverage by this legislation, including adaptation of certain norms for political and economic organization, does not mean, however, that the social, political and economic organization of the peoples actually had the same basic features. This problem is central, because social sciences in general have not challenged this concept: on the contrary, they have described a huge variety of peoples as if they were really variants of a basic organization that fits them all" (Golte, 1992: 17). Golte's proposal helps us understand that subordinated social groups use State law to serve their own interests, beyond official intentions.

Accordingly, it is no surprise that Skar finds that *mistis* (*mestizo*, non-indigenous, mixed-blood) have manipulated the law on recognition of communities to establish "their pseudo-community under State protection" and that "ironically, although the law was made to benefit indigenous communities, the newly-established communities were often neither communities nor indigenous". He reports that the population of one community that had been recognized was mainly black, whereas other communities were apparently of Chinese descent (1997: 111).

The Peruvian government currently uses the definition of rural communities given in Law 25656 (General Law on Rural Communities, of 30-3-1987). There they are defined as public-interest organizations, with legal corporate status, comprising families who live in and control certain territories, linked by ancestral, social, economic and cultural connections, expressed in communal ownership of land, communal work, mutual assistance, democratic governance and development of multi-sectoral activities, geared toward members' self-realization and the country's progress.

Obviously, this definition is closer to the mythology woven by early 20th century indigenous advocates than to current social science. There is a similar mismatch between the image of the target population (e.g. community = co-operative) for the military government's agrarian reform (1969) and scientific findings of the time (Skar, 1997). Therefore, different theoretical and ethnographic approaches to Peruvian rural reality and the voices of social stakeholders themselves should inform the official vision. This task will make it possible to overhaul public policy on communities and Andean irrigation. Otherwise, the official law will once again fall for the conceptual mirage.

Development and construction of 'peasants' and 'indigenous people'

Intervention-oriented development projects often practise what is called 'the fallacy of under-differentiation', i.e. "the tendency to see 'less-developed countries' as more similar than they actually are," ignoring cultural diversity and adopting a uniform (often ethnocentric) approach for highly different types of beneficiaries (Kottak, 1997: 224). The Andean world is no exception.

Peasants and indigenous, as a synonym for 'needy population groups,' have often become key categories for development projects that prove their legitimacy by proclaiming themselves

to be indispensable components for their well-being. 'Developmentalists' manufacture arguments that then become self-fulfilling through project implementation. These arguments include assertions about the 'target population', classifying it and categorizing it so that it has the characteristics that call for a particular intervention. The most common claims underlying development projects geared toward indigenous and rural peoples consider, for instance, that 'the lifestyle of the indigenous peoples is materially inadequate', that 'integration will improve their quality of life', that 'interest by indigenous peoples in new technology reflects their desire to become integrated' and 'progress is inevitable' (Bodley, 1988: 3). These premises are the foundation for developmentalist interventions and for thrusting the target population into an expanded political economy, justifying the loss of their local autonomy.

However, there are 'culturally compatible' economic development projects that support locally-perceived needs for change, that are culturally appropriate in design and practice (Kottak, 1997). The problem is that, in their eagerness to support vulnerable groups, they often make the same mistake, defining these groups as 'traditional', isolated, autarkic entities, when in practice they have been relating with other groups of society for centuries. This tendency includes projects based on cultural ecology, which assume the existence of a harmonious balance between the behaviour of societies and their adaptation to the environment. Following functionalistic logic, in which a change in any element of the system leads to changes in the rest, they criticize development projects with 'westernising' technological aspects that modify or attempt to modify the cultural patterns of societal groups. By so doing, they conceive of these groups as pristine, idealized entities that maintain their cultural characteristics and ecological equilibrium. They often also forget, in their purism, that the indigenous and rural peoples themselves are often the ones who exhaust their own resources by using them unsustainably.

To cope with external interventions into their culture, organization and environment, some indigenous peoples have mobilized themselves, attempting to regain the initiative and take control. The Kunas in Panama organized themselves to protect a forest and wildlife refuge in their indigenous reservation. Forming the Committee of Indigenous Peoples and Communities of the Bolivian East (CIDOB) was crucial to defending indigenous territory in that part of Bolivia. Both Amazon indigenous confederations (AIDESEP, CONAP) and Peruvian rural confederations (e.g. CONACAMI, Confederation of Communities Affected by Mining) bear witness to the protagonist role that indigenous and rural folk are playing in the struggle to defend their rights. Interestingly, instead of grounding their claims in images of themselves as the 'needy population', they base their demands fundamentally on concepts of autonomy and sovereignty over their resources; i.e. on the power to decide for themselves about the type of development they want and need.

Any successful reworking of official laws on indigenous and rural water rights, for example, will require overcoming classical moulds of participation and the discussion of proposals prepared by the interested parties themselves.

State law, social meaning of law, and legal plurality

Revision of legislative policy on Andean irrigation must take into account the 'social life' of government legislation, i.e. what societal agents do with positive law. Beyond official desires and dictates, positive law acquires a constellation of social meanings that can be appreciated only when one abandons classical instrumentalism and pays attention to the social function that State norms acquire (Griffiths, 1992).

The problem is that the instrumental vision of law is widespread. It is shared by State representatives, development agents, classic legal sociology and people's 'common sense'. This ideology believes in the transforming power of law. It assumes that the law is a privileged instrument for inducing and making social changes (e.g. agrarian, labour or judicial reform laws).

This instrumental vision of law makes a series of assumptions. The first is that the State, society and the law are autonomous systems, but mechanically related. The second is that society and individuals respond directly and automatically to governmental norms. The third is that the law is the privileged 'voice' of the modern State. The State speaks, preaches and commands – even itself – in legal terms and ways (not in moral, philosophical or religious terms; Benda-Beckmann, 1989). The fourth assumption is that communication between the State and Society is perfect. The fifth is that positive-law norms are justified self-referentially if issued following the formalities of their own system. Finally, instrumentalism assumes the State's normative monopoly. On the basis of these assumptions, it is postulated that legal changes produce social changes according to the parameters established in public policy and are positive. It is also postulated that law is a rational system for planning and 'social engineering'.

However, law is not a rational system for planning and designing societal life. It is a cultural phenomenon and a social product, constructed by social and governmental agents who ply their strategies using reasoning and the available legal tools. Law prescribes, proscribes and also re-creates social reality. Moreover, in a context of legal plurality, governmental norms acquire meaning as they are interpreted, enforced and manipulated in societal settings. The important thing is not to see whether they were enforced as the legislator intended, but to determine what role they play in a pre-existing social and legal constellation.

It is also very important to understand how the State is experienced and coped with locally. Local expressions of the State are a far cry from the theoretical self-portrayal (i.e. the Constitution) which emphasises the normative hierarchy, bureaucratic specialization of functions and neatly-established lines of command. As Urban and Sherzer put it: "From the point of view of native peoples, states do not appear to be monolithic or goal-driven, but rather heterogeneous and random, guided by impenetrable and changing motives (…) The state is heterogeneous, composed of different and conflicting factions, intertwined with local power groups" (1991: 12).

The State, for rural communities and indigenous peoples, is not a consistent, self-regulated entity that impartially regulates the life of society. It acquires its physiognomy in terms of local conditions and the political deals that officials make with local power brokers. The supposed autonomy of the State and impartiality of authorities representing it become radically different in day-to-day political practice: "Just as the state is not a single monolithic entity but made up of individuals and semi-autonomous groups vying for resources and institutional survival, so too the state's policies and organizational models will be refigured at the local level" (Gelles, 2000: 174, note 6).

To analyse the water rights of indigenous and peasant population groups within and versus a positive-law framework, the theory of pluralism will be quite useful. Legal pluralism assumes the harmonious or conflicting co-existence of more than one legal order in a single geopolitical setting[7]. This concept has opposed the notion of 'legal centralism', which maintains that the only body able to create law is the State (Griffiths, 1986). On the contrary, many researchers have shown that both creation of norms and administration of justice are not exclusively State functions, but are produced in multiple social domains.

Law is not only a normative system with coercive capacity, but is above all an exercise of social imagination, a cultural construction for political purposes (Santos, 1995) whose changes are conditioned by its historical context. Additionally, it is crucial to remember that, in terms of power relationships and margins of autonomy, local legal and social orders have been incorporating elements and concepts from other groups and the State (Gelles, 2000). The possibilities of reproducing customary law lie precisely in the permeability and adaptability arising from its semi-autonomous nature.

In this context, law is seen as an instrument at the service of human behaviour, and is used according to people's needs. Individuals make changes to legal systems. For example, the quest for justice is not restricted to a single legal jurisdiction, but is carried out by what has been called 'forum shopping' (in the classic formulation by K. von Benda Beckmann).

Current law and the various strategies wielded by societal agents are the clearest expressions of the legal hybridisation process developed by rural communities to cope with their changing political and social contexts.

Official neoliberal legislation and indigenous and smallholder rights

Peruvian laws on natural resources and water deny, ignore or, at best, very restrictedly recognize the validity of indigenous and small-farmer rights. This slant has been reinforced over the past decade, in which the concept of economics and the State changed, reversing the polarity of traditional Latin American nationalism. Liberalization of the economy and the consequent need to adapt the State's role to these processes took form during the successive governments of former and now fugitive President Fujimori (1990-2000). In ideological terms, this economic liberalization has attempted to reinforce the concept of State sovereignty over natural resources. For some resources such as minerals, the Republic had eminent domain, reproducing the Spanish colonial royalties system. But for others such as water, this national control took much longer. For instance, it was only in 1969 that the military reform government nationalized water resources. In the recent wave of neoliberal reforms, the State has reaffirmed its monopoly over natural resources on behalf of the Nation and assumed the power of distributing them (e.g. through concessions, or transfers). The aim is not to use resources directly through public enterprises, but to tender them to investors, promote national and foreign investment, and generate fiscal revenues. Under this arrangement, the neoliberal State proclaims eminent domain over resources to provide legal security to concessionaires who receive usage rights.

The social and economic engineering required to develop this model assumes proper management of laws. One of the first legal instruments to take this orientation was the 1993 Constitution. First of all, it restricts the State's entrepreneurial activity to a minimum and secondly it defines renewable and non-renewable natural resources as the Nation's heritage, over which the State has sovereign control. 'The organizational law sets the conditions for its utilisation and its granting to private parties. A concession grants its bearer real rights, subject to those legal norms (Article 66). Developing the constitutional mandate, the organizational law for natural resource usage clarifies that this State sovereignty 'becomes the jurisdiction to legislate and exercise executive and judicial functions over them' and the power to grant 'rights for sustainable utilisation' (Law No. 26821 of 1997, Articles 6 and 19).

These norms aim to foster an active policy of concessions to the private sector and prevent the State from getting directly involved in natural resource usage. Accordingly, the national and foreign business sector has to finance and develop investment and utilisation projects. Pursuant to these provisions, the draft water law prepared by a commission under the Presidency in 2001, for example, empowered public administration to grant water concessions as real rights, whereas the new proposal in 2003[8] specifies that water concessions will be categorized as administrative real rights (Del Castillo, 2001).

Although the current proposal specifies the coverage of the real right granted[9], there is a problem with these approaches, namely, what happens with societal groups who have owned and used resources ancestrally? Is it enough to declare that ancestral rights of rural communities will be recognized and respected? What is the scope of the term 'ancestral rights' of indigenous and smallholder communities? Since the norm is designed for economic agents who have financing, in practice this will tend to displace Andean peoples and communities from the customary rights that they had prior to enacting the norm. In sum, the norm will create an implicit social hierarchy based on business capacity and the possibility of providing revenues for the State itself.

With this same approach, the law for utilisation of natural resources (mentioned above) stipulates, for example, that rural communities and local population groups may use 'natural resources freely accessible in the environment adjacent to their land' for ritual and subsistence purposes but 'without exclusive right' and 'providing that there are no exclusive or excluding third-party rights or reservation for the State'. It also states that local utilisation 'cannot be claimed against third parties, registered, or demanded' and that it concludes when the State grants the resource to other parties. Communities have preference to use resources located within their own land providing that the State has not reserved them for itself or granted them via concessions. Although the 1993 Constitution recognizes the power of rural and native communities to administer justice according to their own customary law, the norm does not recognize the validity of customary law to define, enjoy or exclude third parties from utilizing those resources.

Obviously, 'what was written with the right hand has been erased with the left hand'. That is, there is no recognition or effective legislative protection to enforce 'community jurisdiction' or local rights over resources they control. The right that has been granted is frail, subject to revocation whenever the State or third parties activate official mechanisms to appropriate or exploit those resources. Although it does produce the 'legal security' longed for by investors (e.g. mining companies) and paves the way for infrastructure development projects, the other side of the coin is the social and legal insecurity for local people (from the standpoint of customary allocation of access and usage rights).

In the specific case of water, the market has not yet been liberalized, because the law in effect dates back to 1969, and is eminently public-sector – and State-oriented. It is used by many rural society sectors to oppose full privatisation of water. However, the numerous proposals drafted since 1993 have aimed to fit this special law into the current constitutional framework, arguing that water management must be freed of bureaucratic stumbling-blocks, and local management organizations must be granted greater autonomy (e.g. users' boards, irrigators' committees; see Del Castillo, 2001; Rebosio, 2001). The issue in this national debate is precisely the degree to which water law will be bent toward liberal postulates, what role the State will play in water management (overseeing, arbitration, neutral), what room for local autonomy will be acceptable for sustainable water management, and how equitable, efficient water distribution can be encouraged (e.g. the electronic conference on water law, Del Castillo, 2001).

The status of indigenous rights in the Peruvian constitution and legal system

Peru's 1993 constitution recognizes – in Article 2(19) – that all persons are entitled to their ethnic, cultural identity. On the basis of this principle, the State recognizes and protects the nation's ethnic and cultural plurality. It also declares that Quechua, Aymara and other native languages are official in addition to Spanish, in areas where they predominate (Article 48). These individual rights have their collective correlation in Article 89, which obliges the State to respect rural and native communities' cultural and ethnic identity. That article also recognizes communities' legal existence and corporate-body status and stipulates that they are autonomous in their social, economic and administrative organization, in communal work and in freedom to distribute their land.

In Article 88, the State guarantees the right to own land privately or communally. However, unlike the above constitutional provisions, communal ownership of land is only non-transferable, having lost the protection against seizure and transfer granted by the 1933 and 1979 constitutions. Furthermore, this non-transferability has been curtailed by stipulating that communities can lose their land through legal abandonment. Such abandonment happens when, according to Legislative Decree No. 653 of 1991, "the owner has left the land uncultivated for two consecutive years". In this case, land becomes public domain and is put up for sale. The reduction of constitutional protection aims to incorporate communal land into the market economy[10].

In the administration of justice, the Constitution has innovated by recognizing the authorities of rural and native communities as empowered to exercise judicial functions within their territories, applying customary law as long as they do not violate fundamental human rights (Article 149). Finally, the amendment of Chapter 14 on decentralization, regions and municipalities includes norms to promote the right to political participation (Article 2.17) for native communities and 'original peoples'[11] in membership of regional and municipal councils[12].

In the field of international law applicable to indigenous peoples, the most important treaty ratified by Peru is the International Labour Organization Convention 169 on Indigenous and Tribal Peoples in Independent Countries. The Convention has been in force since February 2nd 1995[13]. As indicated in the first section, the Convention stipulates who qualifies under the legal definition of 'indigenous peoples' and 'indigenous' (Article 1. 1.b.2).

Regarding indigenous rights and the environment, Peru has signed the most important documents from the Earth Summit (Rio de Janeiro, 1992). Whereas the Rio Declaration is legally binding, Agenda 21 is not, and is an example of 'soft law' because it sets principles that are only morally binding on States. In general, the need is recognized for indigenous peoples to participate in policies ensuring sustainable development (Principle 21). Agenda 21 devotes a chapter to the role of indigenous peoples, recognizing their wealth of traditional knowledge regarding natural resources and environmental management. It recommends for States to foster the resolution of conflicts of land and resource use and to protect traditional knowledge. It also recommends ensuring the participation of indigenous peoples in the design of environmental laws and policies that affect them.

In domestic law, the legal definition of rural communities and community members is crucial when determining the enforcement of special legislation. The most important laws are the 1984 Code of Civil Procedure and the General Law on Rural Communities, No. 24656 of 1987. Article 134, in the book on corporate bodies, of the Code states that: "Rural and native communities are traditional, stable public-interest organizations, constituted by individuals and oriented toward the purposes of optimal utilisation of their property, for general, equitable benefit of community members, promoting their integrated development. They are regulated by special legislation".

However, this recognition is subject to a series of conditions that the Code itself establishes in the following articles:

"For communities to exist legally, in addition to filing for registration, they must be officially recognized" (Article 135).

"The Executive Branch regulates the status of communities, ensuring their economic and administrative autonomy, as well as their members' rights and obligations and other norms for their recognition, registration, organization and operation" (Article 137).

Evidently, the apparently full recognition by the 1993 Constitution (rural communities' legal existence and corporate-body status) collides with the Civil Code barriers that impose the requirements of official registration and recognition by administrative agencies. Furthermore, although the Constitution could be construed to override, being the highest-ranking norm, in daily legal practice communities can operate successfully only when they accredit their official registration and recognition.

The General Law on Rural Communities, Article 2, defines them as "public-interest organizations with legal existence and corporate-body status, comprising families who inhabit and control certain territories, linked by ancestral, social, economic and cultural connections, expressed in the communal ownership of land, communal work, mutual assistance, democratic governance, and development of multi-sectoral activities…"

To obtain official recognition and registration of their legal status, the regulations of the General Law on Rural Communities (Supreme Decree 008-91-TR) establish that communities must have their territory in their possession, feature the characteristics defined in Article 2 above, and have the consensus of at least two thirds of their members to begin the procedure. Additionally,

to obtain title to their territory, communities must present a series of proofs as evidence of their ownership. In fact, Law 24657 on the title and boundaries of rural community territory (1987) states that: "Communal territory comprises the community's original land, land acquired according to common and agrarian law, and land awarded for agrarian reform purposes. Original land includes: what the community has possessed, including land not being used, and that land indicated in their titles" (Article 2).

On belonging to the community, Article 5 of Law 24656 distinguishes between members and qualified members. The former are born in the community, offspring of community members and people integrated into the community. They can be integrated by establishing a stable couple with a community member or when a person of legal age applies to the general assembly to be admitted as a member. Qualified members are those of legal age (or acquired civil capacity), living in the community for over five years, not belonging to any other community, and registered in the community roster. Additionally, each community's by-laws can establish further requirements, besides those of the Law.

For proper natural resource management, Convention 169 prescribes that the State must recognize and protect indigenous peoples' land and habitat because they are essential for their material and cultural reproduction. It must also oversee indigenous peoples' rights to natural resources within their territories. These "rights include peoples' right to take part in using, administering and conserving such resources" (Art. 15.1). However, in royalty-based systems such as Peru's, which attribute ownership of underground minerals and resources to the State, indigenous peoples' rights to participation and consultation in decisions about using these resources are clearly restricted (Art. 15.2).

Regarding identity and use of natural resources, Peruvian law states that "the State respects and protects the community's uses, customs and traditions [and] fosters the development of their cultural identity"; and that the community is obliged to "defend ecological equilibrium, preservation and rational use of natural resources" (Arts. 1.d and 3.e, Law 24656 of 1987).

Along these lines, the Organizational Law for Sustainable Use of Natural Resources mentioned above (Law 26821 of 26-6-1997), for example, defines water as a natural resource and recognizes ancestral modes of natural resource use by rural communities and local population groups. Unfortunately, as we have seen, it then imposes the State's eminent domain to grant management of these resources, thus favouring governmental rights (e.g. concessions).

Additionally, Article 18 ratifies liberal thinking by stating that "Rural and native communities have preference in sustainable use of natural resources on their land, to which they have due title, except for the State's express reservation or exclusive or excluding rights of third parties". This clear pre-eminence of rights issued by the State contradicts the provisions of ILO Convention 169, by failing to respect participation by and consultation with indigenous peoples affected by use of natural resources located in their territories (Articles 15.1, 15.2, 13 and 14).

Environmental law – gathered into the Environmental Code in effect since 1990 (Legislative Decree 613) but emasculated by the government that enacted it, because the headway it made "increased the cost of doing business" – extends recognition of rural communities' rights in natural protected areas: "The State recognizes rural and ancestral native communities' right to own land that they possess within protected natural areas and their zones of influence; [and] promotes participation by such communities for the purposes and aims of protected natural areas where they are located" (Article 54).

In an apparent play on words, the environmental code introduces the category of 'cultural natural heritage', as "all archaeological or historical constructions that, being integrated into the environment, make rational, sustained use possible" (Article 59). It states that areas containing them cannot be claimed for agricultural, mining, or such purposes, and that "areas where there are terraces, canals, aqueducts or any construction of an archaeological or historic nature shall be excluded from any concession" (Article 61). Since these articles on cultural natural heritage match the definition of the elements constituting human settlements in general (Article 80,

Environmental Code), we find that a fundamental element in these settlements, in addition to the soils, water, natural resources and atmosphere making them possible, is "the economic and social infrastructure that shapes organization and conditioning of space".

Since indigenous peoples, local population groups and rural communities form human settlements, these provisions could be used to affirm their rights to control the cultural natural resources that they manage (e.g. canals, terraces) and to exclude third parties who attempt to gain concessions over them. These articles could also be used to defend and assert their customary ways of using resources, because this organization is, *per se*, a constitutive element of their human settlements, i.e. part of the "economic and social infrastructure that shapes organization and conditioning of space".

The General Law on Water in effect (Decree Law 17752 of 1969) makes no mention whatsoever of rural and native communities' rights to manage their water resources. What we do find is uniform, abstract treatment for all those who use water for agrarian and non-agrarian purposes, whom the Law terms, in general, 'users' (Article 12). Article 136 of the Law establishes that water users in each irrigation district must organize into Users' Boards and Irrigators' Commissions for each Irrigation District Sector. Current regulations for this Law have no explicit reference, either, to rural communities' rights.

Legislative Decree 653 (Law to Promote Agrarian Investments) and its regulations maintain the concepts of users, users' board and irrigators' commissions, which are also present in Supreme Decrees 047-2001-AG and 057-2001-AG, which establish the current regulations for water user organizations (Articles 1 and 2). The first norm defines the Irrigation District as "the continual, geographical area, comprising one or more watersheds, sub-watersheds or part thereof, in the jurisdiction where the Technical Irrigation Administrator has authority to enforce the General Law of Water". It also orders that: "Water users in each Irrigation District shall mandatorily organize into Irrigators' Commissions for each irrigation sector or subsector and a Users' Board for each Irrigation District. They shall also register in the respective roster to be able to use water and pay the water fees by unit of volume"(Article 59, Leg. Dec. 653).

These norms make no direct reference, either, to rural communities, but it follows that communities must organize an irrigators' commission in order to join the respective users' board. To have full rights to participate in the irrigation system, this commission must be recognized by the administrative ruling of the Technical Administrator of the Irrigation District (Article 4, Supreme Decree 057-2001-AG; Legislative Decree 653, Article 60). Comparing this norm with the provisions of the regulations of the General Law on Rural Communities (Supreme Decree 008-91-TR of 1991), we see that communities materialize this participation by setting up a specialised irrigation committee.

The law has granted preference to communities who decide to use mineral/medicinal water located in their territory for tourism. In this case, they can set up a specialised committee and the regulations of Law 25533 establish that the Ministry of Industry, Tourism and Integration is responsible for granting the usage license. If the rural communities decide not to take advantage of this possibility, the concessionaire must obtain explicit community authorisation before the State will grant the concession.

In general, Peruvian norms recognize indigenous peoples' and rural communities' territorial rights by subjecting them to a series of requirements, such as registration of their land, providing continual possession of it, and maintaining traditional forms of social organization. The problem they face, pursuant to the Constitution, the Civil Code and Legislative Decree 653, is that their land can be declared legally abandoned when they fail to occupy and work the land for two consecutive years. Undoubtedly, this possibility places indigenous peoples and communities in a very fragile position, because it is well known that, in Andean and Amazon ecosystems, land may be left fallow for longer than this legal limit. Moreover, the Law considers that all unused land is State property, which makes it urgently necessary to obtain communal title to land, because the legal presumption assumes against communities.

The Law not only recognizes rights to a given territory but includes the habitat traditionally used by indigenous peoples (particularly, in the Amazon region). This opens up possibilities to defend resources they use without necessarily having to be located within their delimited territory. As for uses, the Organizational Law for Sustainable Use of Natural Resources recognizes ancestral modes of natural resource use by rural communities and local population groups, but subject to the State's eminent domain; the State may alter these uses and grant them via concessions. It also subjects recognition of ancestral modes of natural resource use to the condition of respecting environmental protection norms.

In terms of water used for consumption, the norms recognize no specific treatment for indigenous rights. In general, they state that consumption to meet primary needs requires no administrative authorisation. Also, the State must respect communities' uses and customs and consequently recognizes traditional modes of natural resource usage. In theory, uses for consumption by indigenous and small farmers must abide by general water law.

In theory, the system of constitutional guarantees, the constitutional nature of indigenous rights and their establishment in international treaties should help Andean communities and farmers interested in having their customary rights respected or preventing their fundamental rights from being violated. They could apply to the judicial authorities to demand respect and affirmation of their rights (e.g. to ethnic identity, community autonomy, ownership and the rights provided for in ILO Convention 169). To achieve this, they could take different actions, depending on the nature of the threat or violation of their rights, and could even activate international human rights protection mechanisms (e.g. the Inter-American Human Rights Protection System of San José). In this way, they could force a supportive action (against authorities who are undermining their rights), a declaration of unconstitutionality or class action (against laws and decrees that violate the Constitution), or an action of compliance (for the authorities to abide by the norms).

Conclusion

This overview shows how necessary it is to radically transform the relationship between peasant and indigenous peoples and the State. Not only must strategies be designed for defence on the basis of official laws, both national and international, but above all a political mobilization must achieve the recognition and legal establishment of indigenous and peasant rights to control such vital resources as water.

ENDNOTES

(1) Based on Guevara et al. (2002) and on Urteaga and Guevara (2002).

(2) Skar remarks that "the term 'Indian' was forbidden, under the pretext that the word 'small farmer' [or peasant] was more dignified… Because of strict use of the term 'small farmer', Indians are grouped into the Marxist economic class of peasants, and their cultural identity – what makes them so different from the rest of the Peruvian population – is discarded as something undesirable or unimportant". (1997, 102-103).

(3) Guevara-Gil 2001.

(4) Giusti 1999, 222. In the context of Latin American constitutional law, Clavero makes a truly advanced proposal (2000).

(5) As Taylor puts it, "true value judgements assume the fusion of normative horizons, assuming that we have been transformed by studying the 'other', so that we do not judge according to only our familiar original norms" (1993, 104).

(6) Enrique Congrains, No una, sino muchas muertes [Not one, but many deaths] (Lima, 1957).

(7) A summary of the main technical contributions in Guevara-Gil and Thome (1992).

(8) Proposed Water Law, April 2003, drafted by the Multi-Sectoral Technical Commission D.S. 122-2002-PCM.

(9) According to the Proposal, "[…] the National Water Authority grants the titular holder the right to utilize water […]" (Article 45) and the titular holder may "use, enjoy, allocate and claim an annual allotment of the water extracted" (Article 46); the concession can expire because of "[…] c) failure to pay two consecutive quotas of the economic retribution […] d) un-authorized change of the water utilisation activity; and e) when the titular holder has been penalized twice for the same water norm infraction, of a very serious nature, and has not complied with the orders issued by the National Water Authority".

(10) The 1984 Code of Civil Law states that "communities' land may not be transferred, encumbered or seized" (Article 136) but the subsequent constitutional mandate has curtailed these features of communal property.

(11) Note that here a new term is introduced into Peruvian positive law. The juridical and social scope of the category of "original peoples" must be determined. According to CONAPA, the National Commission of Andean, Amazonian and Afro-Peruvian Peoples, "the term 'indigenous' includes and may be used as a synonym of 'original', 'traditional', 'ethnic', 'ancestral', 'native', or other such words" (Article 5 of the proposed constitutional amendment presented to Congress on 17-4-02; in Congreso del Perú 2002, 59).

(12) Law No. 27680 on Constitutional Amendment of Chapter XIV, Title IV on Decentralisation (6-3-2002) establishes that regional governments have political, economic and administrative autonomy and comprise the President (executive branch), the Co-ordinating Council (consultative and co-ordinating branch), and the Regional Council (normative and oversight branch). The regional council shall have no more than 25 members and is empowered to "regulate activities and/or services regarding agriculture (…), energy, mining (…) and the environment" (Article 192.7). The constitutional amendment involves a law that will establish "minimum percentages to grant access for representation in terms of gender, native communities and the original peoples on Regional Councils ". Law No. 27683 on regional elections (27-3-02) stipulates that the list of candidates for the regional council will comprise "no less than 30% men or women, and at least 15% representatives of native communities and original peoples of each region where they are located " (Art. 12).

(13) According to the Fourth and Last Transitional Provision of the 1993 Constitution, constitutional norms and those of lower hierarchy must be interpreted according to the Universal Declaration on Human Rights and other international treaties ratified by Peru dealing with fundamental rights and freedoms. Accordingly, ILO Convention 169 has constitutional status, and informs interpretation of all Peru's juridical pyramid.

REFERENCE LIST

Abercrombie Thomas, 1991, *To Be Indian, To Be Bolivian: 'Ethnic' and 'National' Discourses of Identity.* Greg Urban and Joel Sherzer, eds., Nation-States and Indians in Latin America, pp 95-130, University of Texas Press, Austin.

Appadurai Arjun, 1997, *Modernity at Large. Cultural Dimensions of Globalisation.* University of Minnesota Press, Minneapolis.

Benda-Beckmann Franz von, 1989, *Scape-goat and the Magic Charm: Law in Development Theory and Practice.* Journal of Legal Pluralism 28, pp 129-148.

Bodley John, 1988, *Tribal Peoples and Development Issues: A Global Perspective.* Mayfield Pub, Mountain View.

Boelens Rutgerd and Dávila Gloria, eds., 1998, *Searching for Equity. Concepts of Justice and Equity in C ommunity Irrigation.* Van Gorcum, Assen.

Castillo Laureano del., 2001, *El largo camino hacia una ley de aguas.* Basic document for the electronic conference on Water law: proposals from rural development. Lima, September 12 to October 3, 2001. www.agualtiplano.net [revised 29-2-02]

Comaroff John, 1992, *Of Totemism and Ethnicity.* John and Jean Comaroff, Ethnography and the Historical Imagination, pp 49-67. Westview Press, Boulder.

Congreso de la República del Perú, 2002, *Draft Proposal, Law to Amend the Constitution.* Constitution, By-laws and Impeachments Commission Congreso de la República, Lima.

Degregori Carlos Iván, 2000, *Panorama de la antropología en el Perú: del estudio del Otro a la construcción de un Nosotros diverso.* C. I. Degregori, ed., No hay país más diverso, Compendio de antropología peruana, pp 20-73, Red para el desarrollo de las ciencias sociales, Lima.

Falk Richard, 1998, *The Decline of Citizenship in an Era of Globalisation.* The Transnational Foundation for Peace and Future Research, Lund. http://www.transnational.org/forum/meet/falk_citizen.html (20-1-02).

Favre Henri, 1998, *El indigenismo.* Fondo de Cultura Económica, Mexico DF.

Field Les, 1994, *Who are the Indians? Reconceptualizing Indigenous Identity, Resistance, and the Role of Social Science in Latin America.* Latin American Research Review 29(3), pp 237-248.

Gelles Paul, 2000, *Water and Power in Highland Peru. The Cultural Politics of Irrigation and Development.* Rutgers University Press, New Brunswick.

Giusti Miguel, 1999, *Alas y raíces. Ensayos sobre ética y modernidad.* Fondo Editorial, Pontificia Universidad Católica del Perú, Lima.

Golte Jurgen, 1992, *El problema con las comunidades.* Debate Agrario 14, pp 17-22.

Golte Jurgen, 2000, *Economía, ecología, redes. Campo y ciudad en los análisis antropológicos.* Carlos Iván Degregori, ed., *No hay país más diverso.* Compendio de antropología peruana, pp 204-234. Red para el desarrollo de las ciencias sociales. Lima

Griffiths John, 1992, *Legal Pluralism and the Social Working of Law.* Bob Brouwer et al., eds., Coherence and Conflict in Law, pp 151-176. Kluwer Law and Taxation Publishers. Deventer/Boston.

Guevara Gil Armando et al, 2002, *Estudio de la legislación oficial peruana sobre la gestión indígena de los recursos hídricos.* Indigenous Water Rights, Local Water Management, and National Legislation. WALIR Studies, Volume 2, Rutgerd Boelens (ed.), pp 101-131, Wageningen University and UN CEPAL/ECLAC, Wageningen.

Kottak Conrad Phillip, 1997, *Antropología cultural. Espejo para la humanidad.* McGraw-Hill, Madrid.

Kukathas Chandran, 1997, *Multiculturalism as Fairness.* The Journal of Political Philosophy 5(4), pp 406-427.

Kymlicka Will, 1995, *Multicultural Citizenship. A Liberal Theory of Minority Rights.* Clarendon Press, Oxford. (Ciudadanía multicultural. Barcelona: Paidos, 1996).

Mayer Enrique, 1993, *Recursos naturales, medio ambiente, tecnología y desarrollo.* Paper, Seminario Permanente de Investigación Agraria, Arequipa.

Monge Carlos, 1993, *Transformaciones en la sociedad rural.* Paper, Seminario Permanente de Investigación Agraria, Arequipa.

Mossbrucker Harald, 1990, *La economía campesina y el concepto "comunidad": un enfoque crítico.* Instituto de Estudios Peruanos, Lima.

International Labour Organization (ILO), 1992, *Convenio 169 sobre Pueblos Indígenas y Tribales en Países Independientes.* OIT, Lima.

Pajuelo Ramón, 2000, *Imágenes de la comunidad. Indígenas, campesinos y antropólogos en el Perú.* Carlos Iván Degregori, ed., Nohay país más diverso, Compendio de antropología peruana., pp 123-179, Red para el desarrollo de las ciencias sociales, Lima.

Peru 1993 *Constitution*. Fondo Editorial de la Pontificia Universidad Católica del Perú [1995], Lima.

Rebosio Guillermo, 2001, *Marco legal vigente para la gestión del agua.* Reference document 3 for the electronic conference on Water law: proposals from rural development, Lima 12 September to 3 October 2001. www.agualtiplano.net [revised 29-2-02]

Santos Boaventura de Sousa, 1995, *Toward a New Common Sense. Law, Science and Politics in the Paradigmatic Transition.* Routledge, New York, London.

Skar Harald, 1997, *La gente del valle caliente. Dualidad y reforma agraria entre los runakuna (quechua hablantes) de la sierra peruana.* Fondo Editorial, Pontificia Universidad Católica del Perú, Lima.

Starn Orin, 1992, *Antropología andina, 'andinismo' y Sendero Luminoso.* Allpanchis 39, pp 15-71.

Stavenhagen Rodolfo, 1990, *The Ethnic Question. Conflicts, Development, and Human Rights.* The United Nations University, Tokyo.

Urban Greg and Sherzer Joel, 1991, *Introduction: Indians, Nation-States, and Culture.* G. Urban and J. Sherzer, eds., Nation-States and Indians in Latin America, pp 1-18, University of Texas Press, Austin.

Urteaga Crovetto Patricia, Guevara-Gil Armando, 2002, *Legislación de recursos hídricos y derechos indígenas. Propuesta de investigación para el caso del Perú. Water Law and Indigenous Rights. The Research Proposals.* WALIR Phase 1, Volume 1, Rutgerd Boelens and Miguel Solanes, co-ordinators, pp 24-54, Wageningen University and UN CEPAL/ECLAC, Wageningen/Santiago, Chile.

Urrutia Jaime, 1992, *Comunidades campesinas y antropología: historia de un amor (casi) eterno.* Debate Agrario 14, pp 1-16.

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Water Law and Indigenous Rights

A comparative research and action programme focusing on peasant and indigenous water rights and the legal and material discrimination of local water management forms:

In regions like the Andes, peasant and indigenous water management systems are the fundamental basis for sustaining local livelihoods and national food security. Nevertheless, in addition to long-standing, extreme inequalities with regard to water access, indigenous and customary water rights are being encroached upon, discriminated against and put under growing pressure. Consequently, millions of indigenous water users are being marginalized. Moreover, they are usually not represented in national and international decision-making structures. This contributes to a situation of increasing inequality, poverty, conflict and ecological destruction. The Water Law and Indigenous Rights programme sets out to understand indigenous and customary rights and management forms and sheds light on how they are legally and materially discriminated against and undermined.

An inter-institutional think-tank that critically informs the debates on indigenous and customary rights to facilitate action of local, national and international platforms:

The WALIR initiative is a research and action programme that supports and deepens the debates on indigenous and customary rights and their relevance to water legislation and policy, both to facilitate local and national action platforms and to influence law- and policy-makers. Thereby, WALIR aims to make a concrete contribution to better legislation and water management policies. Of major concern are the distribution of equitable rights and democratic decision-making, as well as support for the empowerment of marginalized water use sectors.

A research alliance that presents concepts, methodologies and contextual proposals concerning the recognition of indigenous water rights and management rules:

WALIR seeks to integrate in its analysis and proposals its fundamental water management concepts:

- Institutional viability: an appropriate organizational and normative framework that sustains water management, embedded in its cultural context
- Equity: social justice and acceptability of the rules and practices that inform water management and distribution
- Political democracy: veritable representation of the diverse, multiple stakeholder groups in decision-making on water management
- Human capacity and capability: adequate water management knowledge and contextual skills
- Economic viability: economically sustainable water management to maintain livelihoods and production strategies
- Productivity, efficiency and effectiveness of water use: productive and appropriate land and water management as well as technical sustainability
- Security of water access: the ability to enforce water use rights now and in the future

• Ecological equilibrium: protection of good quality water resources and prevention of ecological degradation

A strategy that builds upon academic investigation, action-research, capacity building and advocacy, together with existing networks:

The strategy of WALIR builds upon research and action, together with local, regional and international networks – both indigenous and non-indigenous. While WALIR research also covers the cases of Mexico and the United States, its main focus of action is in the Andean countries: Peru, Bolivia, Chile and Ecuador. Central issues are indigenous water rights in the context of local rule-making, in national law and in international treaties. Several thematic research projects complement and strengthen the network, and lay the foundation for a broad international framework: for example, on water management and livelihood systems, indigenous identity, gender, food security, legal pluralism, and methods for dialogue on water policy. On the basis of this research, WALIR and its counterpart platforms implement a number of exchange, dissemination, capacity building and advocacy activities on water legislation.

An endeavour joining committed, inter-disciplinary researchers, platforms and counterpart organizations in Latin America, North America and Europe:

WALIR is coordinated by
- Wageningen University, Department of Irrigation & Water Engineering, The Netherlands
- UN/ECLAC – United Nations Economic Commission for Latin America and the Caribbean

The basic WALIR network of research and action counterparts consists of
- Peasant & indigenous organizations and NGOs in Peru, Bolivia, Chile, Ecuador and Mexico
- University of California at Riverside, Dept. of Anthropology, USA
- University of Colorado at Boulder, School of Law, USA
- Universidad Católica del Perú
- IPROGA / Inter-institutional Program for Improved Water Management, Peru
- CEDLA / Centre for Latin American Research and Documentation, The Netherlands
- Universidad Mayor San Simon – Centro AGUA, Bolivia
- Universidad Jesuita Alberto Hurtado, Chile
- IRD / Institute for Development Research, Montpellier, France
- CAMAREN / Capacity-building Network on Natural Resource Management, Ecuador
- CONAIE / Confederation of Indigenous Nationalities of Ecuador
- El Colegio de San Luis, México
- CGIAB / Commission for Integrated Water management in Bolivia
- SNV / Netherlands Development Organization, The Netherlands, Peru, Ecuador

The Water Unit of the Netherlands Ministry of Foreign Affairs funds the program.

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indigenous peoples and water resource management in Mexico

Drying up lakes and wetlands, moving rivers to build hydropower plants, polluting watersheds and ruining springs – these are government decisions that have affected indigenous peoples and rural communities in different states and regions of Mexico. This situation has not changed during the government of President Vicente Fox, as shown by the dams on the Usumacinta River.

Water management in indigenous regions is a complex issue. It is not enough to ensure adequate flow to irrigate crops. Ecosystems must also be protected. It is vital to regulate water cycles, for the survival of the people living there. Government failure to keep its word in agreements with Zapatismo has left pending the issue of respect for indigenous peoples' rights to manage and control basic territorial resources, such as water.

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Indigenous communities in Mexico have often had to defend the water resources they need to sustain their lifestyles and livelihoods. They have also had to cope with governmental decisions that fail to consider their needs and rights. Drying up lakes and wetlands, flooding towns and farmland to build huge dams, polluting rivers and aquifers with petroleum industry wastes, transferring water to big cities – these are just a few examples of decisions that have affected the indigenous peoples in different regions of Mexico.

Changes made since the federal elections in 2000 have not substantially altered the involvement of indigenous peoples in water management decision-making, particularly in regard to drastic alterations in the territories where they live, such as the construction of major reservoirs to generate electricity.

On the contrary, as we shall see below, there is evidence that the Vicente Fox government is repeating the same types of measures as in the past, by building dams against the interests and rights of indigenous and rural communities[1]. The government's failure to keep its commitments under the San Andrés agreements[2], defended not only by the Zapatista movement, but also by the largest coalition of unarmed indigenous organizations, confirms the position taken by the federal government in this field.

Studies under the Water Law and Indigenous Rights (WALIR) programme in the Andean area show that the issue of water rights, always linked to the right to territory, is one of the great challenges facing the indigenous peoples of Latin America (Gelles, 2002; Gentes, 2002; Guevara et al., 2002, among others). This is a key issue for water management on this subcontinent, if we consider that conservative calculations estimate that 40 million indigenous people live in this part of the world.

The purpose of this paper is to offer an overview of the water management challenges facing Mexico's indigenous peoples. Democratic water management must include respect for the rights of indigenous peoples and rural communities, which means actually including them in decision-making. Unfortunately, this issue has not received due attention by government institutions in Mexico[3].

This article is divided into four sections. The first offers an overview of Mexico's indigenous peoples and their relationship with water resources. The second presents background information on water management in Mexico, and the role played by indigenous people. The third section offers a summary of some of the main problems facing rural communities and indigenous peoples in water management. Special mention is made of links between water management and territorial management, which is a central element in the program of claims raised by various indigenous organizations of Mexico. Finally, some conclusions and proposals are presented.

The indigenous peoples of Mexico: a brief overview

Mexico is a country with great ethnic and linguistic diversity. According to the 2000 population census, there are just over 10 million indigenous persons, 10.5% of the total population, speaking over 62 languages and living throughout the country, although mainly concentrated in the central and southern states[4].

The states with the greatest indigenous population are: Oaxaca, 1.5 million; Chiapas, one million; Veracruz, Yucatán, State of Mexico and Puebla, with about 900,000 indigenous inhabitants each.

Hidalgo, Guerrero, Quintana Roo, San Luis Potosí and Tabasco are other states with sizeable indigenous populations. Among the northern entities on the US border, Sonora has a significant population of Yaquis and Mayos, Chihuahua has Tarahumaras, and Coahuila has a small Kikapú group. About 27% of the country's 2443 municipalities have populations that are 40% or more indigenous (Figure 1).

Some 333,000 indigenous people live in Mexico City, the capital, making it the urban concentration with the largest indigenous population in Mexico. The languages most spoken are Náhuatl, Maya and different variants of Zapotec and Mixtec.

Figure 1. Distribution of Indigenous Populations in Mexico

National Indigenous Affairs Institute

Source: INI-CONAPO
Estimate of indigenous population based on data from the 12th Population and Housing Census, Mexico City, 2000, INEGI.

Indigenous peoples are not just a population statistic. They play a very important social role in various aspects of the life of the country, and their intervention is particularly outstanding in managing forests, jungles and lacustrine environments (Toledo and Argueta, 1992; Nigh and Rodríguez, 1995). Most of the country's woodlands area is legally owned or inhabited by indigenous communities and peoples, who have become major forest resource stewards. (Merino, 1997; Chapela, 1995).

Indigenous people also play a leading role in the use and protection of biodiversity, and have broad, complex knowledge of the highly varied ecosystems where they live: deserts, coastal plains, rain forests and temperate/cold forests (Carabias et al., 1994).

The water situation varies for indigenous peoples. Most live in parts of Mexico where water is readily available, since central and especially southern Mexico have the highest mean annual rainfall. In some zones of Chiapas, Oaxaca, Veracruz, Tabasco and San Luis Potosí, rainfall totals 3500 mm per year, compared to the national average of 770 mm.

At the other extreme are peoples inhabiting dry areas, such as the Otomís (Hñähñü) of the Mezquital valley, which has an average 350 – 400 mm of rain a year, or the Seris (Konkaak) of the Sonora coast, with precipitation of 100 – 200 mm per year.

Water is a basic element of these peoples' economic, social and cultural lives, that varies with environmental diversity. For most, it is crucial to have water for crops, but some also strive to keep their rivers, lakes and inlets in good shape for fishing. For all of them, it is very important to have a sufficient supply of good-quality water for human consumption.

Indigenous peoples are dependent on water for consumption, but they also play a key role in watershed conservation – particularly the forest communities. Increasingly, indigenous and rural communities are concerned about the general conditions in which their territory is managed, to guarantee the quantity and quality of the water that they require. Many woodlands indigenous communities are committed to sustainable forest management, namely because they understand the role that the woods play in water catchment. They offer highly valuable environmental services to society in these areas.

Water management

Water use in Mexico is governed by Article 27 of the Constitution and its Regulations, the National Water Law (enacted on 2 December 1992[5]). The definition of national waters in the law is so broad that it encompasses practically all surface water and regulates the extraction of underground water. Through the National Water Commission (CNA), the federal government (executive branch) legally administers and wields authority over the country's water resources.

The federal government has concentrated control of Mexico's water resources through a lengthy process spanning the late 19th and entire 20th centuries. It displaced state governments and municipalities for control of rivers, lakes, springs and aquifers. Similarly, irrigator groups and community authorities governed by uses and customs were phased out of decision-making by federal intervention (Sánchez, 1993; Aboites, 1998).

This process occured due to various legal, political, technical and financial measures, with a major role played by large water projects that have changed the configuration of many watersheds.

This planning and control of water projects, changing watercourses throughout basins, has concentrated knowledge about water regimes within a group of experts and the federal government technical staff, at the expense of the local expertise legitimacy. These projects, geared toward expanding the area under irrigation, were headed by the National Irrigation Commission, and later by the Secretariat of Water Resources.

Concentrating control of water resources particularly affected indigenous peoples' rights to their accustomed uses of lakes, springs and rivers. And where lakes and wetlands were dried up or major reservoirs built, it also altered the territories

themselves, causing profound changes in the lifestyles of countless communities.

There was significant growth in the country's irrigated area from 1920 to 1970, and increased electric power was available for industrial and urban growth. This was achieved through a management model that concentrated all water management decisions in the executive branch of the federal government. Under these conditions, water projects nation-wide attained an unprecedented magnitude.

Up until the late 1980s, there was no societal involvement in decision-making. Affected groups had no recourse but open protest. Under these legal provisions, an example of such project was the transfer of water from the Lerma river basin to Mexico City. This affected many rural and indigenous communities in the State of Mexico. They saw their lakes and wetlands vanish, where they had fished and collected other lake products. Farming peoples were left without water for their crops.

The 1992 Law, in tune with changes in other countries, charged the CNA with accrediting, promoting and supporting organization of users "to improve water utilisation and preserve and control water quality", and set up watershed to enhance water management by co-ordinating and building consensus among the CNA, different levels of government and users.

The current law favours a fragmented approach to water management, by focusing solely on sectoral uses (urban, agricultural, industrial, power) and paying only very slight attention to the impacts of such uses on ecosystems or large territories. Current water management in Mexico has not changed much from traditional approaches. Forming watershed councils involves users only according to their type of water use (agricultural, urban, industrial). So indigenous peoples and communities, interested in the impacts that water management might have on their lifestyles and in general on the territories where they live, have no forum to express their concerns or influence decision-making[6].

Nor does the Law recognize collective rights for indigenous peoples over the territory where they live. So, they have few legal means to stop irreversible changes, such as water transfers and dam-building[7].

The formation of watershed councils is a recent legal provision (started 11 years ago), that is weakly and erratically implemented, and entails no change in the management scheme characterized by decision-making that is concentrated in the hands of federal administrators, who act without disclosing information or consulting with affected parties.

In some international forums, Mexico has been recognized for having managed, in such a short time, to organize watershed councils covering practically the whole country. However, many independent voices in Mexico have pointed out that these councils are generally not very legitimately representative, because their membership depends on the corporate legacy and political clienteles of the regime that has dominated Mexico for the last 70 years.

Mexico's watershed councils have been set up and operate with mistakes that cripple their legitimacy and prevent them from operating as bodies truly representing the diverse groups with interests in water administration. Under such conditions, democratic water management is pending. The challenge will be to construct forms of management that include the country's indigenous population in decision-making.

Impacts of water management on indigenous peoples

There are many areas in which indigenous people have difficulty exercising their water rights. Water supply for human use is a basic right but facilities are sorely lacking in rural localities. According to official estimates, 42% of indigenous homes in Mexico did not have piped water supply in the year 2000, and 70% had no sanitation service[8]. This partly explains the resurgence

of diseases such as cholera, and the persistence of typhoid in these regions.

Mexico still has high rates of infectious diseases, especially in rural areas, transmitted in association with lack of water or use of contaminated water. Governmental programs to address this situation are feeble, short-sighted and poorly implemented.

Paradoxically, there are plans to transfer water from rural regions to the large cities, without any thought to the minimal investments required to improve local supply for human use. This is the case for a project to transfer water from the upper Balsas river basin to Mexico City. In some cases, small rural and indigenous communities negotiate so that, in exchange for turning their springs over for a city's use, they at least get a water distribution system of their own.

Another area of conflict is the contamination of water resources used by indigenous peoples. An extreme case of this is the irrigation of the Mezquital valley with sewage from Mexico City. That region, inhabited by rural and Otomí indigenous communities, has, for a century, received most of the sewage from the capital city. The benefits that the inhabitants obtain by irrigating their crops cannot be compared with the health risks of using polluted water (Peña, 1999). Mexico has a tremendous backlog in terms of sewage treatment, and the indigenous regions are among the furthest behind in this regard.

One of the most important aspects, because its effects are so extensive in time and space, is forced relocation of indigenous and rural population to make way for big dams for irrigation or hydropower.

The most dramatic example of this policy, and perhaps the best documented, happened in the Papaloapan river basin on the Tehuantepec isthmus, with the building of the Miguel Alemán dam (9.106 billion cubic metres capacity) and Cerro de Oro dam (4.4 billion m^3). The former is for hydropower and flood control and the latter for irrigation and power.

In the early 1950s, the Papaloapan Commission started plans to build in the river basin. For the Miguel Alemán dam, 500 km^2 of the Mazatec people's land was used, just over one fifth of their total land area. Twenty thousand peasants were evicted from their homes. Although the dam was finished in 1955, it was not until 1962 that all the displaced persons had been re-housed (Barabas and Bartolomé, 1973; Boege, 1988; Nigh and Rodríguez, 1995).

Since many native peoples resisted eviction from their land, the government created the Temascal Indigenous Co-ordinating Centre in 1954, to talk the affected Mazatecs into relocating. The main task of the National Indigenous Institute was to cope with the contingencies of organizing new villages. Twenty years later, there was another massive relocation of indigenous people, with the Cerro de Oro dam, south-east of the former. This time, the persons displaced were mainly Chantec.

In the case of Cerro de Oro, the indigenous persons expelled were sent to settle in the tropical rain forest, which had been cleared for irrigated farming. Some 13,000 Chinantecs displaced by the dam were taken to Uxpanapa, which was hurriedly made into an irrigation district, with an investment of US$50 million borrowed from the Inter-American Development Bank (IDB).

It took years for both the Mazatecs and the Chinantecs to rebuild the community bonds that were wrenched apart after they were driven from their land. They lost day-to-day communication with most of their relatives and former neighbours; they were also deprived of essential symbols of identity, such as sacred places and the graves of their predecessors. The police removed families who refused to leave.

They soon found that the land in the jungle was no good for rice and pasture monoculture. In a few years, the fragile soils were depleted, and cattle finished the degradation of the land that had once been rain forest (Toledo, 1984). The government's commitment to offer better living conditions to the displaced persons was never kept. Fifty percent of the new localities had no basic public services, and support for training and investment in farming was not consistent, either.

The Miguel Alemán and Cerro de Oro dams serve as examples of how not to proceed, if one

intends to respect and protect indigenous peoples' rights. Indigenous peoples were simply never taken into account in these decisions.

Forced resettlement of indigenous peoples in order to build reservoirs is one of the most sensitive issues in Mexico. Therefore, there has been particular concern about the Fox government's reactivation of plans to build a system of dams in the Usumacinta river basin, along the border with Guatemala. The most important of these will be the Boca del Cerro dam, a bi-national project by Mexico and Guatemala, under the Puebla Panama Plan driven by Fox.

The Usumacinta river valley covers the upper region of Chiapas, the Lacandona jungle and part of the State of Tabasco in Mexico and the departments of El Quiché, Verapaz and El Petén in Guatemala. Clearly, these are indigenous territories. In Chiapas, most municipalities have population that are 40% or more indigenous. The Usumacinta basin is a region with great biological and cultural diversity. Many archaeological sites of the Maya culture are located there, as are major petroleum reservoirs.

The Federal Electricity Commission plans to build the Boca del Cerro project 9.5 kilometres southwest of the city of Tenosique, in Tabasco. The dam, 135 metres high, would be on the Mexican side, damming 30.5 billion m^3 of water. Half would be in Guatemala and half in Mexico, although 65% of the water would come from Guatemalan tributaries (México Tercer Milenio, 2003).

Promoters of the plan project a flooded area of 645 km^2, of which 530 km^2 are in Mexico and 115 km^2 in Guatemala, that will generate 17.4 billion kilowatt-hours of electricity. They claim this power plant will save fuel (29 million barrels of fuel oil per year) and help power the economic growth of Mexico and its neighbours.

The Boca del Cerro dam is part of a plan for major transformations in the water regime of the Usumacinta basin. This includes the Balancán bypass canal that will transfer water from the river to Términos Lake and generate another 1.25 billion kilowatt-hours.

By building the Salto del Agua dam and a sizeable drainage system, the federal government plans to irrigate 1.5 million ha. for crops, cattle ranching and aquaculture.

In June 2002, a Tabasco newspaper published the Memorandum for Electrical Co-operation with Central America that Fox had signed a few days earlier. Some weeks later, the same newspaper published part of the project[9]. The director of the Federal Electricity Commission confirmed that the dam would be built, stating that it would not be a high dam, but lower, to reduce the area flooded. However, as of October 2003, the authorities had offered no complete information on the plans they intend to implement[10].

Non-governmental organizations, indigenous and environmental organizations, intellectuals and artists have criticized the project severely[11]. They point to the negative impact that the dam would have on indigenous and rural population groups, who would be displaced from the area to be flooded. According to moderate calculations, 30,000 to 50,000 persons would have to leave their homes and crops, meaning an exodus comparable to the Cerro de Oro and Miguel Alemán dams[12].

Experience with previous cases would indicate that the displaced indigenous and small farmer families would not be relocated in better conditions but, on the contrary, would face an even more precarious future.

Dams also jeopardize the cultural heritage of indigenous peoples, threatening archaeological sites of the Mayan culture, such as Yaxchilán in Chiapas and Piedras Negras in El Petén, Guatemala. The region's biodiversity is also threatened. Ecological niches of numerous plant and animal species would be drowned beneath the flood water, whereas wetlands would be dried up elsewhere, as in the Centla swamps.

The coalition of agencies and individuals opposing the project, which actively involves several indigenous organizations and municipal governments, has denounced the powerful economic interests involved. Reactivation of the plan to build the system of dams on the Usumacinta coincides with President Fox's insistence on amending the National Constitution to enable private investment in the power sector, especially by

trans-national companies such as Enron, which would have an excellent platform to sell electricity to Central America.

Large construction companies with strong ties to federal administration – which is often accused of corrupt contract procedures – are also interested in the projects. It is estimated that the Boca del Cerro dam would cost US$5 billion, a major deal for builders.

Government plans under way and the citizen movements opposing these dams pose a challenge for the watershed council. Does this body actually exist, and represent the constituency? Could it operate as a forum for information and consultation with the affected parties? Apparently not. Criticism by citizens' bodies and rebuttals by authorities have all circulated independently of the council that should, by law, be the main body for information, consultation and consensus-building. In particular, indigenous and rural organizations of the zone that have spoken up are being ignored. The federal government is responding as its predecessors have.

A major hurdle for indigenous peoples is the weak and indirect nature of legal recourse to claim rights over territory. With the government's failure to comply with the San Andrés agreements, indigenous communities are forced to seek, in environmental and other laws, some foothold to curb the water-related changes that threaten them. In addition to weak legal recourse, they are also socially at a disadvantage in confrontations with powerful economic interests, such as those pushing to build hydropower dams.

To guarantee respect for indigenous water rights, including not destroying their livelihoods, it will be necessary to work in three directions: insistence on adopting a legal framework that fully recognizes indigenous peoples' rights; inclusion of legitimate indigenous representatives on water management bodies, in territories where they live; and formation of social coalitions to amplify the voice of citizens such as indigenous peoples who are generally at a disadvantage vis-à-vis more powerful financial interests.

Conclusions

In Mexico, respect for indigenous peoples' water rights and their involvement in water management are still pending issues. Despite the importance that native communities have and could have in watershed conservation, the key area for water resource conservation, indigenous voices remain faint in management bodies.

Representation in watershed councils is designed and applied in such a way that it neglects indigenous peoples and jeopardizes their interests in water management, especially regarding the protection of community territories and the management of unassigned water resources. Water management and its interrelations with the conservation of biodiversity and cultural heritage are issues of great interest to indigenous peoples. Their multi-faceted uses cannot be reduced to user categories, such as agricultural or urban.

ENDNOTES

(1) The indigenous presence in Mexico goes beyond groups speaking the American languages, and is found as well in the customs and lifestyles of Mexico's rural communities (Bonfil, 1987). Moreover, indigenous and non-indigenous live together in many communities, and decision-making involves all of them, through community institutions. For this reason, this paper always refers to indigenous peoples and rural communities.

(2) The most important outcome of San Andrés, the indigenous law initiative drafted by a plural commission of legislators, did not pass Congress. Representatives of President Fox's party (Partido Acción Nacional) actively worked to change the terms of the agreed draft law, which the President had promised to promote.

(3) Emphasizing this issue and contributing to building proposals for respecting indigenous water rights is one of the fundamental goals of the Water Law and Indigenous Rights (WALIR) program, pursuing research, dissemination and collaboration with indigenous organizations in various countries of the Americas. Boelens, 2002.

(4) In Mexico, as elsewhere, there is debate about the best way to identify the existing indigenous population. In censuses, the language criterion has been used. The National Indigenous Studies Institute made an overall estimate of 12,707,000 indigenous (year 2000). For more data, see Serrano, et al., 2002.

(5) At present, a process is under way to amend the National Water Law. Changes approved by Congress were sent back by President Fox, with a series of observations to be considered.

(6) In the last three years, watershed councils have begun including representatives of 'environmental use' of water. This approach is designed to keep the vision fragmented, as if a lake or estuary were also 'a user'. Representation is also generally assigned to environmental groups, without considering that municipal authorities or indigenous organization leaders in some watersheds might have a stronger interest in integrated water management in a given territory.

(7) Facing similar cases, indigenous communities may seek support from the country's environmental laws, which offer loopholes to argue the non-sustainability of projects that are to be implemented. There is also a little room for municipal authorities to intervene to change some plans. These procedures depend on an environmental impact assessment, which has proven to be a controversial instrument, readily manipulated by the companies that present them.

(8) Having piped water does not mean having safe water. In rural areas, as in many cities of Mexico, maintain the quality of drinking water continues to be a major challenge.

(9) See Tabasco Hoy, 30 June and 10 August 2002. The information was also published in other newspapers, New York Times, 22 September 2002.

(10) The National Water Commission has not published the details on the whole project, although it has been reported that the Federal Electricity Commission began work in March of this year.

(11) March 2002, declaration of the Central American Forum against Dams.

(12) Others claim that the numbers of displaced persons may total a million, by the time the project is completed, with all its facets. (Tabasco Hoy, 26 January 2003).

REFERENCE LIST

Aboites Luis, 1998, *El agua de la nación. Una historia política de México (1888-1946).* CIESAS, Mexico City.

Barabas Alicia and Bartolomé Miguel, 1973, *Hydraulic development and ethnocide. The Mazatec and Chinantec people of Oaxaca.* International Workgroup for Indigenous Affairs 15, Copenhagen.

Boege Eckart, 1988, *Los mazatecos ante la nación. Contradicciones de la identidad étnica en el México actual.* Siglo XXI, Mexico City.

Boelens Rutgerd, 2002, *Water Law and Indigenous Rights: Research, Action and Debate.* WALIR Studies, Vol. 2, Wageningen University/IWE and United Nations/ECLAC, Wageningen.

Bonfil Guillermo, 1987, *México profundo: una civilización negada.* CIESAS/SEP, Mexico City.

Carabias Julia, Provencio Enrique and Toledo Carlos, 1994, *Manejo de recursos naturales y pobreza rural.* UNAM-FCE, Mexico City.

Chapela Gonzalo, 1995, *Aprovechamiento de los recursos forestales en la Sierra Purépecha.* UAM, Mexico City.

Gelles Paul, 2002, *Andean Culture, Peasant Communities and Indigenous Identity.* WALIR Studies, Vol. 2, Wageningen University/IWE and United Nations/ECLAC, Wageningen.

Gentes Ingo, 2002, *Water Law and Indigenous Rights in the Andean Countries: conceptual elements.* WALIR Studies, Vol. 2, Wageningen University/IWE and United Nations/ECLAC, Wageningen.

Guevara-Gil Armando et al., 2002, *Water Legislation and Indigenous Water Management in Peru.* WALIR Studies, Vol. 2, Wageningen University/IWE and United Nations/ECLAC, Wageningen.

Merino Leticia (co-ordinator), 1997, *El manejo forestal comunitario en México y sus perspectivas de sustentabilidad.* UNAM, SEMARNAP, WRI,CMS, Mexico City.

México Tercer Milenio, 2003, www.mexicotm.com

Nigh Ronald and Nemesio J Rodríguez, 1995, *Territorios violados.* INI-CNCA, Mexico City.

Peña Francisco, 1999, *La esperanza en las aguas de desecho, Construcción de una región irrigada en el valle del Mezquital.* Frontera Interior, social science and humanities journal, Nº 3-4, INAH-University of Querétaro, Querétaro.

Sánchez Martín, 1993, *La herencia del pasado. La centralización de los recursos acuíferos durante el porfiriato 1888-1910.* Relaciones. Estudios de Historia y Sociedad, Nº 54, El Colegio de Michoacán, Zamora.

Serrano Enrique, Embriz Arnulfo and Fernández Patricia (co-ordinators), 2002, *Indicadores socioeconómicos de los pueblos indígenas de México, 2002,* INI, United Nations Development Programme, CONAPO, Mexico City.

Toledo Alejandro, 1984, *Cómo destruir el paraíso: el desastre ecológico del sureste.* Océano-Cecodes, Mexico City.

Toledo Víctor and Argueta Arturo, 1992, *Cultura indígena y ecología.* Plan Pátzcuaro 2000, Friedrich Ebert Foundation, Mexico City.

between customs and the establishment of juridical pluralism

This paper studies the bodies of law drafted by the Ecuadorian indigenous movement to enforce their collective rights, in the context of their own political intentions. It hypothesizes that this movement is attempting to synthesize a complex of normative frameworks from different indigenous nationalities and peoples into a codified norm, to harmonize their viable operation with the system of national laws, as an attempt to achieve juridical pluralism, as guaranteed by the national Constitution.

In this context, three proposed laws, one proposal for community regulations and one presidential decree are analysed (the latter issued on the basis of a prior proposal by the movement). The central theme for this analysis is the water management model proposed by indigenous nationalities and peoples for Ecuador.

The idea here is to present an overview of what is being achieved under a model of juridical pluralism, in a country governed by positive law, through the vision and efforts of one of the most significant social-sector stakeholder movements in the Americas.

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Introduction

In countries of the Andean region governments have chosen different ways to incorporate norms recognizing their pluri-ethnic composition into the legal framework – through laws or national Constitutions. Likewise, with the exception of Chile, legislation addresses norms for relations within indigenous, original inhabitant or rural communities. As for natural resource management by indigenous peoples, the region's national constitutions (again, excepting Chile's) grant relatively broad authority over the areas they have traditionally inhabited[1].

This study has taken as its frame of reference
• the rights acquired by indigenous peoples in Andean national Constitutions regarding, very broadly speaking, the concept of juridical plurality,
• and natural resource management, including water.

For customary law, I will limit discussion of the frame of reference to key concepts regarding juridical plurality, indigenous and/or customary law. The intention is not to address the conceptual issue in *extenso* but rather to examine Ecuador's specific case.

In Ecuador, a legal framework that features juridical plurality, such as in water management, has materialized through actions pursued by the Ecuadorian indigenous movement.

This paper aims to describe what has become an interesting case of 'positive-isation' of customary law – or rather, of (general notions) in such an inter-ethnic complex as Ecuador's. This movement has led to harmonization enabling Ecuador's indigenous peoples to apply the juridical plurality guaranteed by Article 191 of the national Constitution, without relinquishing their own conceptual and ethical framework.

Accordingly, the indigenous movement proposes full exercise of community and/or peoples' forms of social management of water in their territories. The cases discussed in this study are proposed bodies of law that have been prepared using differing modalities, with ample involvement of delegates from indigenous nationalities and peoples. The draft laws have been presented to the National Congress for legislative approval. The model community by-laws have actually become a model for several communities in Imbabura province (northern Ecuador), Otavalo and Cayambi Kichwas. Also included is an executive decree, issued by the President and therefore a national juridical norm. This makes it the only proposal of the indigenous movement that has been enacted.

We will not attempt to present an exhaustive range of legislative proposals drafted by the indigenous movement, but only to address those that have made the effort to manage public water on the basis of the civilizing heritage of indigenous rights or normative systems.

Ecuador: a diverse, pluri-cultural country

In Ecuador, the indigenous peoples identify themselves as nationalities and peoples. There are 13 indigenous nationalities, and 18 peoples within the Kichwa nationality[2]. There are several government institutions that respond to demands for inter-culturality and indigenous participation, as well as indigenous representation in a number of other state institutions addressing a range of issues. The Confederation of Indigenous Nationalities of Ecuador (CONAIE) has drawn indigenous nationalities and peoples together since 1986, as the visible leadership of the Ecuadorian indigenous movement.

In 1990, CONAIE inaugurated the Ecuadorian indigenous movement politically and socially, by a massive national uprising for *Inti Raymi* (the solstice 'sun festival'), demanding resolution of land conflicts and reforms to make the State pluri-national. Since then, CONAIE has played a leading role as a social and political movement that has made it possible to revisit the concept of the State, and other elements of cultural short-sightedness that kept indigenous people underprivileged and out of sight. In 1992, the March for Life made demands regarding indigenous territory in the Amazon region. This revealed the

complexity of a social fabric tightly interwoven with indigenous interests, including particular claims to manage their ancestral territories.

By 1994, the National Congress had enacted an Agrarian Development Law that reversed the agrarian reform process. Despite serious drawbacks, this process had provided a way for indigenous and other rural folk to own their community and family land. Ecuador's indigenous and rural organizations held a second major uprising to advocate an integrated, democratic approach to agricultural development. The protest stirred up such strong feelings that the President had to veto the law. This curbed, for the time being, norms that would have privatised water.

In 1996, CONAIE decided to take part in representative democracy, setting up the Pachakutik Nuevo País Pluri-National Unity Movement, for that year's local, provincial and even (through alliances) presidential elections. In the 1996 national elections, eight senators elected under this new party's banner voted as a block. This gave rise to legislative discussion about indigenous peoples' rights, within a setting of democratic, progressive proposals.

In 1998, after President Abdalá Bucaram was ousted with the active participation of CONAIE, the Confederation pushed for the National Constitutional Assembly, with a pluralistic summons to all societal and citizens' sectors, to create an unprecedented, participatory, inclusive, democratic constitution. By the end of that year, the proposal turned into reality, and the Assembly was held, with several indigenous leaders, both male and female, as Assembly members. Under collective rights, this new Constitution specifies a number of the demands raised in the indigenous movement's struggles.

Customary law concerning access to and use of water: ancestral practices, uses and traditional customs

Conceptual considerations

In the Andean countries, such as Ecuador, 'positive law' is, in effect, pursuant to the juridical norms established by the government. This approach is incorporated in the national Constitution, thereby excluding other approaches and norms. Although the assumption is that positive law is the only possible way to set up a State, the Ecuadorian Constitution (CPE: 1998, article 191)[3] also provides for juridical plurality, by accepting the enforcement of customary law among indigenous peoples.

Customary law comprises the norms based on the dynamic cultures of indigenous peoples, regulating and providing order for them. These norms for behaviour, morality, and social conduct are often difficult to classify into thematic categories, such as 'indigenous criminal law', or 'indigenous water law', etc. They are more like regulations, perspectives, moralities and precepts that organize life in communities and other grassroots organizations within indigenous nationalities and peoples.

Various disciplines discussing juridical pluralism express the concern that customary law must be legally established and defended. In Ecuador, the indigenous movement has attempted to summarize values, morality and norms, in an attempt collectively to draft laws with normative validity under written, positive law. This has meant inserting their own normative way of thinking into Ecuador's juridical norms.

Central issue

The Ecuadorian indigenous movement brings together a diverse range of normative frameworks from different indigenous nationalities and peoples regarding water management. This is the basis for proposing a normative model for overall participatory management of society, transforming customary law into positive-law building, and into bodies of law that summarize what juridical pluralism 'should be'.

Although customary law is the aggregate of local norms governing particular societies, the Ecuadorian indigenous movement has undertaken the task – with direct participation by indigenous peoples – of 'positive-izing' these norms. It has taken several years' work to produce bodies of law specifically for water management that are informed by the indigenous movement's demands. The Ecuadorian indigenous movement has synthesized positive law and customary-law norms, exemplifying the historical and legal viability of juridical pluralism.

Indigenous grassroots communities and organizations are regulated by normative frameworks, tied to local cultures. The local norms resolve conflicts in water management processes as collective efforts to return to or maintain order.

The Ecuadorian indigenous movement has managed to synthesize written, codified positive law with indigenous or customary law, which is usually oral and tradition-based. The bodies of law prepared collectively by this societal and political stakeholder draw upon the indigenous peoples' common practices, notions and values to resolve conflicts, to share water on a consensus basis, distribute responsibilities, politically organize their local mechanisms, traditional and/or legitimate authorities, and handle their water units or ecosystems holistically.

This study will use the terms 'customary law', 'norms', 'normative frameworks' and 'local indigenous norms' interchangeably, to denote the set of customs gathered by the Ecuadorian indigenous movement into the bodies of law analysed here. We will not discuss terminology and concepts here, as they are beyond the scope of this study, albeit a rich topic.

Finally, the collected water management norms entail social participation and the search for equity, which is something of an expanded hypothesis. The model, derived from a critical reading of documents in Ecuador, entails an integrated, participatory perspective for shared management, or co-management, with governmental agencies. It nevertheless maintains strong awareness of the concepts of territory, nationalities, peoples, and autonomy or self-determination by peoples through their actions and rights. This proposal obviously refers to the frame of reference that would be institutionalised; it is not an empirical analysis of current relationships or values prevailing in present-day practice – whether equitable or not – within Andean communities and indigenous peoples.

Bodies of law composed by the Ecuadorian indigenous movement

In Ecuador, the indigenous movement has managed to influence lawmaking significantly, as a high-profile political stakeholder. This includes the lengthy process of ratifying the International Labour Organization (ILO) Convention 169 on Indigenous and Tribal Peoples in Independent Countries and the collective rights guaranteed in the national Constitution, which CONAIE actively promoted.

These processes are significant, and it is worthwhile to underscore the efforts that Ecuador's indigenous peoples have made to further collective legislation. In this study, I will refer to several bodies of law that have been proposed by the Ecuadorian indigenous movement, analysing:

- the Law of Indigenous Nationalities and Peoples,
- the Law on Water,
- the Law on Indigenous and Rural Communities of Ecuador,
- the Otavalo Model Regulations, and
- the Programme for Irrigation and Recovery of Degraded Land.

These proposed norms have been selected, first from among the laws that the indigenous movement has prepared collectively; second, in terms of the jurisdictional level at which they have been proposed (from national to local); and third in order to provide an overview of the indigenous peoples' political and normative vision for this country. The last body of law will be reviewed as a special case, as the only indigenous movement proposal that has materialized into a positive-law norm, incorporated into Ecuadorian law. The

documents reviewed here correspond (as will be explained below) to different periods and are therefore not necessarily related. Prior to indigenous peoples seeing their rights recognized in 1998, the Convention 169 and plurality stipulated by the Constitution were no more than aspirations.

We will examine water management norms: in each case, there is a close relationship between the proposal itself, the customary-law vision of lawmaking, and participation in creating the norms with the repercussions they could entail.

These proposed norms, which embody much of the indigenous peoples' normative and ethical culture, could become a bridge, challenging the divide between the nation's positive law and indigenous normative frameworks.

Law on indigenous peoples[4]

It took several years of meetings, workshops, seminars and even academic discussions to draft the proposed law on indigenous nationalities and peoples. The national Constitution guarantees a body of collective rights for peoples "who define themselves as nationalities with ancestral roots" (CPE, 1998, art. 83). Pursuant to this constitutional norm, with the need for a legal framework enabling them to exercise these collective rights, CONAIE pressured for the enactment of this law. It was presented to the National Congress in the version studied here, and passed. However, the President vetoed it because of disagreements regarding certain formalities and legal technicalities, so it remained suspended.

The draft law very specifically conceptualises the indigenous peoples as holders of collective rights. It also conceptualises the legitimate authorities of these rights-holders, their own forms of governance, different sorts of organization within ethnic structures, juridical plurality, territory, natural resources, biodiversity, customary law, consultation, integrated management of indigenous properties and/or territories, government institutions, maintenance and development of indigenous cultures, and promotion of indigenous lore and science.

This proposal would become a framework or organizational law for the body of collective rights assured for indigenous peoples by the Ecuadorian Constitution and the ILO Convention 169. It was drafted following both these normative instruments, and after CONAIE proposed the Water Law.

The norms that the proposed law on indigenous peoples establishes for water management always mention the collective rights-holder, the maintenance of political autonomy for this rights-holder, their authorities and the administration of their territory.

Specifically, it addresses the issue of legitimate authorities over natural resources, as well as jurisdictional powers, administration of justice, legal status and administrative/para-State status (Article 10).

Regarding natural resources (which several articles understand as including water) the law establishes the peoples' and nationalities' full rights over them, as part of indigenous territory (Article 19). It also proposes consultation for all planning, programmes and projects for prospecting, exploration, or extraction of renewable and non-renewable natural resources located in indigenous territories or related to their development (Article 24). Such consultation must submit proper, complete information to indigenous authorities, as well as exhaustively analysing the future effects that such projects could have. Another point involves participation in benefits yielded by projects implemented in indigenous territories or by lands possessed ancestrally by these rights-holders (Article 28). Then it proposes a guarantee that all projects involving natural resources be subject to environmental, socio-cultural and economic impact studies, as well as measures to repair these resources and/or indemnify peoples and nationalities for expected damages (Article 33).

Regarding government institutions, it proposes direct involvement by indigenous nationalities and peoples in government agencies that make policies on, among other topics, natural resources and biological diversity (Article 39). These agencies include the National Water Resource Council (CNRH), Ecuador's top governmental agency for

freshwater management and control (Article 40). Since Ecuador's legal framework stipulates that the State must be decentralized, this proposed law provides for full, direct involvement of indigenous nationalities and peoples in project preparation and implementation of services including water supply (Article 47). To administer services, responsibility for indigenous nationalities and peoples is regulated in co-ordination with local or sub-national government (Article 50). Moreover, the law provides for forming community or self-managed enterprises to administer basic services (Article 51).

Law on water

This proposal was drafted in the context of privatising trends that seemed inevitable as Ecuador's water management model. In 1996, the indigenous movement had not yet concretely entered Ecuadorian representative democracy, nor had the National Constitutional Assembly – summoned by CONAIE to 're-found the State' – been held yet. This draft law was presented by a block of indigenous and non-indigenous members of Congress belonging to Pachakutik, and Congress has yet to deal with it. In fact, since this proposal, different productive, political and even academic sectors have submitted another 14 proposed water laws to the Legislature.

The proposal covers a diverse range of issues regarding water regulation, both those contained in the current law[5], and new areas related to sacred waters, financing of indigenous and rural irrigation, community management, and crimes against water resources.

Several areas are covered in the proposal's main themes:

- water is public property, as is the concession of water for all uses;
- integrated, sustainable use of ecosystems and water;
- support for indigenous and small farmer irrigation;
- domestic food-supply security, based on indigenous-smallholder agrarian economies;
- the cultural perspective of indigenous and other rural peoples, including ways to use sacred water;
- community management and participatory societal management for genuine democratisation of natural resource use "we always link the social function with participatory social management…";
- creation of the National Irrigation Fund, along with autonomy for agencies managing water resources.

The first comment involves the vastness of the goals and therefore the norms proposed by this law. Secondly, there is a duplication of norms for certain areas, that the constitutional norm establishes as rights (for example, respect for, recognition and management of sacred places) that the peoples must legislate for, if not already part of other laws proposed in the last few years (e.g. indigenous administration of justice, the Irrigation Programme, etc.) by CONAIE itself.

The proposal is not very clear institutionally or in terms of jurisdiction. It also emphasizes management of all water issues at the local level; in the cases of indigenous peoples and rural population groups, it always mentions community management. These local levels of society must also participate directly in managing water within their territories or areas of influence. Accordingly, there is a chapter ranking priorities for water use, considering the type of access, the grantee of the usage (individual or collective), and the purpose for which the water will be used, including the social benefit of domestic food security.

The water law proposed by CONAIE would create a National Fund for Irrigation, Training, Protection and Water Resource Management, to finance:

- construction and repair of indigenous, rural and Afro-Ecuadorian irrigation systems,
- studies, designs and construction of projects to optimise water utilisation,
- sustainable, integrated watershed management,
- training,
- maintenance regarding polluted water and sewage, and
- research.

This fund would be administered by the government water authority (i.e. the National Water Resource Council, CNRH) and the top-priority beneficiaries would be indigenous, smallholder and Afro-Ecuadorian communities.

In this regard, the CONAIE proposal contains several elements:

- the need for the State to provide funding for indigenous and peasant irrigation;
- that beneficiaries must always include indigenous, small-farmers and Afro-Ecuadorians, to materialize inter-culturality and the will to provide an alternative for all Ecuadorian men and women;
- the proposal to create the fund, in the water law, embodies the Ecuadorian indigenous movement's 'model' for participatory, intercultural, equitable water management.

This topic of the Fund is interesting: in the year 2000 it was included on the agenda for the dialogue with the government of (ousted President) Jamil Mahuad. The indigenous movement persuaded the successor (the Vice President who took over the presidency) to issue a presidential decree, creating the National Programme for Irrigation and Recovery of Degraded Land, with an initial fund for several of the objectives already outlined in CONAIE's 1996 water law proposal. The initial proposal and the way it materialized are compared below.

Law on indigenous and peasant communities of Ecuador

The Ecuadorian indigenous movement remains strongly committed to what it terms its 'community base' or culture, especially among inter-Andean (highlands) or Kichwa peoples. It was, in fact, the highlands organization, called at that time the Confederation of Peoples of the Kichwa Nationality of Ecuador (Ecuarunari), a fourth-tier regional organization belonging to CONAIE, that collectively drafted a proposed law on communities. This proposal had several aims (Ulcango, 1998): to materialize general norms for ancestral communities; to create legal norms recognizing the constitutional rights that indigenous peoples had just been incorporated into the national Constitution; and to help 'reconstitute' the Kichwa nationality, which is a main thrust of Ecuarunari.

The communities law is based on an idealized approach to the concept of communities, "as a group of families that base their lifestyle on collective practise of reciprocity, solidarity and equality, grounded in community modes of production (mingas) in which all members take part" (Article 1). The proposal attempts to include any organization with these internal mechanisms, and to establish the procedure for legalization and development.

It is interesting to note that 'autonomy' is conceived as the right of all communities to conserve and reinforce their own political, economic, social, cultural and legal characteristics, as well as direct participation in all projects, planning and development efforts affecting the community. Article 5 also includes community jurisdiction for administration of justice.

Article 6 covers the purposes and operation of communities: "To govern access to the use of land and other renewable and non-renewable natural resources belonging to their territory for those belonging to the community and others." This approach would view the ecosystem as a whole (with respect to the territory) as a unit of land with all its natural resources. However, above all, there is the community purpose of 'governing' access to these elements of their territory, thereby including a perspective of self-determination. This article also proposes: (subsections b and c) direct action for development; (d) regulating work; (e, f and g) also governing agricultural, livestock and forest production, including cadastral records; and (h and i) conservation and regulation of cultural and educational rights.

This makes the community the core of indigenous peoples' lives, providing them with autonomy, outlining a concept of community territory, characterizing the community as the collective rights-holder and accordingly the authority to administer, represent and govern free self-determination in the issues under its jurisdiction, including the right to be included in consultation.

Articles 17, 19 and 24 propose that communities directly and legally manage water and other natural resources in their habitat. This management is by the community, and entails (in this proposed law):

- active, equitable participation by all members (male and female);
- sustainability as an active principle;
- development of ancestral knowledge; and

- water management according to local and customary rights.

In this last area, the synthesis examined in this study (between positive law and community law) is achieved: communities, interacting with various socio-legal repertoires, administer justice and regulate/govern all walks of community life. I would like to emphasize that codifying community law does not generate a 'static, essential indigenous law'. The indigenous organization's lawmaking work envisions the possibility for the norms to be applied, maintaining local traditions and customs, also alluding to the present-day dynamics of indigenous cultures.

This proposed law also regulates other issues involving agricultural development, credit, production, marketing, and training in production-related activities, as part of the State's responsibility for community development.

In other sections, it regulates identity, culture, education, health and collective intellectual property, maintaining the paradigm that the community holds these rights and that, within the community, individuals can enjoy and develop them.

Otavalo model regulations

This body of law was made by members of different communities around Otavalo, with ongoing co-ordination by Ecuarunari, as a regional organization, at the time when the latter was preparing its proposed law on communities (1998). These regulations attempt to include collective rights and to create the law, according to Luis Fernando Tocagón, the indigenous leader who provided a copy for this study. The present chapter is an overall review of these regulations, because the text constantly refers to an overall vision. That is, many articles refer to natural and/or water resource management, and participation is a cross-cutting theme.

The text agrees with the concept of a community, its aims, purposes, and certain expressions found in the proposed law on communities. It is also an example of local norms, for the Kichwa people around Otavalo and Cayambe, attempting to create a model for participating communities. It is interesting that the co-ordination with Ecuarunari and the process of preparing these regulations, with delegates from various communities, attempted to avoid infringing on norms, and to incorporate the constitutional progress, in recognition of the indigenous movement as a whole.

The regulations were drafted for a particular community, and therefore develop norms for protecting and managing natural resources in general, but also specify their local gullies, springs, grasslands and forests. They also contain the community members' individual rights, the obligation to reforest private property, environmental care, natural resource conservation and prohibitions and penalties.

Regarding water management, the sustainable management approach is outlined in several articles, covering different elements of water resources: sources, native forests, gullies, and reforestation. Furthermore, community-level participation involves community members directly in managing community territory and land, and in decision-making, through assemblies. The traditional authority is the *cabildo* board.

An interesting element is the constant inclusion of a gender perspective in the wording of the regulations. There are several proactive measures geared towards achieving equity, particularly in favour of women, for example by including both genders in the wording. This emphasis may reflect renewed outlooks among community leaders that confirm how indigenous cultures and norms are dynamic and changing.

The chapter on penalties is also worth nothing. The foundations of non-indigenous criminal law bear no direct relationship with this indigenous body of norms. Failure to comply with the legal and community norms will be penalized by the *cabildo*. Article 43 sets forth the penalties in the following order:

- private admonishment;
- public admonishment;
- temporary suspension of community members' rights; and
- expulsion of the member from the community.

The last two penalties must be ordered with approval by the General Assembly. Article 44 determines the behaviours that will be penalized, which may be classified as

- those that infringe on community co-existence; and
- infractions against shared management of the community's resources and services.

The preceding paragraph reveals an ethical perspective and a concept of equity. The community seeks to maintain order inwardly, with respect for the community and its members, setting forth general treatment for all, and on a case-by-case basis. Communities governed by these regulations and complying thoroughly with them, would apparently enjoy significant order, maintaining the lives of their peoples, within their cultural and moral customs and practices.

The programme of irrigation and recovery of degraded land

Since 1996, the indigenous movement has been calling for the creation of a fund to support indigenous and smallholder irrigation, so that the government can fund those sectors that have not received support, but which – according to CONAIE statistics – generate 60% of domestic food supply security.

In the proposed Water Law, the indigenous movement specifically defined the objectives for creating the Fund. This demand went further than presenting this proposal to the National Congress and, every time CONAIE has organized rallies, it has been part of its 'mandates'.

After CONAIE's leading role in ousting the President of Ecuador, Mahuad, their mandates again included the creation of an Irrigation Fund. Discussions were a slow process that codified the CONAIE proposal into a presidential decree signed by Mahuad's successor, and entitled Programme of Irrigation and Recovery of Degraded Land.

This decree is the only body of law in this study that has been proposed by the indigenous movement and that has been converted into law by the Ecuadorian government.

The programme was created under the Ministry of Agriculture, to support irrigation in indigenous and peasant communities, along with recovery of degraded land (Article 1). Three indigenous and rural users' and irrigators' organization leaders sit on its board of directors, alongside three representatives from the government, and a representative of the large-scale agricultural production sector (Article 4). The objectives include those that CONAIE had presented to the government:

- Optimisation of water use;
- Reactivation of small-farmer economies;
- Employment creation;
- Guaranteed domestic food supply;
- Greater socio-economic stability in rural zones; and
- Harmonizing urban development by applying sustainable, efficient management of natural resources within the framework of family farming (Article 5).

Funding will be provided for sustainable, indigenous and small-farmer irrigation projects, as well as organization-building, training and integrated management of watersheds, micro-watersheds and sub-watersheds (Article 6). The Programme must be efficient, must directly involve communities and irrigators' organizations, and guarantee participation by non-governmental agencies (Articles 7, 8 and 9).

This decree provided a vehicle for the indigenous demand to fund the huge requirements for community irrigation, while maintaining the goal of strengthening grassroots organizations so that they can directly manage the projects funded. This unique experience was a political landmark for the indigenous movement. But it also showed the capacity for intercultural dialogue, as a means to integrate demands for participation, direct organizational management and written, positive-law norms. These, in turn, would help to make support for indigenous and peasant irrigation State policy.

As a final comment: the resources allocated in this decree (2001) have not yet been delivered by the government, which blames the fiscal reform that Ecuador must undergo, pursuant to agreements with the International Monetary Fund. In any event, the programme has not been imple-

mented, although it is on the law books, and is a recurrent issue in mobilizations and demands by the Ecuadorian indigenous movement.

Conclusions

Indigenous endeavours in Ecuador have worked towards synthesizing customary law and positive law, along with local norms and organizational models for integrated water management. Customary law, amidst a dynamic political process of mobilization, dialogue and collective lawmaking, can in fact offer opportunities for developing a pluri-cultural coexistence and juridical plurality.

The Ecuadorian indigenous movement has been proposing, for almost two decades now, the construction of a pluri-national State as a pathway to structural political reform of the State. The collective effort appearing in the bodies of law that were prepared and proposed to Ecuadorian society and government show what this could mean.

There are a number of constraints and challenges for the movement. First, Ecuador's economic system is dependent upon the model implemented by the International Monetary Fund and multilateral development banks. Second, and as a consequence of the former, no resources are available to implement such proposals, simple though they may seem, because of this dependence. Third, there is a strong tendency to privatise water management and environmental conservation, which emerges as proposals that are based on swaps involving Ecuador's foreign debt to multi-lateral banks. Fourth, the possibility of enforcement, in a context of complex inter-ethnic relations, remains to be seen.

Some final readings

This case can only provide us with conclusions about itself, and the process of the Ecuadorian indigenous movement. The purpose of describing and de-coding[6] the work done by the indigenous movement is to design a legal framework that could harmonize their demands and rights under customary-law with prevailing reality and norms, and serve as an example. But it can not be an exclusive blueprint for such diverse realities as are found in the Americas, or even for the indigenous peoples of the Americas.

It is noteworthy that this generation of concepts, policies and norms to achieve sustainable water management has been democratic and participatory. It has also been a substantial element in the development of Ecuador's indigenous peoples. This aim has always been present in the testimonies we have gathered, in the drafting of texts, and also in discussions that indigenous leaders have had as they became more and more mobilized.

This exercise of proposing laws that address general norms and ethical precepts, but which also embody the demands of the indigenous peoples, could be seen as the capacity for synthesis that is required to build juridical plurality into the Ecuadorian State.

Here, I must emphasize the efforts that have been made in Ecuador to draft the proposed laws collectively among the indigenous peoples, in a general context of power relationships that have usually excluded these stakeholders and seem to deny that any juridical practises or rights exist beyond the current governmental system.

Water management in practical, local reality has shed light on many issues encountered in the laws analysed here. This portrays a world that is not ideal but intensely complex, with day-to-day conflicts about water management at all levels, in all areas and localities. I would simply like to point out that these lawmaking endeavours address the deontology and therefore the ideal of water management ethics. Furthermore, communities do achieve meaningful social control; for example, community work and organizational forms have enabled the indigenous peoples of

Ecuador to maintain their culture and resist oppression. This does not, however, imply by any means that their community model is perfect.

Customary law is one way to deal with policy and law that, within the framework of respect for the norms of indigenous cultures, can contribute to building a more equitable country and ensuring social, sustainable management of natural resources.

ENDNOTES

(1) See also Appendix 1.

(2) CONAIE, Law on Indigenous Nationalities and Peoples, 2002.

(3) Article 191: The indigenous peoples' authorities shall perform functions of justice, enforcing their own norms and procedures to resolve internal conflicts pursuant to their customs or customary law, providing this is not contrary to the Constitution or the Law. The Law will make these functions compatible with the national judicial system. (CPE, 1998)

(4) See also Appendix 2.

(5) Regarding water management, governmental institutions, administrative procedures to obtain water usage rights, conservation of water resources, water pollution, dumping permits and concessions, priorities for concessions, budget and jurisdictional institutions.

(6) I am referring to the de-codification carried out by the indigenous peoples who acknowledged that their citizenship statuses are different, have undertaken lawmaking with an eye to profoundly change the State and the Law, while it remains necessary to reform the existing State in response to the plurality of stakeholders in Ecuador.

REFERENCE LIST

Asamblea Nacional Constituyente [National Constitutional Assembly], 2003, *Constitución Política del Ecuador.* [National Constitution of Ecuador]. http://www.corpei.ec

CEPCU, 1999, *Model Community Regulations.* Otavalo, Ecuador.

Clavero Bartolomé, 1994, *Derecho Indígena y cultura constitucional en América.* Siglo XXI Editores, Mexico City.

Clavero Bartolomé, 2000, *Ama llunku, Abya Yala. Constituyencia indígena y código ladino por América.* Centre for Political and Constitutional Studies, Madrid, Chapter One. http://www.alertanet.net

Comisión Andina de Juristas [Andean Commission of Jurists], 2003, *Los derechos humanos en las constituciones andinas. Derechos Indígenas.* http://calpe.org.pe/rij

CONAIE, 1996, *Water Law.* Quito.

CONAIE, 2002, *Proposal regarding Indigenous Nationalities and Peoples.* Word document, Indigenous Affairs Commission, National Congress of Ecuador, Quito.

CONAIE, 1998, *Political Proposal of the Confederation of Indigenous Nationalities of Ecuador.* Quito.

ECUARUNARI, 1998, *Law on Indigenous and Rural Communities of Ecuador.* Quito.

Gomez Magdalena, 1997, *Indigenous Law.* National Indigenous Studies Institute, Mexico City.

Noboa Gustavo, 2003, *Programme for Irrigation and Recovery of Degraded Land.* Executive Decree 3609, 20 March 2003, Official Gazette, Special Edition N° 1, Unified Text of the Secondary Legislation of the Ministry of Agriculture and Livestock, Quito.

Ulcango Ricardo, 1998, *Presentation on the Law of Indigenous and Rural Communities of Ecuador,* Quito.

APPENDIX 1 [1]: Comparative chart, Andean Positive Law on environment and indigenous peoples[2].

ADMINISTRATION OF JUSTICE

BOLIVIA
Article 171: (…) III. The native authorities of indigenous and rural communities may perform functions of administration and enforcement of their own norms, as alternative conflict resolution, pursuant to their customs and procedures, providing the latter are not contrary to this Constitution or the Law. The Law shall make these functions compatible with the powers of government authorities.

CHILE
No specific provisions regarding indigenous peoples and administration of justice.

COLOMBIA
Article 246: Indigenous peoples' authorities may perform judicial functions within their territory, pursuant to their own norms and procedures, providing that they are not contrary to the Constitution or Laws of the Republic. The Law shall establish the ways to co-ordinate this special jurisdiction with the national judicial system.

ECUADOR
Article 191: (…) Indigenous peoples' authorities shall perform functions of justice, applying their own norms and procedures to resolve internal conflicts according to their customs or customary law, providing this is not contrary to the Constitution or the Law. The Law will make these functions compatible with the national judicial system.

PERU
Article 149: Rural and native community authorities, with support from Rural Committees [Rondas] may perform judicial functions within their territory pursuant to customary law, providing they do not violate individuals' fundamental rights.
The law establishes the ways to co-ordinate this special jurisdiction with the Justices of the Peace and other agencies of the Judicial Branch.

VENEZUELA
Article 260: The legitimate authorities of indigenous peoples may enforce, in their habitat, justice based on their ancestral traditions, solely affecting their members, according to their own norms and procedures, providing they are not contrary to this Constitution, the Law or public order. The law will determine the way to co-ordinate this special jurisdiction with the national judicial system.

AUTHORISATION AND CONSULTATION TO EXTRACT NATURAL RESOURCES

BOLIVIA
No specific provisions on authorisation or consultation prior to using indigenous peoples' natural resources.

CHILE
No specific provisions on authorisation or consultation prior to using indigenous peoples' natural resources.

COLOMBIA
Article 330: Pursuant to the Constitution and the Law, indigenous territories shall be governed by councils formed and regulated according to the usage and customs of their communities, performing the following functions: (…).
Sub-section: Natural resources shall be extracted from indigenous territories without harming indigenous communities culturally, socially or economically. In decisions made regarding such extraction, the Government shall encourage participation by representatives of the respective communities.

ECUADOR
Article 84: The State shall recognize and guarantee indigenous peoples, pursuant to this Constitution and the Law, respect for public order and human rights, the following collective rights: (…)
5. To be consulted on plans and programmes for prospecting for and extracting non-renewable resources found in their land, which could affect them environmentally or culturally, to share in benefits yielded by these projects, when possible, and to receive indemnity for socio-environmental damage caused to them.

PERU
No specific provisions on authorisation or consultation prior to using indigenous peoples' natural resources.

VENEZUELA
Article 120: Natural resources shall be extracted from indigenous habitats by the government without harming them culturally, socially or economically and shall also be subject to prior information and consultation with the respective indigenous communities. Benefits of such extraction by the indigenous peoples shall be subject to the Constitution and the Law.

NATURAL RESOURCES

BOLIVIA
Article 171: I. The social, economic and cultural rights of the indigenous peoples living within the Nation's territory are recognized, respected and protected by Law, especially those regarding their community lands of origin, guaranteeing usage and sustainable utilisation of natural resources, their identity, values, languages, customs and institutions.

CHILE
No specific provisions on indigenous peoples' rights over natural resources.

COLOMBIA
Article 330: Pursuant to the Constitution and the Law, indigenous territories shall be governed by councils formed and regulated according to the usage and customs of their communities, performing the following functions: (…).
Sub-section: Natural resources shall be extracted from indigenous territories without harming indigenous communities culturally, socially or economically. In decisions made regarding such extraction, the Government shall encourage participation by representatives of the respective communities.

ECUADOR
Article 84: The State shall recognize and guarantee indigenous peoples, pursuant to this Constitution and the Law, respect for public order and human rights, the following collective rights: (…)
4. To share in the use, usufruct, administration and conservation of renewable natural resources found in their land.
5. To be consulted on plans and programmes for prospecting for and extracting non-renewable resources found in their land, which could affect them environmentally or culturally, to share in benefits yielded by these projects, when possible, and to receive indemnity for socio-environmental damage caused to them.

PERU
Article 66: Natural resources, renewable and non-renewable, are the Nation's property. The State is sovereign in utilizing them.
The organizational law sets the conditions for utilisation and for particular grants. Concessions grant bearers real rights, subject to that legal norm.

VENEZUELA
Article 120: Natural resources shall be extracted from indigenous habitats by the government without harming them culturally, socially or economically and shall also be subject to prior information and consultation with the respective indigenous communities. Benefits of such extraction by the indigenous peoples shall be subject to the Constitution and the Law.

ENVIRONMENT

BOLIVIA
No specific provisions on the environment.

CHILE
No specific provisions on indigenous peoples and the environment.

COLOMBIA
No specific provisions on indigenous peoples and the environment.

ECUADOR
Article 84: The State shall recognize and guarantee indigenous peoples, pursuant to this Constitution and the Law, respect for public order and human rights, the following collective rights: (…)
5. To be consulted on plans and programmes for prospecting for and extracting non-renewable resources found in their land, which could affect them environmentally or culturally, to share in benefits yielded by these projects, when possible, and to receive indemnity for socio-environmental damage caused to them.
Article 86: The State shall protect the public's right to live in a healthy and ecologically balanced environment, that will guarantee sustainable development. It shall ensure that this right is not affected and shall guarantee the conservation of Nature.

PERU
Article 67: The State sets national environmental policy. It promotes sustainable use of natural resources.
Article 68: The State is obliged to promote conservation of biological diversity and protected natural areas.

VENEZUELA
Article 120: Natural resources shall be extracted from indigenous habitats by the government without harming them culturally, socially or economically and shall also be subject to prior information and consultation with the respective indigenous communities. Benefits of such extraction by the indigenous peoples shall be subject to the Constitution and the Law.

(1) On the basis of a matrix by Raquel Irigoyen-Fajardo (www.tanet.net) and the Andean Jurists' Commission (www.cajpe.org.pe), a partial comparison of Andean Constitutions regarding indigenous rights.

(2) Source: Andean Commission of Jurists (RIJ) Indigenous Peoples (www.cajpe.org.pe).

APPENDIX 2: Norms of the Proposed Law on Indigenous Nationalities and Peoples regarding water management and participation

(Law proposed by the Confederation of Indigenous Nationalities of Ecuador (CONAIE), presented by Congressman Gilberto Talahua, as Chairman of the Commission on Indigenous Affairs in 2001)

Art. 10. The power of the indigenous authority that the nationality or people recognize as legitimate, as granted by their own customary law, over the territories of their community property, and those of ancestral possession, shall be respected; moreover, they shall have the following powers:
2. To establish the collective community's participation in management, usage and utilisation thereof.
3. To prepare and approve, with citizens' participation, plans, programmes and projects for development and ongoing improvement of the inhabitants' quality of life.
4. To administer renewable natural resources found within their boundaries and to regulate access thereto and rational use and utilisation thereof.
5. To regulate use and utilisation of waters originating and running within the boundaries of their territory.
6. To authorize transfer of use and usufruct of individual ownership of lots of land within their community or ancestrally possessed land.
7. To resolve conflicts that arise regarding boundaries, possession, easements, succession, donation and others that come up in regard to individual property referred to in the previous item.
Transfer of use and usufruct by the indigenous authority, pursuant to their own customary law, and the resolutions issued under items 6 and 7 hereof, shall be put in writing by the same authority and notified to the property register of the canton for registration, and shall constitute sufficient title.

Art. 19. Powers and rights regarding territories of indigenous nationalities and peoples comprise community property, ancestral possession, administration, conservation, use and usufruct of renewable natural resources for communities' collective benefit, and conservation and promotion of practises regarding management of biodiversity and the natural environment.

Art. 24. All plans, programmes and projects for prospecting, exploration, or extraction of renewable and non-renewable natural resources found in the territories or lands of nationalities and peoples or that could harm them or their members, or affect the environment, must be consulted on with them. For this purpose, the respective information shall be delivered to the indigenous authority with competent jurisdiction according to customary indigenous law and subsidiarily in the by-laws. The information shall be accompanied by studies and details that make it possible to foresee environmental, cultural, social and economic effects.

Art. 28. All plans, programmes or projects of infrastructure, tourism, prospecting, exploration or extraction of natural resources taking place in territories of community property or ancestral possession of indigenous nationalities or peoples and direct areas of influence, shall provide for their sharing in the benefits yielded thereby.

Art. 33. All projects for infrastructure, prospecting, exploration and extraction of natural resources, tourism and those others referred to in Article 28 of this law shall require environmental, socio-cultural and economic impact studies and shall provide for measures to prevent harm to people, property and the environment, as well as mechanisms and actions to repair and/or indemnify for damage that may occur.

Art. 39. Indigenous nationalities and peoples shall participate, with the right to speak and to vote, through their representatives, in all governmental institutions with sectoral membership, as well as regional, provincial, and canton-level institutions, having the responsibility for studying and setting State policies in activities that the State has undertaken pursuant to the Constitution and the Law, such as natural resources, biological diversity, natural reserves, protected areas, national parks, tourism, electromagnetic spectrum, electrical power, etc.

Art. 40. Indigenous nationalities and peoples shall appoint representatives for the following institutions: the Technical Body responsible for the National Planning System, the National Educational Council, the National Health Council, the National Water Resource Council, the National Council on Children and Adolescents, the Board of Directors of the Home of the Ecuadorian Culture, the National Agrarian Development Institute, Energy and Mines, the Board of Directors of PETROECUADOR, and other national agencies with sectoral representation, responsible for studying and setting State policies in the activities that the State has undertaken pursuant to the Constitution and the Law, such as natural resources, biological diversity, natural reserves, protected areas, national parks, electromagnetic spectrum, electrical power, etc.

Art. 47. Infrastructure and public service, transport, sewerage, water supply, and in general environmental sanitation projects shall be the responsibility of central government institutions and of autonomous sub-national governments, with involvement of indigenous nationalities and peoples in preparing and implementing the projects.

Art. 50. Administration of public services – water supply, sewerage and/or environmental sanitation – shall be the responsibility of indigenous nationalities and peoples within their jurisdiction, in co-ordination with local governments.

Art. 51. To administer public services, the responsible nationalities or peoples may form community or self-managed enterprises such as water supply administrative boards, involving non-indigenous persons when the parties so agree.

Art. 63. Own resources also include those from direct utilisation, by community enterprises or through concession contracts, of renewable natural resources, over which they have jurisdiction for administration, conservation and extraction.

indigenous peoples Kyoto water declaration

Indigenous Peoples Kyoto Water Declaration

Third World Water Forum, Kyoto, Japan, March 2003

Relationship to Water

1. We, the Indigenous Peoples from all parts of the world assembled here, reaffirm our relationship to Mother Earth and responsibility to future generations to raise our voices in solidarity to speak for the protection of water. We were placed in a sacred manner on this earth, each in our own sacred and traditional lands and territories to care for all of creation and to care for water.

2. We recognize, honour and respect water as sacred and sustaining of all life. Our traditional knowledge, laws and ways of life teach us to be responsible in caring for this sacred gift that connects all life.

3. Our relationship with our lands, territories and water is the fundamental physical, cultural and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations. We assert our role as caretakers with rights and responsibilities to defend and ensure the protection, availability and purity of water. We stand united to follow and implement our knowledge and traditional laws and exercise our right of self-determination to preserve water, and to preserve life.

Conditions of Our Waters

4. The ecosystems of the world have been in change and in crisis. In our generation, we see that our waters are being polluted with chemicals, pesticides, sewage, disease, radioactive contamination and ocean dumping from mining to shipping wastes. We see our waters being depleted or converted into destructive uses through the diversion and damming of water systems, mining and mineral extraction, mining of groundwater and aquifers for industrial and commercial purposes, and unsustainable economic, resource and recreational development, as well as the transformation of excessive amounts of water into energy. In the tropical southern and northern forest regions, deforestation has resulted in soil erosion and thermal contamination of our water.

5. The burning of oil, gas, and coal, known collectively as fossil fuels, is the primary source of human-induced climate change. Climate change, if not halted, will result in increased frequency and severity of storms, floods, drought and water shortage. Globally, climate change is worsening desertification. It is polluting and drying up the subterranean and water sources, and is causing the extinction of precious flora and fauna. Many countries in Africa have been suffering from unprecedented droughts. The most vulnerable communities to climate change are Indigenous Peoples and impoverished local communities occupying marginal rural and urban environments. Small island communities are threatened with becoming submerged by rising oceans.

6. We see our waters increasingly governed by imposed economic, foreign and colonial domination, as well as trade agreements and commercial practices that disconnect us as peoples from the ecosystem. Water is being treated as a commodity and as a property interest that can be bought, sold and traded in global and domestic market-based systems. These imposed and inhumane practices do not respect that all life is sacred, that water is sacred.

7. When water is disrespected, misused and poorly managed, we see the life threatening impacts on all of creation. We know that our right of self-determination and sovereignty, our traditional knowledge, and practices to protect the water are being disregarded, violated and disrespected.

8. Throughout Indigenous territories worldwide, we witness the increasing pollution and scarcity of fresh waters and the lack of access that we and other life forms such as the land, forests, animals, birds, plants, marine life, and air have to our waters, including oceans. In these times of scarcity, we see governments creating commercial interests in water that lead to inequities in distribution and prevent our access to the life giving nature of water.

Right to Water and Self Determination

9. We Indigenous Peoples have the right to self-determination. By virtue of that right we have the right to freely exercise full authority and control of our natural resources including water. We also refer to our right of permanent sovereignty over our natural resources, including water

10. Self-determination for Indigenous Peoples includes the right to control our institutions, territories, resources, social orders, and cultures without external domination or interference.

11. Self-determination includes the practice of our cultural and spiritual relationships with water, and the exercise of authority to govern, use, manage, regulate, recover, conserve, enhance and renew our water sources, without interference.

12. International law recognizes the rights of Indigenous Peoples to:
- Self-determination
- Ownership, control and management of our traditional territories, lands and natural resources
- Exercise our customary law
- Represent ourselves through our own institutions
- Require free prior and informed consent to developments on our land
- Control and share in the benefits of the use of, our traditional knowledge.

13. Member States of the United Nations and international trade organizations, international and regional financial institutions and international agencies of economic cooperation are legally and morally obligated to respect and observe these and other related collective human rights and fundamental freedoms. Despite international and universal recognition of our role as caretakers of Mother Earth, our rights to recover, administer, protect and develop our territories, natural resources and water systems are systematically denied and misrepresented by governmental and international and domestic commercial interests. Our rights to conserve, recreate and transmit the totality of our cultural heritage to future generations, our human right to exist as Peoples is increasingly and alarmingly restricted, unduly impaired or totally denied.

14. Indigenous Peoples interests on water and customary uses must be recognized by governments, ensuring that Indigenous rights are enshrined in national legislation and policy. Such rights cover both water quantity and quality and extend to water as part of a healthy environment and to its cultural and spiritual values. Indigenous interests and rights must be respected by international agreements on trade and investment, and all plans for new water uses and allocations.

Traditional Knowledge

15. Our traditional practices are dynamically regulated systems. They are based on natural and spiritual laws, ensuring sustainable use through traditional resource conservation. Long-tenured and place-based traditional knowledge of the environment is extremely valuable, and has been proven to be valid and effective. Our traditional knowledge developed over the millennia should not be compromised by an over-reliance on relatively recent and narrowly defined western reductionist scientific methods and standards. We support the implementation of strong measures to allow the full and equal participation of Indigenous Peoples to share our experiences, knowledge and concerns. The indiscriminate and narrow application of modern scientific tools and technologies has contributed to the loss and degradation of water.

Consultation

16. To recover and retain our connection to our waters, we have the right to make decisions about waters at all levels. Governments, corporations and intergovernmental organizations must, under international human rights standards require Indigenous Peoples free prior and informed consent and consultation by cultural appropriate means in all decision-making activities and all matters that may have affect. These consultations must be carried out with deep mutual respect, meaning there must be no fraud, manipulation, and duress nor guarantee that agreement will be reached on the specific project or measure. Consultations include:

- To conduct the consultations under the communities own systems and mechanisms;
- The means of Indigenous Peoples to fully participate in such consultations; and;
- Indigenous Peoples exercise of both their local and traditional decision-making processes, including the direct participation of their spiritual and ceremonial authorities, individual members and community authorities as well as traditional practitioners of subsistence and cultural ways in the consultation process and the expression of consent for the particular project or measure.
- Respect for the right to say no.
- Ethical guidelines for a transparent and specific outcome.

Plan of Action

17. We endorse and reiterate the "Kimberley Declaration and the Indigenous Peoples' Plan of Implementation on Sustainable Development" which was agreed upon in Johannesburg during the World Summit on Sustainable Development in September 2002.

18. We resolve to sustain our ancestral and historical relationships with and assert our inherent and inalienable rights to our lands and waters.

19. We resolve to maintain, strengthen and support Indigenous Peoples' movements, struggles and campaigns on water and enhance the role of Indigenous elders, women and youth to protect water.

20. We seek to establish a Working Group of Indigenous Peoples on Water, which will facilitate linkages between Indigenous Peoples and provide technical and legal assistance to Indigenous communities who need such support in their struggles for the right to land and water. We will encourage the creation of similar working groups at the local, national and regional levels.

21. We challenge the dominant paradigm, policies, and programs on water development, which includes among others; government ownership of water, construction of large water infrastructures; corporatisation; the privatisation and commodification of water; the use of water as a tradeable commodity; and the liberalization of trade in water services, which do not recognize the rights of Indigenous Peoples to water.

22. We strongly support the recommendations of the World Commission on Dams (WCD) on water and energy development. These include the WCD report's core values, strategic priorities, the "rights and risks framework" and the use of multi-criteria assessment tools for strategic options assessment and project selection. Its rights-based development framework, including the recognition of the rights of Indigenous Peoples in water development is a major contribution to decision-making frameworks for sustainable development.

23. We call on the governments, multilateral organizations, academic institutions and think tanks to stop promoting and subsidizing the institutionalisation and implementation of these anti-people and anti-nature policies and programs.

24. We demand a stop to mining, logging, energy and tourism projects that drain and pollute our waters and territories.

25. We demand that the World Bank, the International Monetary Fund (IMF), regional banks like the Asian Development Bank, African Development Bank, Inter-American Development Bank, stop the imposition of water privatisation or 'full cost recovery' as a condition for new loans and renewal of loans of developing countries.

26. We ask the European Union to stop championing the liberalization of water services in the General Agreement on Services (GATS) of the World Trade Organization (WTO). This is not consistent with the European Commission's policy on Indigenous Peoples and development. We will not support any policy or proposal coming from the WTO or regional trade agreements like the NAFTA (North American Free Trade Agreement, Free Trade Area of the Americas (FTAA), on water privatisation and liberalization and we commit ourselves to fight against such agreements and proposals.

27. We resolve to replicate and transfer our traditional knowledge and practices on the sustainable use of water to our children and the future generations.

28. We encourage the broader society to support and learn from our water management practices for the sake of the conservation of water all over the world.

29. We call on the States to comply with their human rights obligations and commitments to legally binding international instruments to which they are signatories to, including but not limited to, such as the Covenant on Civil and Political Rights, the Covenant on Economic, Cultural and Social Rights, International Convention on the Elimination of all Forms of Racial Discrimination; as well as their obligations to conventions on the environment, such as the Convention on Biological Diversity, Climate Convention, and Convention to Combat Desertification.

30. We insist that the human rights obligations of States must be complied with and respected by their international trade organizations. These legally binding human rights and environmental obligations do not stop at the door of the WTO and other regional and bilateral trade agreements.

31. We resolve to use all political, technical and legal mechanisms on the domestic and international level, so that the States, as well as transnational corporations and international financial institutions will be held accountable for their actions or inactions that threaten the integrity of water, our land and our peoples.

32. We call on the States to respect the spirit of Article 8j of the Convention on Biological Diversity as it relates to the conservation of traditional knowledge on conservation of ecosystems and we demand that the Trade Related Aspects of the Intellectual Property Rights (TRIPS) Agreement be taken out of the World Trade Organization (WTO) Agreements as this violates our right to our traditional knowledge.

33. We call upon the States to fulfil the mandates of the United Nations Framework Convention on Climate Change (UNFCCC) and to ratify the Kyoto Protocol. We call for the end of State financial subsidies to fossil fuel production and processing and for aggressive reduction of greenhouse gas emissions calling attention to the United Nations Intergovernmental Panel on Climate Change (IPCC) that reported an immediate 60% reduction of CO2 is needed to stabilize global warming.

34. We will ensure that international and domestic systems of restoration and compensation be put in place to restore the integrity of water and ecosystems.

Other titles in the LINKS series *Knowledges of Nature:*

Hviding Edvard, 2005. *Reef and Rainforest: An Environmental Encyclopedia of Marovo Lagoon, Solomon Islands* / **Kiladi oro vivineidi ria tingitonga pa idere oro pa goana pa Marovo.** *Knowledges of Nature 1.* UNESCO: Paris. 252 pp.

Indigenous peoples from all corners of the globe continue to struggle for acknowledgement and recognition of their unique visions of water, both at home and in national, regional and international forums. But almost without exception, their voices remain obscured by a mainstream discourse rooted in the conception of water as a mere commodity. *Water and Indigenous Peoples* is based on the papers delivered on the occasion of the Second and the Third World Water Forums (The Hague in 2000 and Kyoto in 2003). It brings to the fore some of the most incisive indigenous critics of international debates on water access, use and management, as well as indigenous expressions of generosity that share community knowledge and insight in order to propose remedies for the global water crisis.