



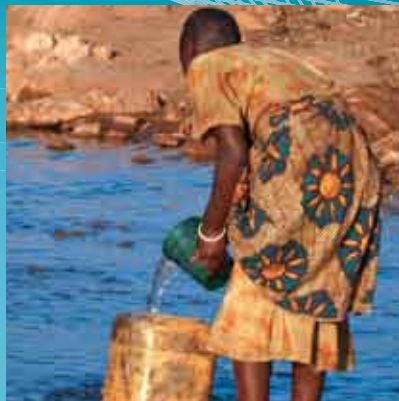
United Nations
Educational, Scientific and
Cultural Organization



International
Hydrological Programme

WATER AND CULTURAL DIVERSITY

TOWARDS SUSTAINABILITY
OF WATER RESOURCES AND CULTURES





This brochure provides an overview of the project on Water and Cultural Diversity of the International Hydrological Programme (IHP) of UNESCO. It includes the background, future steps and the main objective of the project – mainstreaming cultural diversity in water resources management. It initiates a dialogue to encourage a shared understanding of water, one that respects cultural diversity, as a first step towards building trust between caretakers of water: all of us.

WATER AND CULTURAL DIVERSITY

Water is the essential lifeblood of our planet, with the power to generate, sustain, receive and ultimately to unify life.

Water is

*the source
of all life on
Earth*

*what gives
rhythm and
pulse to life*

an idea

*essential
to sustain
biodiversity in
nature*

*the life-blood
of Earth*

*a basic
human need
and a fundamental
human right*

*what
connects all
life*

*constructed,
understood,
appropriated, managed
and controlled in
diverse ways*

*intrinsic
for cultural and
biological
diversity*

*the generator,
sustainer and
unifier of all life
forms*

WHAT IS... ?

Water

The French call it **eau**, but in Greek it is **hydros**, in Latin, **aqua**, in Spanish, **agua**, while the Japanese call it **mizu** and the Nepalese refer to it as **the nectar of life**. Indigenous peoples such as the Gitxsan say **aks**, while the Yorta Yorta say **walla**, and the Guarani use **y** to say water. Peoples around the world have a rich diversity of terms and concepts related to water; however, they all share a common understanding about the urgency of thirst. The movement and ubiquity of water create a common connection, a shared reliance on this unique basic element of existence. Water is a primal human need and desire that flows through all boundaries, definitions and beliefs.

Culture

Because water touches us all, it is part of every culture. The term culture applies not only to the culture of indigenous people, but also: ethnic, Western, urban, suburban, rural, academic, local and professional cultures. Three definitions of culture presented below exemplify the diversity of thought on the notion:

- A complex whole which includes knowledge, belief, art, morals, laws, custom, and any other capabilities and habits acquired by man as a member of society (Tylor 1958)
- A system of inherited conceptions expressed in symbolic forms by means of which people communicate, perpetuate, and develop their knowledge about and attitudes toward life (Geertz 1973)
- The values, beliefs and knowledge people use to generate and interpret social behaviour (Webster 2006).

Geertz, C. (1973) *The Interpretation of Cultures: Selected Essays*. New York, Basic Books.

Tylor, Edward B (1958) *The Origins of Culture*. New York: Harper. [Reprint of part of Tyler's *Primitive Culture* (1871)].

United Nations Educational, Scientific and Cultural Organization (UNESCO) (2002) *UNESCO Universal Declaration on Cultural Diversity*. Cultural Diversity Series No.1, Paris: UNESCO.

Webster, J. (2006) *Culture's Influence: Towards Understanding Stakeholder Interactions in Rural Water, Sanitation and Hygiene Promotion Projects*. PhD dissertation. Institute of Water and Environment. Cranfield, Silsoe College at Cranfield, U.K.



The International Hydrological Programme (IHP)

The IHP is UNESCO's international scientific cooperative programme in water research, water resources management, education and capacity building. Among the 24 UN agencies that deal with freshwater issues, IHP is the only broadly based science programme that focuses on water. Implemented by the IHP, this project on water and cultural diversity will focus on fresh water. Fresh water is not only important for biodiversity, but also for cultural diversity: in addition to supporting human life, health and well-being, fresh water has been a catalyst for civilization, and as such, it is invested with many layers of cultural meanings. As fresh water moves through and influences human life in many forms, this project will also include the various forms water takes, from coastal areas to the atmosphere.

Cultural Diversity

The focus of the project is not simply to look at the relationship between water and culture but rather, to comprehend the relationship between water and cultural diversity. Cultural diversity may be understood as, but not limited to, diversity in: (1) practices (rituals, production systems, and knowledge transmission systems); (2) ways of living together (social systems including institutions, legal systems, leadership and tenure systems); (3) value systems (religion, ethics, spirituality, beliefs and worldviews); (4) knowledge (know-how and skills); (5) languages; and (6) artistic expressions (art, architecture, literature and music).

UNESCO'S DECLARATION ON CULTURAL DIVERSITY

The UNESCO Universal Declaration on Cultural Diversity, adopted in 2001, is the first international standard-setting instrument aimed at preserving and promoting cultural diversity and intercultural dialogue. The Declaration raises cultural diversity to the level of "the common heritage of humanity", "as necessary for humankind as biodiversity is for nature". The Declaration aims both to preserve cultural diversity as a living, renewable treasure that must not be perceived as being unchanging heritage but as a process guaranteeing the survival of humanity. In the context of UNESCO's work, cultural diversity is a goal, as something positive that should be protected and promoted.



WHY IS CULTURAL DIVERSITY IMPORTANT FOR WATER?

The increasing demand for water and complexity of issues surrounding water require an integrated, transdisciplinary approach to water resource management. In order to achieve the Millennium Development Goals (MDGs) under the tremendous pressures that the world is currently facing, the integration of human dimensions into water resource management and policy development is vital.

Towards culturally and environmentally sustainable solutions

In order to find sustainable solutions to water problems, any decisions made or research conducted should be based on a deep understanding of how culture affects and is affected by the myriad interactions between people and water. This goes beyond measuring human uses of water such as drinking, washing, and fishing. It also goes beyond examining water – people relations in the framework of environmental services provided by water, such as food, recreation and aesthetic values. By looking at the various ways that cultures affect water problems and the sustainability of their solutions, this

project brings an additional point of view to the one that has characterized water sciences and management in general up to now, and ultimately, endeavours to mainstream cultural diversity in Integrated Water Resources Management (IWRM).

The way forward: mainstreaming cultural diversity

This project attempts to respond to the urgent need in the water field to recognize cultural dimensions of water. Its immediate objectives are to promote, to water scientists and water managers, the importance of understanding the links between water and cultural diversity; to provide information, through case studies and other resources; and to facilitate interactions and partnerships among institutions and experts working on, or interested in, the topic.

In the longer term, the project aims to develop toolkits or guidelines to help foster socio-cultural perspectives in water sciences, promote cultural pluralism in water management strategies, and thereby contribute to the development of culturally sensitive studies and policies on water. This project thus fits into the larger context of international development by contributing to the achievement of the MDG target of reducing by half the proportion of people without access to safe drinking water and safe sanitation by 2015 and to stop unsustainable exploitation of water resources. The need for new approaches is further amplified by the fact that it is very likely that the MDGs will not be met, particularly in Sub-Saharan Africa.

OUR GOAL

Contribute to the achievement of the MDG 7: “Ensure environmental sustainability”, which includes target 10 “Reduce by half the proportion of people without sustainable access to safe drinking water” by:

Recognizing and respecting cultural diversity and interweaving various perspectives towards collaborative and inclusive actions for sustainability of water and cultures.

THE CONCEPTUAL FRAMEWORK

The following four focal areas illustrate the diverse ways that people and their cultures are associated with water. They form the basis of the conceptual framework for the project, which in turn facilitates a systematic analysis of how cultural diversity affects and is affected by water.



Focal Area I

Diversity of cultural meanings, values and perceptions of water

Covering two-thirds of the planet's surface and composing two-thirds of our bodies, water is an important part of our lives and so, imbued with cultural significances. This focal area will explore the diversity of meanings and values attributed to water and differing perceptions of water. Such explorations are important because "meanings poured into water... exert a powerful influence over every decision involved in water use" (Strang, 2004: 3). Cultural identities are often rooted in freshwater ecosystems and these identities have been well documented, in particular as they refer to claims to land by indigenous people around the world. Water is often considered sacred, a purifier and a source of power. Diverse expressions of the significance of water, manifested in the symbolism, mythology and rituals of cultures around the world, demonstrate the essential role water plays in belief systems.

The focal areas are not intended to be an exhaustive list of the factors to be covered under the broad theme of water and cultural diversity.

Strang, Veronica (2004) *The Meaning of Water*, Oxford, New York: Berg.



Focal Area II

Cultural practices and technologies that affect water

This focal area will draw attention to the diverse range of practices and technologies, traditional and otherwise, that affect water and related resources, and are rooted in people's customs, beliefs, knowledge, worldviews and values. Traditional knowledge in particular has played vital roles in conserving springs, rivers, lakes, wetlands and forests that protect watersheds. Such knowledge and practices often include sustainable ways of managing natural resources and alternative ways to adapt to global changes such as population growth or climate change. The worldviews that underpin such knowledge are in many cases holistic and "typically emphasizes the symbiotic nature of the relationship between humans and the natural world" (ICSU and UNESCO, 2002: 9).

TRADITIONAL KNOWLEDGE

Traditional knowledge is defined here as "a cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality and worldview" (ICSU and UNESCO, 2002: 9).

International Council for Science and UNESCO (2002) ICSU Series on Science for Sustainable Development No. 4: *Science, Traditional Knowledge and Sustainable Development*, Paris: ICSU.



Focal Area III

Social, cultural, political and institutional aspects that govern water use

This focal area will examine the diverse range of social, cultural, political and institutional aspects that govern water management and use. Analysing formal and informal institutions* at different levels of governance – including national and international regulations, shared practices in the basin, and local norms of water use and conservation – is necessary to better understand the use, access, and control of water across different scales. As Mosse notes in his study of water control technology in South India: “water resources are never simply there; they are produced by social and political systems... water systems are not only shaped by, but also shape social and political relations” (2004: 272).†

Focal Area IV

Collaboration and conflict related to uses of, access to and control over water

This focal area will look at power relations, conflicts and legal issues related to cultural diversity and water. Many case studies describe situations where there is a major power imbalance between different parties, including those identifying contexts in which the rights of certain peoples had been marginalized, often to facilitate greater extraction of water resources or intensification of its use. New technologies are often owned by the state rather than local communities, creating further grounds for conflicts over ownership. Groundwork and baseline data collection from areas where conflict has occurred or may occur is critical, as is the collection of best practices in conflict resolution.

BALINESE WATER TEMPLES

Lansing’s seminal work in Bali demonstrated that water temples, and not kings, controlled the flow of water for irrigation, as well as the symbolic systems that define social coordination. Thus, “water temples must... be understood, not only as a system of irrigation management but in terms of their role in the process of sociogenesis” (Lansing, 2007 [1991]: 129).

Lansing, J. Stephen (2007) [1991] *Priests and Programmers: Technologies of power in the engineered landscape of Bali*, Princeton: Princeton University Press.

* Institutions are formal and informal rules and procedures that structure the behaviour of social actors, and include rules, norms, laws, policies, regulations, organizations and partnerships (Brechin et al, 2003).

Brechin, Steven R., Peter R. Wilshusen and Charles E. Benjamin (2003) ‘Crafting conservation globally and locally: Complex organizations and governance regimes’, in Brechin, Steven R., Peter R. Wilshusen, Crystal L. Fortwangler and Patrick C. West (eds.) *Contested Nature: Promoting international biodiversity conservation with social justice in the twenty-first century*, Albany: State University of New York Press.

† Mosse, David (2004) ‘The rule of water: Uncertainty and the cultural ecology of water in South India’, in UNESCO *Proceedings of the theme Water and Cultural Diversity at the Third World Water Forum*, Paris: UNESCO. http://www.unesco.org/water/ihp/pdf/wwf3_cult.pdf.

"WATER IS THE LIFE BLOOD OF THE ECOSYSTEM WHICH CONNECTS AND UNIFIES ALL BEINGS" – A FIRST NATIONS' PERSPECTIVE ON FRESH WATER

Elders from First Nations such as the Gitksan, Syilx, Secwepemc, N'laka'pamux, and St'at'imc in British Columbia, **Canada**, acknowledge fresh water's central, functional role in our lives and ecosystems, and thus emphasize the importance of teaching children to respect the spirit of water, practice water rituals, and respect the "water people" – the salmon.



RESTORATION OF URBAN RIVERS

Rivers – the anchors of cultures – have been dammed, drained, diverted, polluted, and paved over. Many cities are now re-envisioning their waterways, revitalizing communities and ecosystems by re-connecting them to rivers. LA River, **U.S.A.**, is about to be unleashed from its concrete ditch into community-based riparian restoration, creating riverfront housing, parks and walkways. New urban water cultures are emerging, celebrating their waterways, deepening understanding and appreciation of rivers.



WATER MANAGEMENT PRACTICES GUIDED BY DEEPLY-HELD BELIEFS AND TRADITIONS

Water management systems in San Cristobal de las Casas, Chiapas, **Mexico**, are based on complex Mayan perceptions of sacred realms and cultural traditions. The Maya believe that they form an integral part of the water cycle and contribute to the continued renewal of the resource through their natural bodily fluids. Thus, water is considered a communal resource and management of the water supply, a responsibility of the whole community, in contrast to conventional water management systems, where consumers contribute by means of a monetary charge for service provision.

"WE WANT OUR DIGNITY TO BE RESTORED" – THE STRUGGLE TO SECURE REPARATIONS FOR LOSS OF LAND, LIVELIHOOD AND LIFE

The Mayan people, whose way of life is rooted in the banks and valleys of wild rivers, have been displaced by the development of the Chixoy Dam in **Guatemala**. Their health, community, and culture have been shattered. Construction was begun without notifying residents or establishing a resettlement plan. When the dam was completed, villages were emptied at gunpoint, homes and fields burned, and massacres ensued. Survivors helped organize dam-affected communities, documented their experiences, and now seek reparations – accountability and remedy.



GOVERNING WATER - A COMPLEX AMALGAM OF CUSTOMARY LAWS AND MODERN LEGISLATION

Dredge-mining in southwest **Sierra Leone** is one of many cases involving clashes between native and modern law. Dredging requires major damming of river systems, and mining companies are given the right to dam rivers and alter watercourses as needed by their operations. This is contrary to native law on damming, which states that anyone building dams and depriving downstream users of water for more than a day will be sued. The precedence of mining legislation over native law has consequences for traditional water-based livelihoods such as female scoop-net fishing.



WATER IS GREEN, WHITE AND BLUE

Yunnan, located in the headwaters of three great rivers of Asia – the Salween, the Mekong and the Yangtze – is a centre of ethnic diversity within **China**. Most of Yunnan's inhabitants are ethnic minorities – including the Tibetan, Naxi, Bai, Lisu, Dayan, Nu, Dulong, Pumi and Mosuo – representing unique cultural systems with a wealth of languages, knowledge, beliefs, technologies, art and music. Water takes many forms in their lives: white in the snow in a sacred mountain; blue in the streams, lakes and rivers; green in being intercepted by vegetation and soil, further absorbed by plants to create biomass.

WORLDVIEWS INFLUENCING RESOURCE-USE BEHAVIOUR

In a rural community in the Mutoko area of **Zimbabwe**, worldviews influence the use and management of water, creating a significant gap between the requirements of statutory law and actual (customary) water-use practices: *“For us, water belongs to God, it belongs to the land, and what belongs to the land belongs to us. What belongs to God is a free gift and it must be accessible to all of us free of charge regardless of whether we have statutory rights or not. Water is a basic human need, it is life, its control and management should be in our hands.”*

ASING WATER AND CULTURAL DIVERSITY

PRAYING FOR RAIN TO THE WATER GOD

Takaokami, the god that brings rain, has long been worshipped in **Japan** as the deity governing irrigation and rice cultivation. Takaokami's birth – from the fire god Kagutsuchi – is mentioned in *Nihon-shoki*, one of the oldest books of classical Japanese history, written in 720 A.D. The Kibune Shrine to Takaokami in Kyoto is said to have been built in the 5th century next to a water source over a “dragon hole”, a significant place in feng shui. A ritual to pray for rain is held at the shrine every spring before rice planting season.



WATER FLOWS SHAPE SOCIAL AND POLITICAL SYSTEMS

In the semi-arid plains of South **India**, an irrigation system consisting of many interconnected tanks was set up in the 14th to 16th centuries for the cultivation of rice. This resulted in interdependencies among communities related through the gravity-fed flow of water on the sloping plain. Maravar-caste warrior chiefs consolidated their political power by building the supply channels and maintaining the infrastructure, granting water rights and arbitrating disputes. Local Tamil myths show a connection between warrior power and the water supply, and the hydrologically-determined interdependencies still pattern daily social and public life through ritual and religious systems.

OWNING THE WATER CYCLE – RAIN, RIVERS, SEA AND CLOUDS

In Arnhem Land, **Australia**, coastal Yolngu people understand the phases of water as interconnected and dynamic. Saline groundwater is part of the sea, freshwater rivers flow offshore during the monsoon floods, and clouds formed at sea complete the cycle by returning water to the land as rain. These phases appear in beautiful songs and paintings that are the sacred foundations of Yolngu identity and ownership.



CULTURE MAY ENCOURAGE PEOPLE TO DRINK CONTAMINATED WATER

The Bunna – semi nomadic cattle herders of southwest **Ethiopia** – live in an area where no springs can be found and where drilling is an essential method to gain access to water. During the dry season, the men walk long distances with their herds to look for water and grass and to harvest wild honey. However, because anything from the ground is considered dirty, they prefer contaminated surface water over potable borehole water for drinking. Deceased ancestors, not contaminated water, are perceived to be the cause of diseases.

CRITICAL QUESTIONS AND EMERGING THEMES ON WATER AND CULTURAL DIVERSITY

DIVERSITY

Approaching diversity: It is important to include a wide range of peoples – including urban dwellers and Westerners – for the project to fully achieve its purposes. Local and Indigenous contexts need to be emphasised because they have historically been marginalized in resources management discourse, and these alternative perspectives are likely to be less familiar to managers and decision makers trained in Western academic traditions. However, urban and first world examples also play an important role, considering the ongoing rapid urbanization of the world's population and the much greater consumption levels occurring in developed countries. Perceptions of water from both contexts are critical to understanding human water usage in the future.

Knowledge and disciplinary diversity: Another challenge is to promote knowledge communication and exchange among different disciplinary fields (e.g., engineering, forestry, urban planning, anthropology), and between people in such fields and the holders of other kinds of knowledge (local, traditional, indigenous, etc.). The fostering of cultural diversity requires ongoing diversification and critique of the ways in which knowledge is produced and shared with others.

SCALE

Water and cultural diversity needs to be documented at individual and household levels, at the local community level, and on broader geographic or cultural scales. On the one hand there is the need to look deep into **local scales** on which the majority of human life is lived to provide the basis for understanding the important components of human existence and diversity. On the other hand there is the need for generalisation at **wider scales**, for classification and comparison of different forms of diversity in order to incorporate such diversity into IWRM, which is a major task for the project. Different kinds of knowledge are relevant at different scales, and so the scale on which diversity is being considered affects the range of skills and methodologies used to understand it. Therefore, the levels, categories, or units of measurement the project will prioritize remain to be explored.

TIME

Time depth is another dimension that needs to be considered in documenting human diversity with respect to water. Many case studies look at the present situation or the recent past; some emphasize the significance of long-term historical continuities and discontinuities in contemporary relationships between people and water. As water may well be a potential source of conflict in years to come, it is important to try to understand the origins of conflict; a better understanding of historical causes greatly facilitates successful conflict resolution. The focus on IWRM suggests an orientation towards the present and the future. Yet the importance of historical lessons learned in anticipating future changes is generally acknowledged, and how we understand the past and present informs our analysis of possible futures. Thus, how the project will engage with questions of time depth, and the relative priority to be accorded to the past, present and future respectively remain open for the time being.

JUSTICE

Rights, ownership and control over water are critical issues, not just for the maintenance and management of the resource, but also for the way that ownership may underpin diverse human identities. Although talking of rights and ownership can set up an adversarial relationship that can rapidly lead to a situation of intractable conflict, the rights discourse needs to be constructed to respond to situations where there is a major power imbalance between different parties.

The right to water is often seen as a human right. Many case studies identify gaps between law and practice, with laws (customary, statutory, or others) not always being adhered to or enforced. The rights of certain people are often violated to facilitate greater extraction or intensified use of water resources. Different forms of law may be incompatible with each other and/or incompatible with alternative technologies and practices. All such issues have the potential to impact significantly on sustainability.



WHAT COMES NEXT?

Summer 2008	<p>Launch of database The database, which will include a bibliography of books, journal articles, conventions, case studies and events on water and cultural diversity, will be put online, along with a directory of organisations and experts working on the topic. The database will allow users to download and upload information.</p>
July 2008	<p>Expo Zaragoza 2008 (tbc) In addition to a permanent exhibition on water and cultural diversity, a lively public session will be held to demonstrate cultural diversity in water. Experts of different backgrounds will raise awareness among the general public and will stimulate discussion among the specialists and practitioners. Information will be provided in the form of case studies and other resources. Interactions and partnerships among institutions and experts working on, or interested in, the topic will be facilitated.</p>
16 – 22 March 2009	<p>World Water Forum The water and cultural diversity project will actively participate in the World Water Forum 2009 in Istanbul, in particular, to facilitate the topic 6.5: Water and Culture, which falls under theme 6: Education, Knowledge and Capacity Building. For more information see www.worldwaterforum5.org</p>
Spring 2009	<p>Launch of CoP The interactive part of the website will be brought into action with the launch of the Community of Practice around water and cultural diversity. Opportunities for virtual interaction through web-conferences, a forum and a laboratory will be created.</p>
September 2009	<p>International Symposium on Water and Cultural Diversity An international symposium is under preparation. The event will bring together experts and practitioners from various disciplines working on the topic of water and cultural diversity. The dates, location and preliminary programme will be announced on our webpage at the beginning of 2009.</p>
Autumn 2009	<p>Launch of book on Water and Cultural Diversity A variety of experts will work together to publish a book on water and cultural diversity, containing academic and non-academic articles on each of the focal areas. The publication is expected to be made available online at the webpage.</p>

HOW TO BE INVOLVED?

CONTRIBUTE TO THE DATABASE

We will concentrate on compiling information on the topic of water and cultural diversity through 2008 and 2009. We will be actively seeking publications, organisations and people working on the topic. We welcome your input, so don't hesitate to contact us.

BECOME A MEMBER OF THE CoP

Once the CoP is launched on the website, you will be able to register as a member. This will allow you to actively participate in discussions and other activities. You will also have the option of subscribing to a newsletter that will inform you about news and events on a regular basis.

Or you can just simply spread the news among colleagues and friends who might be interested in the topic.

FACILITATING COMMUNICATION AND KNOWLEDGE-SHARING

This project will develop an informative and interactive website on water and cultural diversity on UNESCO's Water Portal, consisting of a database and community of practice (CoP). The website will act as an information resource and as a communication platform for experts and organisations. By disseminating information and creating a network of people across disciplines and interests, the website will serve as a tool to meet the objectives of the project.

Database & Library

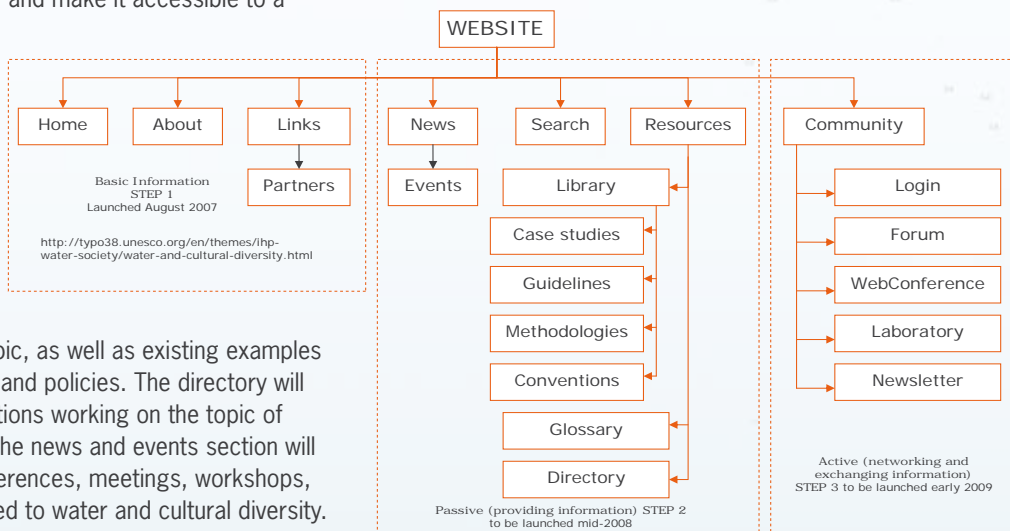
The aim of the database is to collect information relevant to water and cultural diversity and make it accessible to a wide group of users. The database will consist of four main sections – news and events, library, directory of experts and organizations, and a glossary. The library will be a collection of case studies and other research categorized according to the project's focal areas, conventions related to the topic, as well as existing examples of methodologies, guidelines and policies. The directory will consist of experts and institutions working on the topic of water and cultural diversity. The news and events section will contain a list of relevant conferences, meetings, workshops, symposia and seminars related to water and cultural diversity. All interested stakeholders and website visitors will be welcome to access the information, use the database and contribute to its further development.

Community of Practice (CoP)

An interactive space will be created on the website, consisting of a community of practice (CoP), where information and opinions are shared among members and users. The aim is to create an environment that encourages virtual social interaction and collaboration among users interested in the topic of water and cultural diversity, and initiate and support cutting-edge research on the topic. Members of this network will play a central role in developing methodological guidelines to facilitate the integration of social and cultural factors to water sciences as well as culturally-sensitive policy recommendations. Products to be developed through this network include: a handbook for water managers and infrastructure developers; educational and training programmes for water professionals to mainstream cultural diversity into IWRM; public awareness-raising material, such as brochures, DVDs, and games. Some features will be accessible to all, while others are reserved for registered members. Activities in the CoP area will be under supervision of a webmaster and moderator, yet members will be encouraged to engage in active participation (e.g., taking on the role of a moderator for a web-conference).

COMMUNITY OF PRACTICE (CoP)

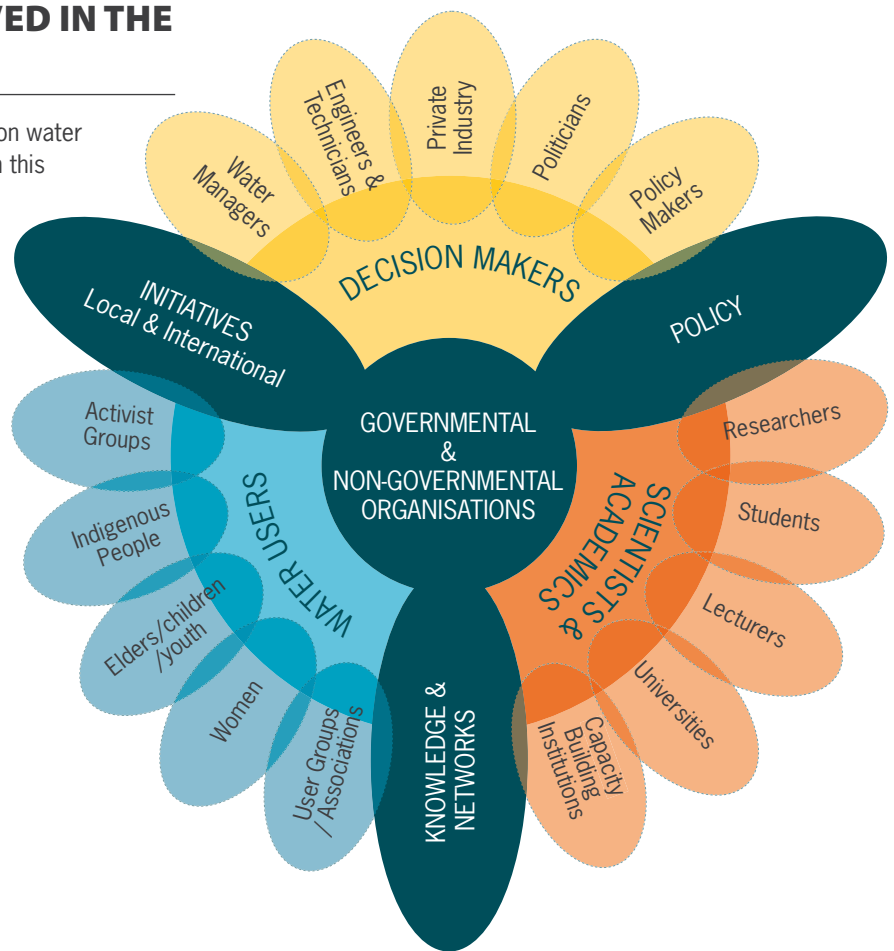
The concept of CoP refers to a group of people who have a common interest and share information and ideas to find solutions and recommendations for a certain topic or problem. The members of the group interact regularly either directly (face-to-face) or on a virtual platform (Wenger, McDermott and Snyder, 2002). Within this project, both forms of CoP interaction will be facilitated.



Wenger, Etienne, Richard McDermott, and William M. Snyder (2002). *Seven Principles for Cultivating Communities of Practice*, Boston: Harvard Business School Press.

PARTNERS TO BE INVOLVED IN THE PROJECT

The network and a community of practice on water and cultural diversity to be created through this project will link a wide variety of groups – decision makers, professionals and water users at all levels (local, national, regional, supranational and global), as well as involving NGOs, industry and government organizations, media and experts.



CURRENT PARTNERS

In addition to the institutional partners listed below, fourteen experts from twelve countries, who represent a variety of backgrounds and disciplines pertaining to water – anthropology, geography, philosophy, ethno-botany, forestry, hydrology, and indigenous knowledge – are guiding the development of this project.

PCCP (From Potential Conflict to Co-operation Potential)

More information: www.unesco.org/water/wwap/pccp

Local and Indigenous Knowledge Systems (LINKS)

More information: www.unesco.org/links

Man and Biosphere Programme (MAB)

More information: www.unesco.org/mab

Research Institute for Humanity and Nature (RIHN)

More information: www.chikyu.ac.jp

UNU-IAS Research Traditional Knowledge Water Programme

More information: <http://www.unutki.org>



UNU-IAS

Institute of Advanced Studies

Traditional Knowledge Initiative



PHOTOS - EXPLANATIONS AND CREDITS

FRONT COVER

A well used by monks for ablution, Kuramadera Temple in Kyoto, Japan
© Hidenobu Aoki

Woman fetching water in rural Dodoma Region, Tanzania
© Nora Dietrich

A female IFAD project beneficiary hand watering mango saplings in Perialangiri
© IFAD/ Anwar Hossain

INSIDE FRONT COVER

Langcang Mekong River in North-West Yunnan, China
© CBIK/ Xie Hongyan

Bunna of South-West Ethiopia fetching contaminated surface water for drinking
© James Webster

Nu-Salween River in North-West Yunnan, China
© CBIK/ Yin Lun

PAGES 2 - 3

Small basin at Ryoanji Temple in Kyoto, Japan. The four characters engraved connote a Zen philosophy, which can be translated roughly as "I learn only to be contented"
© Hidenobu Aoki

Female household members carrying water uphill in central Tanzania
© Nora Dietrich

Children protesting for increased water quality at Doce River in Brazil - "Pollution is enough. We want to swim in our river"
© Claudio Guerra

PAGE 4

Fountain in a Shrine in Kyoto decorated with a flower
© Alexander Otte

Tank with Holy Water in the Cloister of San Xavier del Bac Mission (18th century), Tohono O'odham Nation, San Xavier District, Arizona, U.S.A.
© Alexander Otte

First Nations sacred spring in the dry ponderosa grasslands of central British Columbia, Canada
© Michael Blackstock

PAGES 5 - 7

Canada
Case study & Photo: © Michael Blackstock

U.S.A. (Los Angeles)
Case study & Photo: © Irene Klaver

Mexico
Case study & Photo: © Ameyali Ramos Castillo
Reference: Ramos Castillo, Ameyali (forthcoming). *Breaking the Silence: Indigenous People and Urban Water Governance*

Guatemala
Photo: © Bert Janssens
Case study: Barbara Rose Johnston

Sierra Leone
Case study & Photo: © Fenda Akiwumi
Reference: FAO/UNDP (1973) "Sierra Leone". In *Water law in selected African countries (Benin, Burundi, Ethiopia, Gabon, Kenya, Mauritius, Sierra Leone, Swaziland, Upper Volta, Zambia)*, ed. Dante A. Caponera, 162-205, Legislative study no. 17. Rome, Italy: Food and Agricultural Organization of the United Nations.
Fenton, J.S. 1948. *Outline of native law in Sierra Leone*. Freetown, SL: Government Printer

Zimbabwe
Photo: © IFAD/ Horst Wagner
Case study: Claudious Chikozho

Ethiopia
Photo & Case study: © James Webster

China
Photo & Case study: © CBIK/ Qian Jie

Japan
Photo: © Sango/ Morino-Fukurou
Reference: Anonymous (2001). *Kibune Jinja – Rain ritual* (accessed: March 2008)
<http://www.kibune.or.jp/jinja/>

India
Photo: © IFAD/ Anwar Hossain
Mosse, David (2004) "The rule of water: Uncertainty and the cultural ecology of water in South India", in *Proceedings of the theme Water and Cultural Diversity at the Third World Water Forum, Paris: UNESCO*.
http://www.unesco.org/water/ihp/pdf/wwf3_cult.pdf

Australia
Photo & Case study: © Marcus Barber

PAGE 9

Séguia (traditional irrigation canal) of the oasis Taghoucht (Ferkla), Anti Atlas, Morocco
© Alexander Otte

Mayan protestors displaced by the Chixoy Dam site (Baja Verapaz, Guatemala) listen to the results of negotiation after 29 hours of peaceful protest
© Bert Janssens

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Mayan residents working on a consequential damage survey with men from the Agua Blanca community, a village located downstream from the Chixoy Dam
© Bert Janssens

Kinuso Falls, one of the tallest waterfalls in Canada, located near Tumbler Ridge, British Columbia
© Michael Blackstock

BACK COVER

Man fishing algae in an urban eutrophic pond in Shanghai, China
© Andras Szöllösi-Nagy

FOR MORE INFORMATION

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