

# **THEME ONE**

## **Global Changes and Risk Management**

<b>TOPIC SESSION REPORT 1.1</b>	<b>Chair:</b> Ron Hoffer / Torkil Jønch Clausen.....	<b>Reporters:</b> Åse Johannessen, Marloes Bakker
<b>Theme:</b> Global Change & Risk Management  <b>Thematic coordination group:</b>	<b>Thematic coordination lead:</b> Organization: Co-operative Programme on Water and Climate (CPWC)  Name contact person: Henk van Schaik.....  e-mail: h.vanschaik@unesco-ihe.org.....	
<b>Topic:</b> <b>Adapting to climate change in water resources: understanding the impacts of climate change, vulnerability assessments and adaptation measures.</b>  <u>Topic Main Question:</u> How can water resource managers and major water user groups and affected stakeholders adapt to the consequences of climate variability and change in the near and longer term?  <u>Topic coordination group:</u> CPWC, WWC, GWP, IWA, Green Cross International, UNESCO, NICID, AWC, IGRAC, IAH, GWA, Turkish government	<b>Topic coordination lead:</b> Organization: .....tba.....  Name contact person: ...tba.....  e-mail: .....tba.....	
<b>Key Topic Issues</b>	<b>Questions</b>	<b>Session Ideas</b>
<ul style="list-style-type: none"> <li>• Presentation of the current state of knowledge on climate impacts on water services and water resources and its relevance for water management.</li> <li>• Interactive discussion and debate (i.e., with panel) on national and/or village level impact</li> </ul>	<ul style="list-style-type: none"> <li>• Do we understand the impacts of climate change on the water cycle?</li> <li>• How to assess, prioritize and define hot spots?</li> </ul>	<ol style="list-style-type: none"> <li>1. Presentation on the State of Knowledge on Climate Impacts upon Water Resources and Water Services followed by Debate [panel and participants] on the Relevance for Local Actions</li> <li>2. Assessment of vulnerabilities and hot spots</li> </ol>
Making climate information (incl. models, hydrology, meteorology, modelling) data relevant for water management and water services.	What type of climate related information do water managers and water services managers at the local level need to successfully adapt to climate change?  How can climate related information better inform water management policies and practices?	<ol style="list-style-type: none"> <li>3. Making climate information (incl. models, hydrology, meteorology, modeling) data relevant for water management and water services</li> </ol>
Decision making and mainstreaming climate in water management strategies under uncertainty (national and regional adaptation planning).	How to mainstream climate in water management strategies, incl. IWRM?  How to share risks between different stakeholders under uncertainty?	<ol style="list-style-type: none"> <li>4. Decision making under uncertainty.</li> <li>5. Mainstreaming climate in water management strategies, including IWRM.</li> <li>8. Policy maker session</li> </ol>
Response options; hard and soft methods and costs to adapt to climate change.	What methods and hard and soft measures are available to resource managers and major water user groups and affected stakeholders to cope with climate change?	<ol style="list-style-type: none"> <li>6. Response options; hard and soft methods and costs to adapt to climate change.</li> </ol>

TOPIC SESSION REPORT 1.2	Chair: Nilgün GÖRER TAMER, Gazi University	Reporter: Mine İZMİRLİ, TEMA Foundation
Theme: Global Change and Risk Management  Thematic coordination group:	Thematic coordination lead: Organization: ..... Name contact person: ..... e-mail: .....	
Topic: Water related migration, changing land use and human settlements Topic Main Question: - Migration as a driver : (Migration causing impacts on /effects of migration on water) - Migration as an end result : ( impact of migration on water resources ( directly –indirectly affected by global (climate) change on migration)  Topic coordination group: UNU-EHS UN HABITAT	Topic coordination lead: Organization: ... UNU-EHS UN HABITAT .....  Name contact person: .....  e-mail: .....	
Key Topic Issues	Questions	Session Ideas
Introduction session	How do global changes affect water-related context of land use and human settlements and demographical change?	Population dynamics-water UN HabitAT, UNDP, UNIDO, OSS
Migration and water relation  Land use change due to water availability	How can water resources management and water services lessing migration  Which factor affects human settlements in the context of water?	Migration-water interrelation EHS, UNCCD, ICID, DSI, PAWE, UNUEHS, WB, IFAS, Ministry of Agriculter,
Water and land degradation , land tenure system, water righth	How can water management lessen the impact of extreme events.  Extreme events (flood, earthquake, conflict causing migration  Water and land scarcity / availability causing migration	Human settlements and water Land use change due to water availability  IFAS, Land coalision, FAO, EHO, UNCCD, ICID, DSI, PAWE,
Human settlemen and water	How can the provision of water services to human settlements be ensured in the face of global change	WB, GWA, IFAS, UNESCO, DSI, UN HABITAT, , Professional organizations, NGO, Local elected people
. Coping strategies and policies - What measures are available to integration between land use, spatial plans- policies /spatial plans and water plans-policies/assessment  - Misuse of land and water resources  - Possible effects on underground water of migration (coastal areas)		FAO, UNCCD, In IFAD, IFAS, Proffessional organizations, NGO, Local elected people
Special session Emphasis on refugees safe water and sanitation		UNHCR, OXFAM, UNICEF, GWA, red crescent –Turkey, ACTION..FAIM SOLIDARITY

TOPIC SESSION REPORT 1.3	Chair: Mr. Katsu Miyake, ICHARM	Reporter: Mr. Hikaru Shoji/Ms. Taeko Yokota, JWF
Theme: <b>Global Changes &amp; Risk Management</b> Thematic coordination group: <b>CPWC, Japan Water Forum (JWF)</b>	Thematic coordination lead: Organization: Co-operative Programme on Water and Climate (CPWC) Name contact person: Mr. Henk van Schaik e-mail: h.vanschaik@unesco-ihe.org	
Topic: <b>Managing Disasters</b> Topic Main Question: <b>How can we mobilize and manage all available resources in a proper way to face disasters in a changing world?</b> Topic coordination group: <b>ICARM, JWF</b>	Topic coordination lead: Organization: ..... Name contact person: ..... e-mail: .....	
Key Topic Issues	Questions	Session Ideas
<input type="checkbox"/> Water-related disaster management <input type="checkbox"/> Urban flood mitigation	<b>How can we mobilize and manage all available resources in a proper way to face disasters in a changing world?</b>	<b>Water-related disaster management</b> <Potential organizers> - Governments: MLIT of Japan / General Directorate of Disaster Affairs of Turkey - International organizations: UNESCO IHP / WMO - Academics: International Society of the Paddy and Water Environment Engineering - Donor organizations: World Bank / Inter-American Development Bank
<input type="checkbox"/> Trialogue between Government, Society and Science <input type="checkbox"/> Policy dialogue <input type="checkbox"/> Global-level target and Indices for water-related disaster reduction	<b>1. How do we make the significant leap (or paradigm shift) needed to gain the different levels of cooperation between Government, Society and Science (trialogue) in order to manage disasters? 2. Do we need global-level target for actions and indices to monitor progress to reducing the loss of life, job, property and business continuity caused by disasters?</b>	<b>Triologue Session</b> <Potential organizers> - Governments: MWR of the Netherlands - Academics: CSIR - International organizations: GWA / "High-level Expert Panel on Water and Disaster/UNSGAB" / UNESCAP / Typhoon Committee
<input type="checkbox"/> Utilization of technology (GIS, Remote System, River Information System, indigenous knowledge) <input type="checkbox"/> Transfer of technology	<b>How should we enhance the use of existing technologies to manage disasters caused by climate change and population growth? Is there still need for the development of new technologies and innovations?</b>	<b>Technologies for water-related disaster management</b> <Potential organizers> - Governments: MLIT of Japan / DSI of Turkey / NOAA - Academics: Middle East Technical University - International organizations: WMO
<input type="checkbox"/> Disaster preparedness  <i>* Need to be coordinated with the topic "Adapting to Climate Change"</i>	<b>How can we make a paradigm shift from reactive crisis management to proactive disaster risk management?</b> or <b>How can we move away from traditional disaster response to more appropriate disaster preparedness model for disaster management?</b>	<b>New structure and non-structure design criteria for extreme events / climate change</b> <Potential organizers> - Governments: MOCT of ROK / MLIT of Japan - International organizations: GWA
<input type="checkbox"/> Prevention of primary and secondary effects in conflict areas <input type="checkbox"/> Groundwater Resources under emergency situations	<b>How to maintain key water infrastructures and appropriate living environmental condition when disaster occurs in conflict and/or vulnerable areas?</b>	<b>Managing disasters in conflict and/or vulnerable areas</b> <Potential organizers> - International organizations: ICRC / UNESCO IHP

## **THEME TWO**

# **Advancing Human Development and the Millennium Development Goals**

<b>TOPIC SESSION REPORT 2.1</b>	<b>Chair:</b> ... Saskia Castelein (WHO/WSSCC/WSP/UNICEF .....	<b>Reporters:</b> Christophe Le Jallé (pS-Eau) and Lesha Witmer (WfWfW).....
<p><b>Topic: Ensuring water, sanitation and hygiene for all</b></p> <ul style="list-style-type: none"> <li>- ensuring adequate infrastructure</li> <li>- protecting public health in the short term</li> </ul> <p><b>Topic Main Question: How can everybody in the world have sustainable safe water and adequate sanitation and hygiene?</b></p> <p><u>Topic coordination group:</u></p> <ul style="list-style-type: none"> <li>- WHO</li> <li>- UNICEF</li> <li>- WSP</li> <li>- WSSCC</li> <li>- pS-Eau / French coalition for water</li> </ul>	<p><b>Topic coordination lead:</b></p> <p>Organization: ..... WHO/WSSCC/WSP/UNICEF/pS-Eau .....</p> <p>Name contact person: ... <b>Piers Cross (to be confirmed)</b>.....</p> <p>e-mail: .....</p>	
<b>Key Topic Issues</b>	<b>Questions</b>	<b>Session Ideas</b>
<b>Consistent monitoring for progress on the MDGs</b>	<p>Where are we on the MDG target 10? (mapping of the situation and of the ODA)</p> <p>How to improve the MDG monitoring for WASH sector at international, national and local levels?</p> <p>Who should monitor ? What ? And Why?</p> <p>What are the obstacles to gather information?</p> <p>How to use monitoring to set up WASH national policies and as a tool to improve the service</p> <p>How new IT can help the monitoring system (eg GPS)?</p>	<b>Consistent monitoring for progress on the MDGs</b>
<b>Empowering stakeholders to community development</b>	<ul style="list-style-type: none"> <li>- What are proven strategies and approaches to effectively involve all local stakeholders, notably local communities / and users in the all process ?</li> <li>How do take into account the cultural aspects relating to technological choices?</li> <li>How can we strengthen Local Government for improving WASH service delivery?</li> <li>How facilitate stakeholders to be able to make informed choices?</li> </ul>	<b>Empowering stakeholders to community development</b>

	<p>How to ensure that education, training &amp; instruction are incorporated in projects?</p> <p>Demand driven approach vs supply led approach ?</p>	
<b>Expediting access to water and sanitation</b>	<p>What elements are required to go from project approach to sustainable services? What are the different approaches for scaling up?</p> <p>Role of capacity building to empower national local governments in their service delivery?</p> <p>How to transfer knowledge and experiences to local authorities and communities?</p> <p>How to improve partnership between operators?</p> <p>How can we involve local entrepreneurship?</p> <p>How financing institution (micro-finance / local banks) can contribute to empowering community development?</p> <p>How school sanitation and hygiene promotion can be tools to scaling up?</p>	<b>Expediting access to water and sanitation</b>
<b>Keeping sanitation high on the agenda</b>	<p>How do we convince politician and decision makers of the economic benefits of sanitation?</p> <p>What is the main requirements and obstacles to develop national sanitation policies?</p> <p>How to translate political commitments into concrete action?</p> <p>What are the main stakeholders to be targeted to promote sanitation?</p> <p>How do we promote sanitation to different stakeholders?</p> <p>What were the achievement and shortfalls of the IYS (International year of sanitation), and how can we build upon them now?</p>	<b>Keeping sanitation high on the agenda</b>

<p>TOPIC SESSION REPORT 2.2</p>	<p>Chair: ..... ...</p>	<p>Reporter: .....</p>
<p>Theme: Advancing Human Development and MDGs</p> <p>Thematic coordination group:</p>	<p>Thematic coordination lead: Organization: ..... Name contact person: ..... e-mail: .....</p>	
<p>Topic: Water for Energy / Energy for Water</p> <p>Topic Main Question: How can we harmonize water and energy policies?</p> <p>Topic coordination group:</p>	<p>Topic coordination lead: Organization: .....  Name contact person: .....  e-mail: .....</p>	
<p>Key Topic Issues</p>	<p>Questions</p>	<p>Session Ideas</p>
<p>Water and energy policies often conflict (impact on reaching targets and MDGs)</p> <p>Water and energy institutions, industries and markets are often disconnected</p> <p>Limited accounting for water in the energy sector, despite being a major user</p> <p>Need to factor climate change impact on the water and energy nexus</p> <p>Sustainability criteria (environmental, social and economic) required to address water and energy supply/demand</p> <p>Drivers for water and energy services are predominantly population growth and increasing living standards (before climate change)</p> <p>Communities without access to modern energy are likely to be those without access to water and sanitation also</p> <p>Water and energy resources are unevenly distributed, solutions are likely to be differentiated accordingly</p> <p>Appropriate (new) technologies can improve performance – new developments and synergies can reduce costs and impacts</p> <p>Surface water storage schemes also store energy – can influence mixed energy systems and water services</p> <p>Bioenergy (linkage with agriculture energy crops, biogas, traditional biomass, waste, etc.)</p> <p>Irrigation – pumping can be significant energy user (electric or diesel powered)</p> <p>Navigation – can significantly reduce energy consumption</p> <p>Need to differentiate between consumption and use of water for energy (bioenergy versus hydropower)</p> <p>Water footprint different for each energy technology and service (transport, heating, power production)</p> <p>Energy recovery from water processing (target of energy neutrality in modern sanitation process)</p>	<p>Where are there conflicts in current policy?</p> <p>What are the common drivers and solutions?</p> <p>How can policy support community orientated initiatives?</p>	<p>Integrating water and energy policies to meet the MDGs</p>
	<p>What criteria should be applied?</p> <p>What are the key indicators?</p> <p>How can performance be measured?</p> <p>What role can markets play in guiding performance?</p>	<p>Sustainable use of water and energy resources</p>
	<p>How can the water sector minimize its demand on energy?</p> <p>How can the energy sector minimize its impact on water?</p> <p>What role can renewable energy play in the water sector?</p> <p>To what extent can in-land navigation reduce energy use in the transport sector?</p>	<p>Appropriate technologies to reduce the water and energy footprint</p>

<p>Role of renewable energy in treating and distributing water  Reducing energy consumption in water recycling and desalination  Energy availability and reliability essential for water services  Energy can be 60-80% of water treatment cost – efficiency and recovery key to reducing costs  Pricing water should incorporate the true (energy) cost</p> <p>Cross-cutting issues: (bioenergy and agriculture – and – navigation and optimized use of water)</p>	<p>What criteria should be applied?  What are the key indicators?  How can performance be measured?  What role can markets play in guiding performance?</p>	<p>Sustainable use of water and energy resources</p>
	<p>How can the water sector minimize its demand on energy?  How can the energy sector minimize its impact on water?  What role can renewable energy play in the water sector?  To what extent can in-land navigation reduce energy use in the transport sector?</p>	<p>Appropriate technologies to reduce the water and energy footprint</p>

TOPIC SESSION REPORT 2.3		Chair: ...Henri Tardieu.....	Reporter: ...Ronit Golovaty and Faisal Taha...
Theme: <b>Advancing Human development and MDGs</b>	Thematic coordination lead: Organization: ...UN water.....		
Thematic coordination group:	Name contact person: ...Pasquale Steduto..... e-mail: .....		
Topic: <b>2.3 Water for food for ending poverty and hunger</b> Topic Main Question: <b>How can poverty and hunger be reduced with the growing demand for food, the increasing pressure on land and water, the development of bioenergy ?</b> Topic coordination group: All the members of the session (see attendance list)	Topic coordination lead: Organization: .....ICID..... Name contact person: .....Secretary general Gopolakrisnan..... e-mail: .....icid@icid.org.....		
Key Topic Issues	Questions	Session Ideas	
How to reconcile agricultural and water policies to avoid both global and local food crises?  How can institutional and technical water management improvements and investments contribute to increase the food production	How to bridge between agricultural and water policies to ion avoid both global and local food crises?  How can institutional and technical water management improvements contribute to increase the food production?  What types of investments are necessary to develop additional water resources including non conventional and to modernize existing irrigation schemes to improve water productivity  How can rainfed agriculture contribute more effectively, in continuing irrigated agriculture; to enhance food security and improve livelihoods in rural areas?	Food production and the growing demand for food;	
How poor farmers can benefit from market opportunities?	How poor farmers can benefit from market opportunities and how to improve the marketing chain?  How could local markets be strengthened by capacity building and farmer empowerment consistently with trade?  How New market opportunities can help in financing water services?	Food marketing for rural development	
How can local development benefit from bioenergy?	How rural communities can benefit from bioenergy crops?  How to avoid conflict with food production by considering reversible crops from non-food to food production, and using marginal water and land?  How to develop farming practices compatible with natures balance ?	Bioenergy for local development.	

TOPIC SESSION REPORT 2.4	Chair: Daniel Renault (FAO).....	Reporter: Stef Smits (IRC).....
<p>Theme: Advancing human development and the MDGs</p> <p>Thematic coordination group:</p>	<p>Thematic coordination lead:  Organization: UN Water.....</p> <p>Name contact person: Pasquale Steduto.....</p> <p>e-mail: .....</p>	
<p>Topic: Multiple use and functions of water services</p> <p>Topic Main Question:  How can so-called multiple-use services (mus), which simultaneously address several key water needs (water for domestic needs, food production and nutrition, income generation, habitat support, energy generation, transportation, and tourism) be better recognized as contributing to several MDGs and human development, and how can such services be further strengthened and supported in their governance and sustainable service delivery?</p> <p>Topic coordination group: All present (see participants list)</p>	<p>Topic coordination lead:  Organization: FAO.....</p> <p>Name contact person: Daniel Renault.....</p> <p>e-mail: .....</p>	
Key Topic Issues	Session	Key questions
<ul style="list-style-type: none"> <li>- the potential of multiple-use services in contributing to several MDGs</li> <li>- multiple use of water services and sustainability of services</li> <li>- Cost-effectiveness of multiple-use services</li> <li>- water quantity and quality considerations, and related infrastructure requirements, in multiple-use services</li> <li>- the management and potential for reuse of marginal quality water in multiple-use services</li> <li>- the governance arrangements (including financing mechanisms) of multiple-use services</li> <li>- institutional and policy development for multiple-use services</li> </ul>	Multiple use of water services to accelerate achievement of MDGs	<p>Q1 How can different types of multiple use services (large irrigation systems; community-managed; multi-purpose dams) be conceptualised and characterised?</p> <p>Q2. What are the benefits of multiple-use services for different user groups (farmers, livestock, owners, and the sustainability of the services?)</p>
	Governance and support to multiple use of water services	<p>Q1 What are the current experiences with governance of multiple-use of water systems?</p> <p>Q2 What are the legal, political, financial, institutional barriers faced by multiple-use services, and how can these be reduced so as to support and scale up multiple-use services?</p>

## **THEME THREE**

**Managing and Protecting Water Resources and their  
Supply Systems to Meet Human and  
Environmental Needs**

TOPIC SESSION REPORT 3.1	Chair: Jean Marie Wauthier		Reporter: ... Jean Francois Donzier and Lena Salame
<p>Theme: <b>Managing and protecting water resources and their supply systems to meet human and environmental needs</b></p> <p>Thematic coordination group:</p>	<p>Thematic coordination lead:</p> <p>Organization: .....</p> <p>Name contact person: .....</p> <p>e-mail: .....</p>		
<p>Topic:</p> <p>Topic Main Question:</p> <p>Topic coordination group:</p>	<p>Topic coordination lead:</p> <p>Organization: .....</p> <p>Name contact person: .....</p> <p>e-mail: .....</p>		
Key Topic Issues	Questions	Session Ideas	
	<p>What are the success stories and failures (and their reasons) of IWRM and hydrosolidarity at basin level.</p>	<p>Success stories and failures (and their reasons) of IWRM and hydrosolidarity at basin level.</p> <p>3 elements of IWRM to assess the success stories and failures (enabling environment, Institutional framework, management tools).</p> <p>Presentations of success and failures stories at 3 basin levels: local, national, transboundary.</p> <p>Adaptation of IWRM at different types of situations</p> <p>Proposal of guidelines for better IWRM</p> <p>(Hydrosolidarity v/s hydro sovereignty IWRM at different levels)</p> <hr/> <p>Institutions/people who would like to contribute:</p> <p>Yakup Darama, State Hydraulic Works DSI</p> <p>University of Castilla-la Mancha.</p> <p>DHI water and environment</p> <p>Union of municipalities of Marmara Region</p> <p>UNESCO (ISARM, PCCP, IHP)</p> <p>South Eastern Anatolia project (GAP RDA)</p> <p>Academie de l'eau</p> <p>WWF International</p> <p>Centre of Russian Waterworks Inventory and State Water Cadastre</p> <p>SIC-ICWC</p> <p>Istanbul University Faculty of Forestry</p>	
	<p>How can transboundary (surface and groundwater) resources be managed in a more sustainable manner by concerned riparian.</p>	<p>Sustainable management of transboundary (surface and groundwater) resources by concerned riparian.</p> <p>Sustainable management of transboundary groundwater resources.</p> <p>Sustainable management of transboundary surface water</p> <p>Integration of both.</p> <p>- Institutions</p>	

		<ul style="list-style-type: none"> <li>- Conflict resolution and cooperation building mechanisms</li> <li>- International legal instruments and implementation (1997 convention, draft articles on groundwater resources, ECE convention, WFD...)</li> <li>- Prerequisites and basis for cooperation</li> </ul> <p>Ethical principles for allocating transboundary water resources (Dublin principles and their review to adapt to global changes)</p> <p>Training and capacity building</p>
	<p>How to organize and enable stakeholders' participation in basin management and transboundary cooperation?</p>	<p><b>Organization and enablement of stakeholders' participation</b></p> <p>Different kinds of participation (institutional frameworks, basin committees, education and empowerment, consultation, information, involvement... ) on 3 basin levels</p> <p>Different kinds of groups ( women, NGOs... )</p> <p>Multistakeholders processes</p> <p>Information and communication technology for participation</p> <p>Definition of stakeholders (Local authorities, Municipalities, Elected people, NGOs, researchers, economic sector, citizens' organizations, water consumers, media, international organization... )</p> <p>Presentation of success and failures stories</p>
	<p>What are the operational tools to achieve better:</p> <ul style="list-style-type: none"> <li>- Basin management</li> <li>- Transboundary cooperation over surface and groundwater resources?</li> </ul>	<p><b>Operational tools to achieve better:</b></p> <ul style="list-style-type: none"> <li>- Basin management</li> <li>- Transboundary cooperation over surface and groundwater resources</li> </ul> <p>Focus on operational tools:</p> <p>Management plans/Master plans including risk and disaster management plans</p> <p>Programme of measure</p> <p>Financing</p> <p>Information monitoring, assessment</p> <p>Research</p> <p>Joint planning and operation</p> <p>Modelling</p> <p>Training</p> <p>Decision support systems</p> <p>Dispute/conflict resolution mechanisms and cooperation building tools</p>

## Topic 3.2

### Questions put forward by the group during discussions

What are the mechanisms (communication strategies) to ensure that stakeholder participation is achieved, to avoid conflict, when planning water infrastructure? (1)

What are the best ways to assess world water needs accurately? (3) (4)

How can sedimentation problems be addressed, to contribute to making water infrastructure more sustainable? (5) (14)

How can reservoir water quality be controlled? (2) (14)

What mechanisms should be developed to meet agricultural energy and urban water needs? (7) (4)

Should recycled water be regarded as a water supply storage system? (6)

Flood protection should be recognized as one of the functions of a multipurpose scheme  
(1) (14)

How can environmental flow objectives be integrated into water management objectives of infrastructure projects? (2)

How best to determine appropriate development and use of man-made infrastructure and natural infrastructure (for example, flood plains, wetlands)? (3) (4)

How can countries adopt an integrated policy package that precludes development in certain areas, maximizes the environmental compatibility of development where it occurs, and compensates local communities for ecosystem services lost due to infrastructure development? (2) (3) (16)

How can we meet the increased demand for food, urban needs and energy, and what storages, infrastructure investments and processes (including trade) are required? (10) (11) (5)

How does unreliability of supply constrain productivity, investment and making best use of scarce resources? How can storage help, and at what cost? (13)

How can we determine and prioritize competing/interrelated needs? (Distinction between human and natural/environmental needs; between urban and rural needs; and between needs in arid and water-rich areas? (4) (6)

What mechanisms should be employed to reduce wastage, encourage conservation in water-rich areas, and make the use of water in agriculture more productive? (7) (9) (12)

How can we ensure that adequate environmental flows can be maintained, along with the infrastructure which is needed? (2)

What kind of measures should be taken to improve the income level of affected people in reservoir areas (mitigation measures)? (2) (16) (13)

How to upgrade infrastructure respecting environmental aspects and taking into account changing needs. (15)

How to ensure infrastructure can withstand the effects of climate change (8)

**THEME 3: Topic 3.2 Ensuring adequate water resources and storage infrastructure to meet agricultural, energy and urban needs**

Main question: How can the increasing demands of water and the need for infrastructure be achieved in the framework of sustainable development

*Thematic coordination lead - Secretary of World Water Forum*

*Topic 3.2 coordination group – TNC, WWF, UNEP, IWRA ,ICOLD, ICID, DSI*

*Topic 3.2 coordination lead - Organization: ICOLD Name of contact person: Prof Luis Berga (email: [lluis.berga@upc.edu](mailto:lluis.berga@upc.edu))*

Working group issues (based on 15 questions)	Questions / <b>Session title</b>	Stakeholders
<ul style="list-style-type: none"> <li>-Multipurpose aspects of water (1)</li> <li>-Mitigation measures (2)</li> <li>-Stakeholder participation and decision making (3)</li> <li>-Different reliabilities and priorities for different purposes (4)</li> </ul>	<p>1. <i>With the situation of the water crisis, water security and water poverty in the world, how should be the water development and management (quantity and quality) to achieve sustainable development? Which are the challenges for greater access to water and energy?</i></p> <p><b>1. Water development and management (quantity and quality) for sustainable development</b></p>	<p>Turkish Ministry of Environment and Forestry; GAP; Japan Water Agency; USACE.</p> <p>UNESCO; UNEP; UNDP; FAO.</p>
<ul style="list-style-type: none"> <li>-Energy, food and water supply (5)</li> <li>-IWRM (6)</li> <li>-Productivity and efficiency of water uses (7)</li> <li>-Infrastructure resilience for adapting to climate change (8)</li> <li>-Incentives for the careful use of water (9)</li> </ul>	<p>2. <i>Which are the best approaches for water, food and energy security in connection with global changes? How to implement Integrated Water Resources Management in different countries?</i></p> <p><b>2. Global changes and water, food and energy security</b></p>	<p>WB; AfDB; ADB; EIB; JICA; JBIC.</p> <p>WEC; ICID; IHA; IHGA; ICOLD; IWRA; IMII; IFPRI.</p>
<ul style="list-style-type: none"> <li>-Multipurpose aspects of water (1)</li> <li>-Evaluation of scenarios of future needs (natural and human) (10)</li> <li>-Different kinds of storage / needs for storage; where? (11)</li> <li>-Productivity and efficiency of water uses (7)</li> <li>-Different reliabilities and priorities for different purposes (4)</li> <li>-Reliability, productivity and investment (12)</li> <li>-Economic aspects of infrastructure (13)</li> </ul>	<p>3. <i>How much storage do we need in the future? What type of storage and where?</i></p> <p><b>3. Storage infrastructure needs, types and location</b></p>	<p>WWF; IUCN; TNC.</p> <p>IRHA; INBO; IRCO; SAI.</p>
<ul style="list-style-type: none"> <li>-Positive and negative aspects of infrastructure (14)</li> <li>-Efficiency, rehabilitation, upgrading and maintenance of infrastructure (15)</li> <li>-Mitigation measures (2)</li> <li>-Stakeholder participation and decision making (3)</li> <li>-Benefit sharing (16)</li> <li>-Economic aspects of infrastructure (13)</li> </ul>	<p>4. <i>How to ensure that the projects and infrastructures are applied to meet human needs and achieve sustainable development?</i></p> <p><b>4. Ensuring infrastructure is applied to meet both human and environmental needs</b></p>	<p>DSI; IBB; ISKI; Min. of Public Works and Settlement.</p>

<b>TOPIC SESSION REPORT 3.3</b>		Chair: ...Mathieu Pinkers.....Reporter: Gökmen Yalçın.....
Theme: Managing and Protecting Water and their Supply Systems to meet Human and Environmental Needs  Thematic coordination group:		Thematic coordination lead: Organization: .....  Name contact person: .....  e-mail: .....
Topic: Preserving Natural Ecosystems  Topic Main Question: How to make ecosystems integrated in part of land and water management, How to link other sectors?  Topic coordination group: attached		Topic coordination lead: <b>WATER PASSION GROUP</b> Organization: Netherlands Min of Water, Agriculture and Nature, Doğa Derneği  Name contact person: Methieu, Pinkers, Gökmen Yalçın, Alfredo Rodriges, Takaya Tamara.....  e-mail: <a href="mailto:landandwater@telfort.nl">landandwater@telfort.nl</a> , <a href="mailto:gokmen.yalcin@dogaderneği.org">gokmen.yalcin@dogaderneği.org</a> .....
<b>Key Topic Issues</b>	<b>Questions</b>	<b>Session Ideas</b>
Planning, management and implementation	How to make long term monitoring?  How to integrated land use and water use management both in the planning, decision making and the implementation process?  How to make proper data in order to use in decision making?  How can we make available the local figures, values – proper data- to use it in decision making by people at the appropriate lowest level?	<ul style="list-style-type: none"> <li>▪ Mechanisms to implement environmental flows concept on a basin</li> <li>▪ Collecting and sharing site specific information and data to support wise planning and management.</li> <li>▪ Urban planning and water interaction.</li> <li>▪ “Protected area”, “Wetland management”, and “water basin management” effectiveness</li> <li>▪ Agriculture and ecosystem interactions</li> <li>▪ How to define protected areas: key biodiversity approach.</li> </ul>
Economy and pricing	How to develop and implement mechanisms for valuation and payment for water for preserving and wise use of natural ecosystems?	<ul style="list-style-type: none"> <li>▪ How to implement less use of water, including incentives for implementation.</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Economic approach in preserving natural ecosystems</li> <li>▪</li> </ul>
<p>Institutional arrangement and regulations</p>	<p>What are the mechanisms to develop personal and institutional responsibility for implementation (change of life style, willingness to pay extra for preserving natural ecosystems),</p> <p>How to avoid decision making at higher level, without taking into account local values, and human needs and site specific data?</p> <p>How to integrate and update the existing international laws and conventions to become effective in national planning process?</p>	<ul style="list-style-type: none"> <li>▪ Framework and guideline for integrated decision making, implementing and monitoring water resources within participation approach.</li> </ul>
<p>Dialog, decision making, delivery</p>	<p>How to mobilize people to participate and develop ownership for decision making?</p> <p>How to share responsibility in the implementation?</p> <p>How to integrate the concept environmental flows in to decision making for planning and management?</p> <p>How to make people aware that water is life-giving drop for natural ecosystems, natural ecosystems is neither isolated nor empty but always part of a bigger picture, like every kind of land use?</p>	<ul style="list-style-type: none"> <li>▪ How to solve downstream human impact on coastal areas, including water-born disease.</li> <li>▪ Socializing monitoring process, making indicator facts monitorable, make them understand.</li> </ul>

TOPIC SESSION REPORT 3.4	Chair: Cevat Yaman (cyaman@cevreorman.gov.tr)	Reporter: Jorge Molinero (jorge.molinero@aih-ge.org)
Theme: <b>3. Managing and Protecting Water resources</b>  Thematic coordination group:	Thematic coordination lead: Organization: .....  Name contact person: ..... e-mail: .....	
Topic: <b>3.4. Managing and Protecting Surface, Ground (Soil) and Rain Water</b>  Topic Main Question: How can green and blue water support food and biofuel production and other ecosystem services? Topic coordination group:	Topic coordination lead: Organization: .....  Name contact person: .....  e-mail: .....	
Key Topic Issues	Questions	Session Ideas
Groundwater protection Public participation Increase groundwater potential and optimize use	How to improve public awareness and participation to protect and manage groundwater?	Protecting Groundwater Resources Effectively: → Public participation and awareness → Institutional and legal frameworks → Sea water intrusion → Increase groundwater potential → Treatment applications
Urban planning and water management Rural planning and water management Treating surface, ground and rain water as a single resource Management of water demand	How to move Integrated Water and Land Resources Management from papers to reality?	Practical applications for Integrated Water and Land Resources Management: → Case studies → Bridge between theory and practice
Legal basis of water resources management Institutional framework for effective water management Institutional and stakeholders coordination and collaboration	What kind of legislation and institutional framework can be developed and applied for local/regional/global /water resources management?	Strategic Frameworks for Effective Water Management at Local, Regional and Global Scale  → European Water Framework Directive: Lessons learned → The role of local and regional authorities in water management → Decentralization of water management: case studies
Lack of standardization for data collection in Wat&San sector Lack of utilizing information by decision makers and stakeholders	How to improve monitoring and modelling methods in the water and sanitation sector and how to make effective use of these methods by stakeholders and decision makers?	Emerging monitoring systems and interdisciplinary modelling methods.  → Normalization and standards for data gathering of water and sanitation sector → Utilizing current technological tools for informed stakeholders and decision makers
Implementation of best available technologies Unsustainable use and consumption of water resources Protection of water resources quality	How to implement most suitable treatment technologies that will increase water reuse?	Most suitable and sustainable treatments technologies to increase water reuse  → New technologies → Reuse of water → Water and waste water treatments

## **THEME FOUR**

### **Governance and Management**

TOPIC SESSION REPORT 4.1	Chair: Thomas Van Waeyenberge	
<p>Theme: Governance and Management</p> <p>Thematic coordination group: UN-Habitat, FANCA, Aquafed, World Water Institute, GWP, Almae, IDRC, UNESCO, WWC, PSI</p>	<p>Thematic coordination lead:</p> <p>Organization: UN-Habitat</p> <p>Name contact person: Andre DZIKUS</p> <p>e-mail: <a href="mailto:andre.dzikus@unhabitat.org">andre.dzikus@unhabitat.org</a></p>	
<p>Topic: <b>4.1 Implementing the right to water and sanitation for improved access</b></p> <p>Topic Main Question: What are the practical steps to ensure that the RTWS results in improved access to water and sanitation for the poor and vulnerable?</p> <p>Topic Coordination group: Julie Aubriot (Action Against hunger), Thomas van Waeyenberge (AquaFed), Danielle Morley (FAN), Nathalie Chartier-Touzé (French Water Coordination), Seda Yakinol (Business &amp; Professional Woman)</p>	<p><b>TEMPORARY Topic coordination lead:</b></p> <p>Organization: Action against Hunger</p> <p>Name contact person: Julie AUBRIOT</p> <p>e-mail: <a href="mailto:rechercheEAH@actioncontrelafaim.org">rechercheEAH@actioncontrelafaim.org</a></p>	
Key Topic Issues	<b>Sample</b> Questions for the sessions	Session Ideas
<p>1/ Will the RTWS accelerate progress towards and beyond the MDGs? Or is it an empty promise? (Rights-based approach)</p>	<ul style="list-style-type: none"> <li>• What measures need to be put in place by national gov'ts to ensure that RTWS is taken into account in sector reform, budgeting and policy formulation: (international measures; national measures)</li> <li>• Will it be possible to project Governements' drive and ambition beyond 2015 and 50%</li> <li>• How to clarify the duties that correspond to the right to water and sanitation?</li> </ul>	
<p>2/ Is the RTWS really making a difference for the poor and marginalized?</p> <p>What steps are needed to improve the ability of poor and marginalised to use the RTWS as a tool to gain access and to hold governments and other actors to account.</p>	<ul style="list-style-type: none"> <li>• How can people be assisted in learning about their rights and advocating for them?</li> <li>• How can the water sector partner with other sectors to address these issues</li> <li>• What is the added value of talking about a right and not a need?</li> <li>• The link with informal settlements and land tenure: can you deliver connections illegally: how can you connect.</li> </ul>	
<p>3/ What does the right to sanitation mean?</p>	<ul style="list-style-type: none"> <li>• We need an internationally recognized definition of what the RTS means</li> <li>• Clarification of the scope and the duties</li> <li>• Division of responsibilities of governments and individuals</li> </ul>	
<p>4/ The continuum from Emergency to Development: the role of a rights-based approach</p>	<ul style="list-style-type: none"> <li>• The transition from emergency to development situations</li> <li>• Water rights and international armed conflicts (water crimes in conflict situations)</li> </ul>	

TOPIC SESSION REPORT 4.2	Chair: Ganesh Pangare	
Theme: <b>Governance and Management</b>  Thematic coordination group: UN-Habitat, FANCA, Aquafed, World Water Institute, GWP, Almae, IDRC, UNESCO, WWC, PSI	Thematic coordination lead: Organization: UN - Habitat Name contact person: Andre Dzikus e-mail: <a href="mailto:andre.dzikus@unhabitat.org">andre.dzikus@unhabitat.org</a>	
Topic: <b>4.2 Improving Performance Through Regulatory Approaches</b>  Topic Main Question:  Topic coordination group: Bert Diphooorn, Ganesh Pangare, M Ramon Llamas, Ms. Rita Assogna, Nurektin Pelen, Oded Distel	Topic coordination lead:  Organization: World Water Institute, GWOPS Alliance and UN – Habitat  Name contact person: Ganesh Pangare and Bert Diphooorn  e-mail: <a href="mailto:gpangare@gmail.com">gpangare@gmail.com</a> and <a href="mailto:bert.diphooorn@unhabitat">bert.diphooorn@unhabitat</a>	
Key Topic Issues	Questions	Session Ideas (Titles)
<ul style="list-style-type: none"> <li>Regulatory aspect of Water Supply and Sanitation Providers</li> </ul>	<ul style="list-style-type: none"> <li>- Need for distinction between regulatory and operational functions</li> <li>- How can regulators be empowered ?</li> <li>- Institutional mechanisms of putting in place a transparent</li> <li>- Networking of regulators – experience sharing</li> <li>- Involving end users in the regulatory process</li> <li>- International standards for International Water Operators (eg. ISO)</li> </ul>	<p>Getting the regulation right : Setting international standards for water providers</p> <p><b>or</b></p> <p>Who regulates whom : Putting in place an Independent Regulatory Framework for Service Providers</p> <p><b>or</b></p> <p>Who polices the police : Putting in place a transparent and effective regulatory system for Water Service and Sanitation Providers</p>
<ul style="list-style-type: none"> <li>Waste Water Use</li> </ul>	<ul style="list-style-type: none"> <li>- Waste Water a Source or Burden?</li> <li>- Linkage between regulation and enforcement.</li> <li>- Capacity building and technical upgrading of the monitoring agencies</li> <li>- Waste Water Use and Food Safety Issues</li> <li>- Norms/Standards/Regulation for waste water use in Irrigation</li> <li>- Health issues for peri-urban and poor communities dependent on waste water for their livelihoods</li> </ul>	<p>Waste Water a Source or Burden : Linkages between waste water use and health safety</p> <p><b>or</b></p> <p>Toxic cocktail in the food you consume: Waste Water a Source or Burden</p>
<ul style="list-style-type: none"> <li>Groundwater</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of regulation most countries</li> <li>- Experiences of user regulation</li> <li>- No monitoring of withdrawal of groundwater</li> <li>- Regulation by Users</li> <li>- Demand Based Groundwater Management</li> <li>- Quality Issues</li> <li>- User participation in regulation</li> </ul>	<p>Saving the last straw : Protecting groundwater resources for future generations</p> <p><b>Or</b></p> <p>How to regulate the unseen : depleting groundwater levels across the globe</p> <p><b>Or</b></p> <p>Depleting the last barrel : which finishes first oil or groundwater</p> <p><b>Or</b></p> <p>Sucking the earth core dry : Can we halt depleting groundwater levels</p>

TOPIC SESSION REPORT 4.3		Chair: Michael Hantke-Domas
<p>Theme: <b>Governance and Management</b></p> <p>Thematic coordination group: UN-Habitat, FANCA, Aquafed, World Water Institute, GWP, Almae, IDRC, UNESCO, WWC, PSI</p>	<p>Thematic coordination lead:</p> <p>Organization: UN - Habitat</p> <p>Name contact person: Andre Dzikus</p> <p>e-mail: <a href="mailto:andre.dzikus@unhabitat.org">andre.dzikus@unhabitat.org</a></p>	
<p>Topic: <b>4.3 Ethics, Transparency, and Empowerment of Stakeholders.</b></p> <p>Topic Main Question:</p> <p>How do we define and develop a water ethics for a better governance and management?</p> <p>Topic coordination group:</p> <p>IFBPW Is ve Meslek Sahibi Kadinlar Dernegi; WWF-Turkey; IDRC Canada (Egypt); Istanbul Water and Sewerage Administration; Japan-MLIT; French Water Coalition; Assoc. of Mayors of French Metropolises; CTI-Engineering, Japan; UNESCO Centre for Water Law, Policy and Science; Turkish Irrigation Cooperatives Central Union; Wageningen University.</p>	<p>Topic coordination lead:</p> <p>Organization: UNESCO Centre for Water Law, Policy and Science</p> <p>Name contact person: Dr Michael Hantke-Domas</p>	
Key Topic Issues	Questions	Session Ideas
<b>PARTICIPATION</b>	<ol style="list-style-type: none"> <li>1. Who are the stakeholders? Consumers, users, citizens, international organisations, financial institutions, etc?</li> <li>2. What is the role of democratic government for increasing public participation?</li> <li>3. What does "participation of users" really mean at the different geographic levels of water resources and water services management?</li> </ol>	How to engage stakeholders in the decision p water management?
<b>TRANSPARENCY, ACCOUNTABILITY, AND ACCESS TO JUSTICE</b>	<ol style="list-style-type: none"> <li>1. Does transparency refers to information or is extensive to other areas of decision-making?</li> <li>2. Are there standards for the quality of information provided to stakeholders?</li> <li>3. Are regulatory accounts a good way to provide for benchmark between water providers?</li> <li>4. How to make authorities accountable for their decisions in the water sector?</li> <li>5. Do stakeholders or particular groups of users need particular remedies to challenge decisions adopted by authorities or utilities?</li> </ol>	What are the real measures to achieve transp accountability, and access to justice?
<b>ETHICS</b>	<ol style="list-style-type: none"> <li>1. What ethical principles should guide governance and management in water at local, national, and international level?</li> <li>2. Can we find, at global level, a new ethics of water use and management common to all cultures?</li> <li>3. Is ethic part of good governance?</li> <li>4. Are there any human values and ethics to be considered in governance and management?</li> </ol>	What should be the ethical principles of water governance?

TOPIC SESSION REPORT 4.4	Chair: Celine Kauffmann	
Theme: <b>Governance and management</b> Thematic coordination group: UN-Habitat, FANCA, Aquafed, World Water Institute, GWP, Almae, IDRC, UNESCO, WWC, PSI	Thematic coordination lead: Organization: UN-Habitat Name contact person: Andre DZIKUS e-mail: <a href="mailto:andre.dzikus@unhabitat.org">andre.dzikus@unhabitat.org</a>	
Topic: <b>4.4 Optimizing public and private roles in water services</b> Topic Main Question: An artificial divide? Topic coordination group: OECD, UN-Habitat, Aquafed, Turkish State Planning Organisation, TUSIAD, Hizmet Is Trade Union (Turkey)	Topic coordination lead: A consortium of institutions (incl. UN-Habitat, OECD, Aquafed, PSI, WSP, BPD, Water Dialogue, Regional Development Bank, Turkish State Planning Organisation) will take the topic further and organise a brainstorming on these issues in Paris (in May). Name contact person: Bert Diphoorn (UN-Habitat) and Celine Kauffmann (OECD) e-mail: <a href="mailto:bert.diphoorn@unhabitat.org">bert.diphoorn@unhabitat.org</a> and <a href="mailto:celine.kauffmann@oecd.org">celine.kauffmann@oecd.org</a>	
Key Topic Issues	Questions	Session Ideas
One major trend is the growing diversity of private actors and contractual arrangements, including the blurring of boundaries between the public and the private sector. There is a need to define the scope of private sector activities and arrangements and acknowledge the role of local actors, small-scale providers in service provision, but also potentially of the big users in the management of the resource. What and how can the different private actors contribute? How to channel the efforts towards the societal good (incl. the consequences in terms of regulation...)?	What are the country experiences with involving the private sector and of the evolving relationships (Chile, South Africa, France, Turkey, China...)?  What are the emerging trends in private sector participation in urban and rural areas (definition of boundaries between private and public is increasingly becoming blurred, growing diversity of private actors and contractual arrangements...)?  What challenges and opportunities does it generate? How to channel their efforts towards best interest (incl. in terms of regulation, ...)?	<b>Public / private roles in water services, an artificial divide?</b>  Setting the stage: selected country experience of the evolving relationships with the private sector.
What institutional arrangements should be implemented to make best use of the respective qualities/virtues of the public and private sectors? There is a need to set the appropriate legislation, better allocate the roles of the respective tiers of government and public agencies, define the goals, strategies at all levels. But also to identify the key elements that must be formalized by the authority in their relationship with the private actors.	What roles for different tiers of government and public agencies?  What model of involvement / contractual arrangements with the private sector? What can the private sector do (technology transfer, management, mapping of the poor...) and what it cannot do?  What are the goals? How do we measure the effective delivery?	<b>Getting the basics right:</b> what institutional and policy framework to optimise private sector participation in water?  The basic principles and selected case studies.
Not a face to face dialogue between the private and governments: how to empower the consumers, labour force and communities to improve ownership, accountability and transparency (fight corruption) and build a tripartite partnership? How to craft a partnership that is accountable and transparent? How to make the best of synergies across public and private actors (across providers as well as between public and public)?	How to empower the consumers, labour force and communities to improve ownership, accountability and transparency and build a tripartite partnership?  How to make the partnership set up accountable and transparent? Role of governments (national, local, regulatory body) and private sector?  Role of capacity building, horizontal linkages between providers (public and private).	<b>Putting people in the driver seat</b>  The tools and on going dialogue processes.

TOPIC SESSION REPORT 4.5	Chair: Vadim Sokolov	Reporter:
<p>Theme: <b>Governance and Management</b></p> <p>Thematic coordination group: UN-Habitat, FANCA, Aquafed, World Water Institute, GWP, Almae, IDRC, UNESCO, WWC, PSI</p>	<p>Thematic coordination lead:  Organization: UN-Habitat  Name contact person: Andre DZIKUS  e-mail: <a href="mailto:andre.dzikus@unhabitat.org">andre.dzikus@unhabitat.org</a></p>	
<p>Topic: <b>4.5. Institutional arrangements for efficient and effective water management</b></p> <p>Topic Main Question: What kind of enabling environment should be provided by the state and what kind of institutional arrangements are necessary to make water management equitable, efficient and effective?</p> <p>Topic coordination group: ALMAE, GWP – Med, AquaFed, IDRC</p>	<p>Topic coordination lead: Vadim Sokolov  Organization: GWP CACENA  e-mail: <a href="mailto:vadim@icwc-aral.uz">vadim@icwc-aral.uz</a></p>	
Key Topic Issues	Questions	Session Ideas
<p>1. Decentralisation of water governance from national level to local</p>	<p>What should central government do to enable decentralised water authorities to perform their task at different levels of water management hierarchy?</p> <p>How should the central government facilitate access of local water bodies to finance?</p> <p>What would be the best way of capacity building for local level within the process of decentralisation?</p> <p>How to set up proper mechanism of clear shared responsibilities, accountability and transparency between different levels?</p> <p>How to set up and provide transparency and public participation at different levels?</p>	<p>Session 1  Title: Decentralisation of water governance from national level to local</p>
<p>2. Inter-sector coordination for water governance at national and local levels</p>	<p>How to establish proper coordination among water authorities and all water related sectors and stakeholders at different levels of water management hierarchy?</p>	<p>Session 2  Title: Inter-sector coordination for water governance at national and local levels</p>
<p>3. Benchmarking for water management at local level (to assess the equity, efficiency and effectiveness)</p>	<p>How should government establish its own commitments related to water management policy?</p> <p>What approach should be applied to assess the equity, efficiency and effectiveness of water resources management?</p> <p>How to set up responsibilities of the public and private sectors for implementing new technologies to optimize water efficiency in all uses?</p>	<p>Session 3  Title: Benchmarking for water management at different levels of hierarchy (to assess the equity, efficiency and effectiveness)</p>

# **THEME FIVE**

## **Finance**

TOPIC SESSION REPORT 5.1	Chair: Abel Mejia	Reporter: Roberto Martin-Hurtado
<p>Theme: Financing</p> <p>Thematic coordination group:</p> <ul style="list-style-type: none"> <li>• World Bank</li> <li>• OECD</li> <li>• IsDB</li> <li>• AfDB</li> <li>• Aquafed</li> <li>• Gates Foundation</li> <li>• NWP</li> <li>• EIB</li> </ul>	<p>(Interim) Thematic coordination lead: Organization: World Bank</p> <p>Name contact person: ...Abel Mejia.....</p> <p>e-mail: ... <a href="mailto:Amejia1@worldbank.org">Amejia1@worldbank.org</a>.....</p>	
<p>Topic: 5.1 Sustainable financing for the water sector</p> <p>Topic Main Question:</p> <p>Topic coordination group:</p>	<p>Topic coordination lead:</p> <p>The various partners involved need greater clarity (Terms of Reference) on the roles of the various partners – should they produce a document, convene sessions, etc?</p>	
Key Topic Issues	Questions	Session Ideas
<p>Financial issues are particularly relevant for the water sector because it is characterised by high capital-intensity and long repayment periods for investments. Without financial sustainability the sector will not be able to deliver on its important goals, including contribution to economic growth. There is a need to know what has happened, what progress has been made in the financing sector, including the effect of the Camdessus report, Gurria Task Force, 4<sup>th</sup> Forum, MDG leverage, and assess the progress in implementing the recommendations of Camdessus report, Gurria Task Force, 4<sup>th</sup> Forum, and to what extent the MDG agenda has leveraged additional funds for the sector. Moreover, there are new issues on the financing water agenda, chiefly the issue of climate change adaptation.</p>	<ul style="list-style-type: none"> <li>• Why water is important</li> <li>• What has been the recent progress (Camdessus, Gurria, 4<sup>th</sup> Forum, MDG leverage)</li> <li>• Emerging issues (climate change adaptation)</li> </ul>	<p>Financial Sustainability: Importance, progress and emerging issues</p>
<p>Financial sustainability requires closing the financing gap by acting on the demand and supply sides of finance. The need for finance is potentially boundless, so sector goals should be defined according to realistic financial envelopes. The ultimate sources of finance are limited to user charges, tax-payers (budgetary resources) and international solidarity. Credible and sustainable financing strategies would identify realistic cost recovery levels and realistic subsidy flows.</p>	<p>What are the benefits of a financing strategy, what should be its building blocks and how can it be developed?</p>	<p>Financial sustainability requires credible planning</p>

<p>In many countries public funds account for 70-90% of sector funding. Those funds need to be managed according to good public finance principles. Important aspects include: the role of those vis-a-vis other sources of finance, what their best use would be (including issues of targeting subsidies) and the capacity to manage public funds.</p>	<p>How can the use of public resources (including aid) be improved?</p>	<p>HOW CAN THE USE OF PUBLIC RESOURCES (INCLUDING AID) BE IMPROVED?</p>
<p>Despite investment needs, financiers face a lack of effective demand for lending. Increased borrowing capacity and mitigated risks would allow the latent demand to emerge (whether through stand-alone lending or blending arrangements). Different actors (central governments, local governments, autonomous service providers and international financial institutions) have a role to play.</p>	<p>What can the different actors do to increase the borrowing capacity of service providers?</p>	<p>THE CAPACITY TO LEND IS THERE, THE CAPACITY TO BORROW NO</p>



<p>4) Economic Sustainability – <u>Efficiency in allocation</u>: What is the role of pricing in allocating scarce water resources across competing sectors? What is the role of pricing mechanisms (ad other economic instruments) in addressing mounting water scarcity –particularly in the context of climate change– and dealing with droughts? Reallocation has “winners” and “losers”: is there a conflict between economic efficiency objectives and social sustainability objectives? If so, is keeping the price of the resources low the appropriate answer? Or are there better mechanisms to address the income redistribution impacts of water re-allocation and to protect livelihoods in negatively affected regions? <u>Efficiency in use</u> : How effective are volumetric water tariffs in inducing efficient water use? Volumetric tariffs and metering: what are the pros and cons of metering and who should pay for them? Can there be trade-offs between economic efficiency and financial sustainability (e.g. when a system with over-capacity already exists)?</p> <p>5) Environmental sustainability – What is the role of pricing mechanisms in ensuring the preservation of basic ecological functions of the water resource base for current and future generations?</p>	<p>Should pricing strategies be called upon to reconcile these?</p> <p>Address primarily the questions under “key issue” no. 4. Discuss the relevant social impacts and the potential role of charges for funding or attracting investment in large infrastructure or for the provision of public goods</p> <p>Present country experiences and emerging trends:</p> <ul style="list-style-type: none"> <li>- How have different objectives and trade-offs been identified?</li> <li>- Have raw water charges been designed to achieve efficient allocation or fr other objectives (e.g. raising funds for management agencies)?</li> <li>- How have social aspects been taken into account?</li> <li>- What is the evidence on impacts? Have pricing strategies achieved the objectives that had been assigned to them?</li> <li>- <u>Political economy of reform</u>: What have been the major difficulties in designing and implementing the use of economic instruments for water resources management?</li> </ul> <p>Concluding remarks drawing lessons learned based on policy experiences</p>	
<p>6) Pricing for sanitation: How to reconcile environmental, social and financial sustainability? How to reconcile the challenges when (i) WTP is lower than for drinking water but investment requirements are bigger, (ii) the solidarity/fairness issue may include different stakeholders (e.g. upstream polluters vs. downstream users), (iii) the service may be provided by a separate entity from drinking water supply (no cross-subsidization opportunities)</p> <p>7) The political economy of reform: What are the experiences on the ground? What are the difficulties that policy-makers encounter in reforming pricing mechanisms and implementing reforms?</p>	<p>Is there a fundamental incompatibility between the objectives of financial sustainability of service provision and social objectives?</p> <p>What are appropriate affordability thresholds in different circumstances?</p> <p>Should support be provided through tariff structures or through parallel mechanisms?</p> <p>If cross-subsidization via the tariff is chosen, how do different tariff structures compare in appropriately targeting support to the intended population?</p> <p>What is the evidence on the ground of targeting performance of alternative mechanisms?</p> <p>How can targeting performance of existing mechanisms be improved?</p> <p>What are the constraints (e.g. data availability, costs, acceptability) that may limit the introduction of better targeting mechanisms (e.g. administrative targeting, service level differentiation)?</p> <p>And beyond sector-specific objective, what is the legitimacy and effectiveness of WATSAN tariffs as a social policy instrument?</p>	<p>Financial sustainability vs. social sustainability: Is there a real tradeoff?</p>
	<p>How to reconcile environmental, social and financial sustainability?</p> <p>How to reconcile the challenges when</p> <p>(i) WTP is lower than for drinking water but investment requirements are bigger - How does</p> <p>(ii) the solidarity/fairness issue may include different stakeholders (e.g. upstream polluters vs. downstream users),</p> <p>(iii) the service may be provided by a separate entity from drinking water supply (no cross-subsidization opportunities)</p>	<p>Pricing for sanitation: A special challenge</p>

TOPIC SESSION REPORT 5.3	Chair: ... Abel Mejia	Reporter: ...José Frade
<p>Theme: Financing</p> <p>Thematic coordination group:</p> <ul style="list-style-type: none"> <li>• World Bank</li> <li>• OECD</li> <li>• IsDB</li> <li>• AfDB</li> <li>• Aquafed</li> <li>• Gates Foundation</li> <li>• NWP</li> <li>• EIB</li> </ul>	<p>(Interim) Thematic coordination lead: Organization: World Bank</p> <p>Name contact person: ...Abel Mejia.....</p> <p>e-mail: ... <a href="mailto:Amejia1@worldbank.org">Amejia1@worldbank.org</a>.....</p>	
<p>Topic: 5.3 Water for poverty</p> <p>Topic Main Question:</p> <p>Topic coordination group:</p>	<p>Topic coordination lead:</p> <p>The various partners involved need greater clarity (Terms of Reference) on the roles of the various partners – should they produce a document, convene sessions, etc?</p>	
Key Topic Issues	Questions	Session Ideas
<p>i) Micro-finance, ii) OBA, iii) Subsidies to access the services (connections, standposts, water points in general) including informal settlements (land tenure issue), iv) share of cost of access/connections between the served and the unserved, v) finance of local private sector including informal small scale providers.</p>	<p>What specific financial and legal solutions should be considered to facilitate and accelerate access to water supply and sanitation services for the poor?</p>	<p>Financial mechanisms to benefit the poor</p>
<p>i) relevance of beneficiaries assessment in the design of service provision, ii) acceptable levels of service at different costs, iii) adequate low cost technology, iv) innovative ways of reducing the cost of the service provision (community/user own labour, credit or subsidies to purchase material), v) payment mechanisms, pre-paid meters, vi) the role of CBOs in the management of the service provision.</p>	<p>How could the service provision match the needs and expectations of the poor?</p>	<p>Service provision mechanisms to meet the expectations of the poor</p>
	<p>How to finance multiple water uses to address rural poverty, while protecting livelihoods?</p>	<p>Water in rural areas</p>

## **THEME SIX**

**Education, Knowledge and Capacity Building**

TOPIC SESSION REPORT 6.1		Chair: Reza Ardakanian (UNW-DPC)	Reporter: Maarten Blokland (UNESCO-IHE)	
Theme: Education, Knowledge and Capacity Development (please note change of title) Thematic coordination group:		Thematic coordination lead: Organization: UNESCO Name contact person: A Szöllösi-Nagy e-mail: a.szollosi-nagy@unesco.org		
Topic: Education, Knowledge and Capacity Development Strategies (please note proposed change of title)  Topic Main Question: How can knowledge and capacity development be (better) used so that all stakeholders can contribute, have equitable and meaningful access to, use and benefit from the vast and fast growing body of knowledge and experience on the water sector?  Topic coordination group: UNESCO-IHE		Topic coordination lead: Organization: UNESCO-IHE Institute for Water Education  Name contact person: Richard Meganck  e-mail: r.meganck@unesco-ihe-org		
Key Topic Issues		Questions	Session Ideas	
Issues in EKCD: 1. Capacity assessment 2. Capacity development approaches and tools 3. Response to External changes 4. Knowledge management  Target levels for EKCD: 1. Individual 2. Organisational 3. Institutional 4. Children and Youth  Placeholders: All stakeholders (re. levels above), awareness, grassroots, formal/informal, all ages/lifelong learning, targeted, action oriented, convert and disseminate knowledge for specific groups, 'language' of groups, demand/supply of CD, documentation of successful cases, scientists to respond to demand/ also others develop knowledge		Transfer of research findings to stakeholders Are scientists working on real questions from the ground? Systems for making knowledge available Knowledge sharing	Session 1: Knowledge Management	
		1. Capacity assessment How do we ensure that capacity development reflects local needs? - how do we assess capacity needs - how do we assess existing capacity and ensure that capacity development compliments this - how do we ensure all stakeholders are involved in this assessment 2. CD Approaches and tools 3. Response to external changes	Session 2: Institutional Capacity Development to provide appropriate policy and legal framework.  Institutional level	
		See session 2	Session 3: Developing the capacity of organisations and individuals for action  Organisations and individuals level	
		How can children/Youth and school and community educators make a difference in reducing the impact of major water problems?	Session 4: Action Education / Bridging divide for Future generation.  Children and Youth level	
	Individual	Organisational	Institutional	Children and Youth
Capacity assessment				
CD approaches and tools				
Response to External changes	Session 3		Session 2	Session 4
Knowledge Management				Session 1

TOPIC SESSION REPORT	Chair: Kala Vairavamoorthy (UNESCO-IHE)	Reporter: Gordon Young (IAHS)
<p>Theme: 6 Education, Knowledge and Capacity Development</p> <p>Thematic coordination group:</p>	<p>Thematic coordination lead:</p> <p>Organization: UNESCO</p> <p>Name contact person: A Szöllösi-Nagy</p> <p>e-mail: a.szollosi-nagy@unesco.org</p>	
<p><b>Topic: 6.2 WATER SCIENCE AND TECHNOLOGY: APPROPRIATE AND INNOVATIVE SOLUTIONS FOR THE 21<sup>st</sup> CENTURY</b> (to address the needs of society)</p> <p>Overall approach: To present a forward-looking vision for innovative approaches to water issues while learning from past experiences.</p> <p>Note: It would be important to involve individuals and organizations from developing countries within the coordination groups as much as possible.</p> <p>Topic coordination group:</p>	<p>Topic co-coordination lead:</p> <p>Organization: International Association of Hydrological Sciences</p> <p>Name contact person: A Askew</p> <p>e-mail: Organization: UNESCO</p> <p>Name contact person: Siegfried Demuth</p> <p>e-mail: s.demuth@unesco.org</p>	
Key Topic Issues	Questions	Session Ideas
<p>Decision-making in an uncertain world</p> <p>Demand-driven research</p>	<p>Do we need to change our approaches given the uncertainties in the modern world?</p> <p>What instruments are available?</p> <p>Can we determine to what extent research is driven by the needs of society?</p>	
<p>Integrated urban water management</p>	<p>What innovative approaches and techniques can be used to solve the many water demands within complex urban areas?</p>	
<p>Groundwater</p>	<p>To what extent can the application of new and innovative techniques be used to address groundwater issues to the benefit of societies?</p>	

TOPIC SESSION REPORT	Chair: Fahrad Yazdandoost (IAHR )	Reporter: Paul Reiter (IWA)
<p>Theme: Education, Knowledge and Capacity Development</p> <p>Thematic coordination group:</p>	<p>Thematic coordination lead:          Organization: UNESCO          Name contact person: A Szöllösi-Nagy          e-mail: a.szollosi-nagy@unesco.org</p>	
<p>Topic: 6.3 Using the Assets of Professional Associations and Networks to Achieve the MDGs</p> <p>Topic Main Question:          How can professional associations and networks be used, encouraged and supported to become a key contributor to the achievement of the MDGs?</p>	<p>Topic coordination co-leads:          Organization: IAHR and IWA</p> <p>Name contact person: Chris George (IAHR), Darren Saywell (IWA)</p> <p>E-mail: christopher.george@iahr.org, darren.saywell@iwahq.org .</p>	
Key Topic Issues	Questions	Session Ideas
	<ol style="list-style-type: none"> <li>1). What have been the key obstacles to larger scale involvement of professional associations and networks in addressing pressing global water challenges.</li> <li>2) Should the capabilities of the leading professional associations and networks be used to capacitate the formation of regional, national and local professional associations and networks in lower and middle income countries, where such knowledge institutions are lacking? If so, how?</li> <li>3) Should funding of infrastructure to meet the MDGs be tied to the establishment of regional/local professional/technical institutional structures.</li> <li>4) Could/should a means of globally monitoring the state of “professional infrastructure” be developed? Should professional associations and networks be tasked with this responsibility?</li> </ol>	<p>6.3a Money Down the Drain? The need for professional association infrastructure accompanying investment to achieve sustainable outcomes.</p> <p>6.3b Professionals for Action: Is the pooling of organizations of professional associations a pipedream or salvation?</p>

TOPIC SESSION REPORT	Chair: .....	Reporter:
Theme: Education, Knowledge and Capacity Development  Thematic coordination group:	Thematic coordination lead: Organization: UNESCO Name contact person: A Szöllösi-Nagy e-mail: a.szollosi-nagy@unesco.org	
Topic: 6.4 Data for All (new proposal)  Topic Main Question:	Topic coordination co-leads: Organization: UNESCO-IHE and Netherlands Water Partnership Name contact person: Kala Vairavamoorthy and Jeroen Van der Sommen E-mail: <a href="mailto:jvds@nwp.nl">jvds@nwp.nl</a> ; k.vairavamoorthy@unesco-ihe.org	
Key Topic Issues	Questions	Session Ideas
Lessons to be learned from outside the water box	What lessons can we learn from experiences of other organizations and projects outside the water box? eg learning about accountability from non-water utilities; learning how to build data bases from google maps.	
Data and data bases	How can we use technologies to acquire, organize, disseminate and use data at acceptable cost?	