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DRAFT FORUM SYNTHESIS

TIME FOR *SOLUTIONS*

GLOBAL WATER FRAMEWORK



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6th World Water Forum Marseille

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IFC Secretariat

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Foreword

The International Committee of the 6th World Water Forum is very pleased to convey to the entire water community, not only the content of all preparatory works to the Forum, but also the complete record of the sessions which took place from 12 to 17 March 2012 in Marseille.

This work would not have been possible without the tremendous mobilisation of numerous motivated, dynamic, conscientious people who gave their time, their energy and their professionalism (skills and knowledge) on a global scale, to make this Forum the success it was in terms of richness and content diversity as well as results.

Whether they are thematic or regional coordinators, working on a level of a priority or on a session; whether they are leaders of working groups, experts, volunteers, from associations, parliamentarians elected for regions, large cities or rural sectors, business executives, members of international organisations, national or local government administration managers; they are gratefully hereby acknowledged. It would take too long to mention them all here of course but most are identified in the following document session by session.

We will not forget of course all the IFC team members who have achieved a remarkable performance in terms of organisation, quality, structuring, and seriousness of the tasks they had the honour to conduct. This document brings together everything that has been said, produced, proposed, and promoted during this major gathering that was the 6th Forum in Marseille. It is a working tool for everyone to help their actions and a support to the world water related issues. That is the wish we are addressing in conveying this document to you.

Thank you.

Prof. Ben Braga
President of the IFC

Mr. Jean-Marc Lacave
Executive Director of the IFC

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List of Acronyms

ABDIB: Associação Brasileira da Infra-Estrutura e Indústrias de Base (Brazilian Association of the Infrastructure and Capital Goods Industries)

ACP-EU: Development cooperation between the European Union (EU) and the countries of the African, Caribbean and Pacific Group of States (ACP)

ACSAD: Arab Center for the Study of Arid Zones and Dry Lands (Syria)

AECID: Agencia Española de Cooperación Internacional para el Desarrollo

AFD: Agence Française de Développement (French Development Agency)

AfDB: African Development Bank

AFUR: African Forum for Utility Regulators

AfWA: African Water Association

AGWA: Alliance for Global Water Coalition

AMCOW: African Ministers Council on Water

AMWC: Arab Ministerial Water Council

ANA: Agencia Nacional de Agua

ANEW: Asset Network for Education Worldwide

APWF: Asia Pacific Water Forum

ASBP: Aral Sea Basin Programme

ATTA: Asociación Tecnológica para el Tratamiento del Agua

AU: African Union

AUC: African Union Commission

AWRA: American Water Resources Association

CARI: Centre d'Actions et de Réalisations Internationales (Center for International Actions and Achievements)

CARICOM: Comunidad y Mercado Común del Caribe (Caribbean Community and Common Market)

CCC: Cross-Continental Coordinator

CEDARE: Center for Environment and Development for the Arab Region and Europe

CLTS: Community Led Total Sanitation

CONAGUA: Comisión Nacional del Agua

COP 18: 18th Conference of Parties

CREPA: Water and Sanitation for Africa

CTIC: Centre for Training and International Cooperation

DLG: Dutch Government Service for Land and Water Management

DSK: Bangladesh: Dushtha Shasthya Kendra (NGO)

DSM: Decentralized Solidarity Mechanisms

DWA: Desert Water Agency

ECRR / RESTORE: European Centre for River Restoration

EECA: Eastern Europe and Central Asia

EEDS: Energy, Environment and Development Society

EMWIS: Euro-Mediterranean Water Information System (Greece)

EPM: Empresa de servicios públicos de Colombia

ERSAR: Entidad Reguladora dos Serviços de Aguas e Resíduos

ESCAP: Economic and Social Commission for Asia and the Pacific

ESCWA: Economic & Social Commission for Western Asia

EU: European Union

EUREAU: European Federation of national associations of water & wastewater services

EUWI: European Union Water Initiative

EWA: Environmental Work Area

FAO: Food and Agriculture Organization

FEMSA: Fomento Económico Mexicano, SA

F-IEA: Fundación- Instituto Euro-Mediterraneo del Agua

GDP: Gross Domestic Product

GEF: Global Environment Facility

GGGI: Global Green Growth Institute

GIZ: Deutsche Gesellschaft für Internationale Zusammenarbeit, GmbH (German Society for International Cooperation)

GWE: Global Water Experiment

GWP: Global Water Partnership
HDI: Human Development Index
IADB: Inter-American Development Bank
ICIMOD: International Centre for Integrated Mountain Development
ICPDR: International Commission for the Protection of the Danube River
IDB: Inter-American Development Bank
IFC: International Forum Committee
IFI: International Financial Institutions
IHP-UNESCO: International Hydrological Programme
IME: Institut Méditerranéen de l'eau (Mediterranean Water Institute)
IMIDA: Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario
INBO: International Network of Basin Organisations
IOCL: Indian Oil Corporation Limited
IOWater: International Office for Water
IPCC: Intergovernmental Panel on Climate Change
IPPDSM: International Platform for the Promotion of Decentralized Solidarity Mechanisms
IRD: Institut de Recherche pour le Développement
ISARM: Internationally Shared Aquifer Resources Management
ISDR: International Strategy for Disaster Reduction
IUCN: International Union for the Conservation of Nature and Natural Resources
IWRM: International Water Resources Management
KOICA: Korea International Cooperation Agency
KWF: Korea Water Forum
LAC: Latin America and Caribbean
LCA (WULCA): Life Cycle Assessment (Water Use in Life Cycle Assessment)
MoU: Memorandum of Understanding
M&E: Monitoring & Evaluation
MDG: Millenium Development Goals
MEDDTL: Ministère de l'Écologie, du Développement Durable, du Transport et du Logement
NAIADES: Navigation and Inland Waterway Action and Development in Europe
NBD: Nile Basin Discourse
NBI: Nile Basin Initiative
NCWR: non-conventional water resources
NEPAD: New Partnership for Africa's Development
NGO: Non-Governmental organization
NWR: National Wildlife Refuge
ODA: Official Development Aid
OECD: Organisation for Economic Co-operation and Development
OMRs: European Outermost Regions
ONAS: Office National de l'Assainissement
ONEMA: Office National de l'Eau et des Milieux Aquatiques (National Office for Water and Aquatic Environments)
OPT: Occupied Palestinian Territory
O&M: Operations and Maintenance
PrepCom's: Preparatory Committee meetings
PS-Eau: Programme Solidarité Eau
RBMP: River Basin Management Programme
RC: Regional Coordinator
REC: Regional Environmental Center
RIOB: Réseau International des Organismes de Bassin (International Network of Basin Organisations)
RPD: Regional Policy Dialog
RWH: Rain Water Harvesting
SABESP: Saneamento Básico do Estado de São Paulo
SADC: Southern African Development Community
SCR: Sustainable Cost Recovery
SEMIDE: Système Euro-Méditerranéen d'Information sur les Savoirs-Faire Dans le Domaine de l'Eau (Euro-Méditerranéen Régional Program for Local Water Management)
SIDA: Swedish International Development Cooperation Agency
SIWI: Stockholm International Water Institute

SMART: Specific, Measurable, Achievable, Relevant, Time-Bound
SMHI: Swedish Meteorological and Hydrological Institute
SODIS: Solar Water Disinfection
SWIM: Sustainable Water Integrated Management
TMDL: Total Maximum Daily Load
TNC: The Nature Conservancy
TORs: Terms Of Reference
TWW: Treated Wasted Water
UCLG: United Cities and Local Governments
UfM: Union for the Mediterranean
UN: United Nations
UNCCD: United Nations Convention to Combat Desertification
UNECE: United Nations Economic Commission for Europe
UNEP: United Nations Environment Program
UNESCO: United Nations Educational, Scientific and Cultural Organization
UNFCCC: United Nations Framework Convention on Climate Change
UNGA: United Nations General Assembly
UNICEF: United Nations International Children's Emergency Fund
UNSGAB: United Nations Secretary-General's Advisory Board on Water and Sanitation
UNU-INWEH: Institute for Water, Environment and Health (United Nations University; formerly International Network on Water Environment and Health)
USD: United States Dollar
USAID: United States Agency for International Development
VNF: Voies Navigables de France
WASH: Water, Sanitation and Hygiene
WCC: Water and Climate Coalition
WEC: World Energy Council
WECF: Women in Europe for a Common Future
WET: Water Energy Technology
WFD: Water Framework Directive
WFN: Water Footprint Network
WHO: World Health Organisation
WMO: World Meteorological Organisation
WOPs: Water Operators Partnership
WSA: Water Services Authority
WSP: Water Safety Plans
WSS: Water Supply and Sanitation
WRM: Water Recovery Management
WWAP: World Water Assessment Program
WWC: World Water Council
WWF: World Wildlife Fund
3Ts: Tariffs, Taxes and Transfers

Introduction

Every three years since 1997, the World Water Forum mobilises creativity, innovation, expertise and know-how on Water and Sanitation. It provides a platform to the international water community for exchange and progress on local, regional and global issues into a common framework of objectives. The overarching goal is to improve consideration of Water and Sanitation in political agendas at all scales.

Using the results of previous Forums and other international meetings, the 6th World Water Forum “Time for Solutions” has adopted a strategic approach to promote solutions and trigger or strengthen commitments. This approach has been implemented through four preparatory processes: political, thematic, regional, and grassroots and citizenship.

The report follows the design of these preparatory processes and is enriched by the outcomes and outputs of the Forum week event (12-17 March, 2012). The use of this report is simple and straightforward. Each session, event, or category of events is summarized and related commitments and follow-up actions are briefly listed at the end of each section. The report also offers links to the Forum Library, to the Platform of Solutions and Commitments, and to the 6th World Water Forum Website in order to provide a comprehensive access to the whole range of Forum outputs, be they synthesis reports, target reports including action plans, session presentations, brief session reports, videos, etc.

Despite our comprehensive check this document may include errors or omissions. Please do not hesitate to inform the World Water Council (www.worldwatercouncil.org) so that this report becomes a living working document, helpful to the whole world water community.

I. Political Process

1. Ministerial Process

Leading up to the World Water Forum Week, two Preparatory Committee meetings (PrepComs) were held in order to prepare the Ministerial Declaration of the 6th World Water Forum. During these PrepComs there was more participation from national governments and stakeholders than any other previous Forum showing the importance water issues has on both national agendas and the international as well. At the Forum itself, 176 delegations from national governments and international organizations participated to adopt the Ministerial Declaration.

The Ministerial Declaration can be found in all United Nations languages at:
<http://www.worldwaterforum6.org/en/commissions/political/ministerial-process/>

See video at : <http://www.worldwaterforum6.org/?id=305>

2. High Level Roundtables

2.1 Adaptation to Climate Change

This Roundtable led by the governments of Mexico, Jordan and Portugal considered water resources and adaptation to climate change. As water is the primary medium through which climate change impacts will be felt by humans and the environment it is imperative that effective adaptation strategies are put into place. These impacts will affect all countries, but primarily the least developed – and most vulnerable – areas of the world. Given water’s strategic importance to national development processes, climate change constitutes a serious threat to the progress of developing nations. Furthermore, investment in adaptation measures is highly cost-effective as compared to the cost of reacting to extreme events.

Key Messages

- Appropriate financing frameworks need to be developed. These will include a mix of public and private financing and international mechanisms. However, questions of what constitutes additional funding and what does not should not hinder the building of resilience.
- Climate change adaptation strategies should be ‘no regrets’ options given the uncertainty regarding the precise impact of climate change.
- Water governance at all scales both horizontally between ministries and vertically between different governance scales is required in order to mainstream climate change development into broader development strategies.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=501](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=501)

2.2 Financing Infrastructure

This Roundtable was led by the governments of Tunisia and Mali. It drew upon national experiences, to question financing efficiency in the current context and mechanisms and means of financing beyond bilateral or multilateral aid. The key issues which were considered included capacity building to strengthen decentralized contracting, promotion of good governance and equity, coordination and inclusion of key actors in the sector and mechanisms for encouraging good management from technical and financial partners. It was highlighted that each state has particular socio-cultural conditions which will frame appropriate responses. In addition, a holistic approach is required to consider electricity, water and telecommunications development across-sectors. However, this is dependent on political will and good governance. Representatives present drew attention to a move from discussions regarding private versus public sector investment to an emphasis on centralized versus decentralized services as the most useful frame for governments.

Key Messages

- The three Ts – tariffs (paid by customers), taxes (paid by the whole population) and transfers from international aid should form the framework for financing.

- Tariffs must be considered within the context of sustainability in its broadest sense including socially and financially.
- It is imperative that the legal framework is adapted to reflect financing goals and that new sources of finance are found.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=583](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=583)

2.3 Green Economy/Green Growth

This Roundtable was organized by the Government of Korea and chaired by Han Man Hee, Vice Minister of Ministry of Land, Transport, and Maritime Affairs, Korea. Participating national governments and stakeholders present at the Roundtable presented different expert views on the necessary conditions and policies for promoting green growth or a green economy, as well as the potential economic, environmental and social benefits from pursuing such paths. This Roundtable aggregated a broad range of stakeholder reactions and encouraged commitment to implementing this new paradigm for growth. Participants discussed the need to establish a policy framework to change the prevailing resource intensive development paradigm in order to address these challenges by promoting Green Growth and a Green Economy. Those present emphasized the need to draw on existing information through organisations such as UN-Water, UNEP, UN Regional Economic Commissions such as ESCAP, OECD and GGGI.

Key Messages

- Resource constraints and climate change are real challenges to the development community
- The key recommendation to operationalize Green Growth is to transform the economic structure (system) from resource intensive system to eco-efficient system
- Green Growth is one of implementing strategies strategy for achieving Sustainable Development, but does not replace it Sustainable Development
- An additional policy framework for Inclusiveness and social protection should be developed in parallel.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=586](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=586)

2.4 Implementation of the Right to Water and Sanitation

This Roundtable was organized by the Governments of Uruguay, Spain and Switzerland with the support of Catarina de Albuquerque, UN Special Rapporteur on the right to safe drinking water and sanitation and the participation of over 30 countries. The session commenced with reflection on experiences in national implementation from representatives of civil society groups and private sector organisations. Representatives from Freshwater Action Network, Norwegian Church Aid, Sulabh - India, DSK – Bangladesh and ERSAR – Portugal gave recommendations and lessons learnt regarding key areas of implementation which included civil society engagement, the role of the private sector and public and private expenditure tracking. Following this, the Roundtable reviewed international processes with recommendations and commentary from representatives of the World Water Supply and Sanitation Council, Aquafed, International Water Association, ONGAWA and The Water and Sanitation Water Integrity Network who presented on a variety of topics including The World Sanitation Fund, Business Action to Water and the Water Integrity Network. Comments were received from several ministerial representatives including the Vice President of Peru, the ministerial representative for the Occupied Palestinian Territory, Algeria and Costa Rica.

Key Messages

- Ensuring access to drinking water and sanitation is not a charitable act but a legal obligation for governments.
- Affirming the right to water and sanitation does not imply that services are free but they should be affordable. Social tariffs may be one option to enable this.
- Implementation should be inspired by concrete propositions received from the Blue Group countries to mainstream rights to water and sanitation. Their statement can be found here: <http://h20marsellario.files.wordpress.com/2012/03/blue-group-on-declaration.pdf>
- Ambitious objectives must be set if rights to water and sanitation are to be realised.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=588](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=588)

2.5 The Future of Water Desalination

The Government of the United Arab Emirates organized this Roundtable which explored the future of desalination. Representatives from the governments of Chile and Israel discussed the future of desalination with particular reference to increasing demands for freshwater resources in regions such as the Middle East that are predicted to experience extreme water scarcity in the future. The Roundtable looked at both technical and policy considerations with the Saudi Arabian government presenting examples of development of desalination technology. Currently the largest producer of desalinated water globally is Saudi Arabia (17%), following this the United Arab Emirates (13 %), The United States of America (13 %), Spain (8%), and Kuwait (5%).

Key Messages

If desalination is to be a sustainable technology for future water supply then the following Technical, environmental, and economical challenges must address:

- Brine water discharge
- Emissions
- Costs (capex, O&M cost)
- Research and development and knowledge transfer
- Energy consumption

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=590](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=590)

2.6 Transboundary Waters

This Roundtable was led by the governments of the United States of America, Zimbabwe and Tajikistan. It explored the global context of transboundary waters noting that there are 260+ water basins shared by two countries or more. Thematic presentations were given by the Stockholm International Water Institute (SIWI), the United Nations Development Program and the International Network of Basin Organizations (INBO) on the unique challenges of managing shared waters and current Status of Cooperative Efforts on Transboundary Waters respectively. Countries reflected on transboundary water issues with comments from several countries facing pressing transboundary water issues including South Sudan, Sudan, Iraq, Uganda and Egypt. Signatories of the 1997 UN Watercourses Convention present encouraged others to follow their example. For the convention to come into force another 10 countries are required to ratify it.

Key Messages

Key messages focused on lessons learnt which included the following:

- The involvement of all stakeholders is vital.
- It is necessary to think beyond the river to the entire basket of benefits.
- It is important to create strong, transparent, predictable, and flexible institutions.
- There should be a focus on sustainability and achieving results.
- Financial support for process can increase political will and facilitate dialogue
- Support to international agreements regarding transboundary watercourses is useful.
- 2013, the International Year of Water Cooperation must be meaningful.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=591](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=591)

2.7 Wastewater Management

This Roundtable was led by the governments of Israel and Singapore and chaired by Dr. Uzi Landau, the Minister for Energy and Water Resources, State of Israel and Dr. Vivian Balakrishnan, Minister for the Environment and Water Resources, Singapore. The Roundtable focused on wastewater management and reuse with an emphasis on reuse as one solution in response to water shortage problems. High quality effluents can be directed to irrigate agricultural crops, enabling water of drinking quality which has previously supplied agriculture to be diverted for domestic and industrial purposes. The Roundtable discussion included discussion on the pillars of sustainability, which was led by HRH The Prince of Orange, Chair of the United Nations Secretary General's Advisory Board on Water and Sanitation (UNSGAB). Representatives from Togo and Egypt reflected on their national experience in the sector. Discussions focused on common concerns associated with wastewater reuse including public health impacts and negative environmental consequences. Israel currently reuses 70% of its wastewater for agricultural development. In Singapore wastewater will soon be reused for

domestic drinking purposes. There is considerable opportunity for greater efficiency in wastewater reuse globally and the experiences of Israel and Singapore could provide useful case studies.

Key Messages

- Wastewater reuse should be monitored internationally so that the percentage reused can be compared between each country.
- Wastewater treatment and reuse will be an increasingly important strategy for many countries particularly where water scarcity is predicted or currently experienced.
- There are cultural challenges to using wastewater for drinking purposes and sensitization is required if this is to be successful.

See more details at: [http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2\[uid\]=479](http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2[uid]=479)

2.8 Water and Health

The governments of Romania and Sri Lanka convened this Roundtable which was chaired by László Borbély, Minister of Environment and Forests, Romania and Dinesh Gunawardena Minister of Water Supply and Drainage, Sri Lanka. The Roundtable drew upon national experiences in the field of water and health. The focus of the Roundtable was the relationship between water and health paying particular attention to international mechanisms and national structures. Around 3.5 million people die each year from water related diseases and each year, 443 million school days are lost due to diarrhea and water related illnesses. This is due to water related diseases which are primarily spread through poor quality water.

Key Messages

- An integrated approach for water, sanitation and health should be encouraged at the national level with national and local leadership should be promoted and strengthened.
- Coordination should be improved between different partners at the regional and national level in order to reach integrated priorities for water and health.
- Existing international mechanisms should be utilized more fully. For example, the Water and Health Protocol", "Mediterranean Action Plan", "UNICEF / WHO Informal Processes", and "European Environmental and Health Process.
- Investments in water and sanitation should be secure and sustainable.

See more details at: [http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2\[uid\]=503](http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2[uid]=503)

2.9 Water for Development in Africa

This Roundtable was chaired by Edna Molewa, Minister of Water and Environmental Affairs, South Africa and Issoufou Issaka, Minister of Water and the Environment, Niger in coordination with the governments of South Africa, Niger, Benin, Burkina Faso, Senegal and Togo on the theme of "Water for Development in Africa." The Roundtable shared experiences towards progress in the African continent's water sectors between ministerial representatives. The Roundtable enabled water Ministers and stakeholders present (NGOs, donors, international organizations) to share their experiences and solutions with a view to making water a factor for development in Africa: whether in terms of security in the face of climate change, optimisation for energy and food production, or access for household needs and other uses under conditions of peace and cooperation. A joint declaration was drawn up and adopted by the participating Ministers. It demonstrates the commitment of the States present to make water and sanitation a priority in their national strategies by developing concrete proposals. The Roundtable was moderated by Eau Vive.

Key Messages

- Countries present will ensure that water is given a high profile in climate negotiations.
- Countries present noted the issue of applying the UN-recognised human right to water and sanitation and the need to integrate this into their national constitutions.
- Countries present stated the need to make water and sanitation a priority in national budgets and to set a figure related to GDP for investment.
- Governments were called upon to mobilise resources to strengthen the African Development Bank and the African Water Facility. France has announced a contribution of 40 million euros.

See more details at: [http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2\[uid\]=595](http://www.worldwaterforum6.org/en/library/detail?tx_amswwfbd_pi2[uid]=595)

2.10 Water Security and Sustainability

This Roundtable was organized by the Government of Slovenia on behalf of the Green Group, which is comprised of the governments of Cape Verde, Costa Rica, Iceland, Singapore and the United Arab Emirates. Discussions focused on the relatively new concept of 'water security' along with sustainability and water governance. The Roundtable highlighted the significance of respecting local practices, notably traditional techniques, in line with the motto 'Think globally, act locally' (Rio 1992) in order to develop solutions for sustainable water use and water security. Green Group members reflected on their experiences and challenges in water security and sustainability highlighting best practices for the future. Key elements of sustainable solutions were adequate infrastructure and facilities, better flood control and alleviating the impacts of drought. The World Wide Fund for nature (WWF) and the World Water Council gave feedback and comments on the theme with the WWF underlining that the importance of identifying conservation priorities, freshwater ecosystem assets and freshwater systems that can be used sustainably.

Key Messages

- We must pursue technologies that enable a more efficient use of water for different purposes, particularly agriculture, and ensure technology development and transfer at regional, national and transboundary scales.
- Investment is required both in terms of financial capacity and human skills, knowledge and education.
- Active local, regional and transboundary cooperation is essential and the first level of practical implementation for principles of sustainability and security of water ecosystems. To this end, basins and eco-regions should become basic management units for the planning of sustainable solutions.
- Lack of cooperation can result in costly and ineffective solutions. We must keep this in mind to avoid water losses and food waste.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=596](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=596)

2.11 Water, Food, Energy Nexus

This Roundtable was organized by the governments of Germany and Oman in order to reflect on government involvement and development of policy responses regarding the water, food and energy nexus. There is a common understanding that applying a nexus approach, which addresses interdependencies between water, energy and food security is urgently required to identify the policy levers for implementing a common agenda on how to meet increasing demands and objectives in all three areas. Additional links to health, climate, soil, land use and biodiversity policies were highlighted. The nexus approach could help to create new opportunities for inclusive sustainable development to achieve water, energy and food security while reducing tensions between sectoral objectives and at the same time providing jobs and basic services. A broad spectrum of national examples – both from developed and developing countries - on the relevance of the nexus and approaches to achieve inclusive solutions were presented. The fusion of water and energy within one ministry in Morocco was highlighted as one positive example of the nexus approach. The need for practical cost efficient solutions and adaptive management were stressed.

Key Messages

- Policy coherence, effective leadership and clear governance frameworks that promote equity at both national and international level are required. This means regional and transboundary cooperation.
- It is the responsibility of sectoral actors to implement the nexus approach.
- Partnerships must include all relevant stakeholders and may include public private partnerships.
- Innovation and technologies should be fostered to achieve resource efficiency reducing losses in value chains, and using waste and wastewater as a resource.
- Ecosystems should be appropriately valued with investment in natural infrastructure, and systematic use of ecosystem services.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=601](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=601)

2.12 Water-related Disasters

Ministers and representatives from 12 countries and three international organizations participated in this High Level Roundtable meeting organized by the governments of Japan and China. The Roundtable focused on water-related disasters such as floods, droughts, tsunamis and water pollution accidents, which endanger sustainable socio-economic development. As 95% of people affected by natural disasters are affected by water

related incidents it is imperative that disaster risk reduction policies and practice are refined and developed. Particularly in the context of climatic variability and change which may mean some regions are likely to experience more frequent natural disasters. Country perspectives and tested solutions were shared and debated during the meeting. The need for not only local but global information systems, and both structural and non-structural measures was highlighted. The value of early warning systems was reaffirmed and the importance of ensuring the following noted; 1) adequate observation, 2) identification of appropriate decision makers, and 3) analysis and technology that can support such decision making. It was recognized by all participants that water-related disasters deserve to be a priority within government agendas and that international cooperation is vital in sharing lessons and good solutions for the benefits of all.

Key Messages

- Limitations of institutional capacity should be recognized along with the importance of developing community-centered approaches that link to strong regional, national and international networks.
- Climate change, rapid urbanization and population growth call into question reliance on past experiences to inform current policy. Past experiences and traditional hydrological models may not be adequate to inform future adaptation.
- Countries need to invest not only in reconstruction efforts but also in prevention and preparedness by employing measures tailored to their local conditions, combining structural (e.g. capital investment) and non-structural measures (e.g. early warning).
- Early warning systems are essential in terms of providing lead time for decision-makers and affected populations and to reduce the loss of life and structural damage to properties.
- International and regional cooperation is vital for forecasting, managing and coping with water-related disasters.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=602](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=602)

3. Parliamentarian Process

The Forum gathered 250 parliamentarians for a two-day conference. Following discussions around a number of critical issues, the Parliamentarians drafted a statement and reviewed a prototype for a permanent international Parliamentary "HelpDesk" to aid political cooperation on water legislation and its implementation. Building on the earlier forums held in Mexico (2006) and Istanbul (2009), the one and a half day Parliamentarian session has provided a unique platform for exchange and cooperation between parliamentarians from all regions in the world, in consultation with international experts and practitioners working on water and sanitation issues.

Guided by the Forum's motto, "Time for Solutions", the Parliamentarian Session aimed to strengthen parliamentarians' capacities and to reinforce their decisive role in supporting water and sanitation issues within political arenas at national, regional and international levels. A special focus has been placed upon parliamentarian solutions relating to a series of key water challenges, so that they may induce parliamentary representatives to pledge action towards the implementation of those solutions in their respective regions.

Parliamentarians were thus expected to bring their contributions on a series of critical issues such as:

- Water security and access to drinking water and sanitation;
- The economic role of water in poverty reduction, sustainable development and (green) growth;
- The governance of water and sanitation services;
- Transboundary water resource management;
- Water, Energy, Food, and Health.

Thematic topics have been further refined according to the issues that emerged in the course of the preparatory work of the parliamentarian process and the parliamentarians' proposed responses to them. In order to respond concretely to these challenges, we invite you to share your Parliament's best concrete solution(s) (i.e.: solution-driven legislation, good practices, and case studies) that fit(s) the SMART performance requirements of the Forum (Specific, Measurable, Achievable, Realistic and Time-bound). Please post your proposal directly on the World Water Forum website at the following address: www.solutionsforwater.org

The creation of a "Water Legislation Helpdesk", as a knowledge-sharing tool on water legislation was also discussed and a zero draft has been presented for feedback and guidance. Last but not least, a Parliamentarian

Declaration has been submitted within the framework of the criteria and requirements of the Forum and includes key messages to take to Rio+20 and beyond.

Link to the Parliamentarian session outputs and Manifesto:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=836](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=836)

See video at:

<http://www.worldwaterforum6.org/?id=308>

4. Local and Regional Authorities Process

In Marseille, 350 local and regional elected officials from 5 continents met for two days to increase the international mobilisation of local and regional authorities on the issues of water and sanitation and to reinforce the commitments agreed upon in the Istanbul Water Consensus. This Consensus counts nearly 1100 signatory cities since its adoption at the 5th World Water Forum in 2009, including the Marseille-Provence Metropolitan area (MPM). In the framework of the Forum's political process, the World Water Council organized, jointly with UCLG, the 3rd International Conference of Local and Regional Authorities for Water. With 12 thematic sessions, this International Conference presented the advances realized under the Istanbul Water Consensus and allowed participants to exchange on key issues such as water and urbanization, cooperation and solidarity, as well as regional governance.

*Background: The Istanbul Water Consensus is a global compact signed on a voluntary basis by Local and Regional Authorities willing to adapt their water infrastructure and services to the emerging challenges they are increasingly facing such as climate change, rapid urban growth, depletion and pollution of water resources or ageing infrastructure. Through the signature of the document, LRA commit to prepare action plans, to develop targets and related indicators to monitor progress toward these targets. The implementation phase is being supported by a number of **Champion Cities** acting as drivers and guides for implementation on particular challenges. Cities and Regions also commit to reporting back on the progress at the 6th World Water Forum in Marseille. As of March 2012, more than 1000 Mayors from 58 countries have signed it.*

Link to the Local/Regional Authorities' Closing session and Declaration:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=971](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=971)

See video at:

<http://www.worldwaterforum6.org/?id=306>

<http://www.worldwaterforum6.org/?id=307>

5. Trialogues

The trialogues tackled a series of pressing water and sanitation issues relevant to each region with a specific focus on practical multi-level governance solutions. The range of issues was wide as illustrated below.

5.1 Africa: Transboundary Cooperation: International Legal Mechanisms

Representatives of the Niger basin, Nile Basin Initiative and elected representatives from different levels of government discussed key issues in transboundary water management. Challenges and practical examples of basin management were given. The challenges discussed included disparities in influence and power between states and the need to generate political momentum and recognition of the importance of water issues nationally. In addition, increasing population growth, industrialization and associated energy needs as well as a lack of clear dispute resolution mechanisms at each level of governance must also be addressed. In order to develop more effective transboundary cooperation mechanisms several needs were identified.

Key Messages

- Clear instruments are required to guide processes. Instruments may be legal, social, technical and political in nature. In particular, legal instruments for framing cooperation could encourage greater accountability. Formalised mechanisms to deal with disparities in power and influence at a basin level between states would also be valuable.

- Coordinated data collection and information sharing systems between states are required along with structured cooperation at technical and political levels.
- There is a need for high level political support for transboundary water issues and recognition by heads of state that transboundary water issues are not just 'water politics' but demand strong political responses.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=228](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=228)

5.2 Americas: Water for the Americas' Economic, Social and Sustainable Development

This Trialogue focused on regional and local development of water resources with specific examples given from the Brazil, Mexico, Ecuador, Honduras and the United States of America. The discussion focused on a spectrum of institutional responses at basin management, municipality and national government scales. The conversation covered infrastructure development for sustainable wastewater treatment and reuse to legal mechanisms such as effective legislation, in particular for sanitation. The session concluded that public investment and decentralization are vital in water resource development along with sound assessments of civil society capacity. Water is essential to the formulation of a new economy and a more sustainable world. Rio+20 should support the evolution of this, generating a series of dialogues in particular linking sustainability and water. In addition, leadership and commitment should be promoted in order to involve citizens in water resource development. A key challenge to modernization of water legislation in some areas, are economic powers which influence the prioritization and discussion of water laws within parliaments.

Key Messages

- Public investment and decentralization are key aspects of water resource development in the Americas.
- Civil society must be actively involved in water resource management but with proper assessment and awareness of their capacity.
- Water will be key to the new emerging green economy in the Americas and to this end dialogue and policy responses should be targeted towards the impact of this.
- Legislation should support government commitments to water provision notably through prioritisation of water law reform.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=388](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=388)

5.3 Asia-Pacific: Water Security of Urban Households

This Trialogue focused on the challenge of providing access to water and sanitation for all in an increasingly urban environment. Examples of local management successes and the challenges faced were given with a particular focus on Singapore, Korea and China. The role of technology and investment was considered particularly with respect to Daegu, Korea and the approach of the public utilities board in Singapore. Multi-level governance and joint policies were recognized to be essential to ensure success at all scales.

Key Messages

- Local management should be responsive to regional and national planning.
- Investment in technology development is important.
- Policy responses should be developed with input from all governance levels and effectively communicated and discussed.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=389](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=389)

5.4 Europe: European Action for Worldwide Universal Access to Water and Sanitation: Fostering Mechanisms of Solidarity

This Trialogue focused on a 1% solidarity tax for improving access to water and sanitation within the framework of solidarity at national or regional scales. The solidarity tax is a voluntary tax which may be added to consumer water bills or be taken from the overall budget or revenue from a water operator. The revenue from this is then collected by the water operator in a water fund where it is then used to implement water and sanitation development projects in developing nations. This might include infrastructure, research studies and support to water management mechanisms with a focus on long-term involvement and capacity building of local government actors. The mechanism offers the potential for stronger links to be forged between non-state

actors working towards improvements in water and sanitation access. Solidarity mechanisms, if extended to all 15 member states could raise €650 million. A recent European parliament resolution was passed in support of the solidarity tax and the initiative is supported by the UNDP charter and a recently launched platform for decentralized solidarity mechanisms supported by the French and Swiss governments.

Key Messages

- Solidarity mechanisms could generate substantial funds for water and sanitation improvements.
- Solidarity mechanisms could build sustainable long lasting links between non-state actors in different nations.
- Solidarity mechanisms could offer a new model for knowledge exchange and skills transfer.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=390](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=390)

5.5 Arab States: Water and Energy

This Trialogue focused on links between water and energy in the Arab world with examples from Saudi Arabia, Oman and the Occupied Palestinian Territory. Arab States contain 5% of the Earth's population but only 1% of the Earth's freshwater resources. The OPT context highlighted the challenge of developing access to existing and new water sources and associated technologies in a situation of conflict and military occupation and ongoing inequitable resource allocation. Desalination offers a potential water source for some Arab States and lessons can be learned from Gulf States which already rely heavily on desalinated water sources. Desalination is an energy intensive technology requiring extensive use of fossil fuel reserves. Consequently, development of more renewable energy sources is required. Solar energy options were presented and discussed with all parties agreeing that renewable energy sources offer the greatest hope for future development of desalination technology.

Key Messages

- Desalination is one option for improving water supply in water stressed Arab States yet it is extremely energy intensive. Therefore, sustainable energy sources must be found.
- Unprecedented political reform, civil unrest and ongoing conflict and military occupation within many countries in the Middle East have highlighted the need to respond to citizen demands for access to basic services such as water.
- Some Arab states have considerable experience in emergency water supply provision particularly in situations of protracted conflict and instability and therefore there are opportunities for them to take the lead in developing best practice in this area.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=392](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=392)

5.6 Mediterranean: Water Governance

This Trialogue focused on regional governance for water and sanitation. The Mediterranean region is characterized by very specific challenges and tensions in the management water resources issue and more specifically in the related governance approaches and mechanisms. Therefore the opportunity to organize a trialogue gathering representatives from ministerial bodies responsible for water, parliamentarians and local and territorial councilors enabled to exchange, debate, and especially to make commitments on the selected topic, water governance. The outcomes of this trialogue were achieved in accordance with the objectives of the regional policy initiative, namely the Union for the Mediterranean.

Key Messages

Building on other experiences and known solutions of basin management in the world, the Mediterranean Water Community has committed to strengthen the work of the ad hoc Water Governance Task Force to advance Multi-Stakeholder Participation in Governance Process and disseminate knowledge through existing regional networks, and solutions collected and/or developed from a range of institutions from both shores of the Mediterranean.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=391](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=391)

II. Thematic Process

Backbone of the 6th World Water Forum's structure, the Thematic Process successfully managed to bring to the same table actors coming from very different backgrounds and organised for the first time around a hundred of ambitious quantified water-related targets resulting from a wide, participatory consultation process.

By doing so, it set the stage to enable the participants to move from discussing issues to working on solutions and making commitments. Its preparation mobilised over 1000 organisations including UN and government agencies, multilateral bodies, financial institutions, universities, NGOs, professional associations, civil society, etc., and resulted in the delivery of over a hundred sessions during the Forum week.

The Thematic Process created a long-lasting momentum and generated considerable outcomes in terms of solutions, commitments, strategic partnerships and collaborative networks. It also contributed to developing both an organisational pattern and replicable method to set favorable grounds for action.

The following pages summarise the wealth of information, solutions, key messages and commitments that came out of these high-quality and thought-intensive process.

1. Strategic Direction 1: Ensure Everyone's Well-being

1.1 Priority 1.1: Guarantee Access to Water for All and the Right to Water

Coordinators	Swiss Agency for Development and Cooperation
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=631 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=636 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=639

In 2010 89% of the world's population -or 6.1 billion people- used improved drinking water sources: an impressive progression of 13% from 1990 levels that has met the MDG target for 2015 in advance. However, this target has not been reached by all countries and some parts of the world, notably in sub-Saharan Africa. That very same year the UN General Assembly adopted a milestone resolution recognising the human right to water and sanitation. This human right's normative (availability, quality, accessibility, affordability and acceptability) and cross-cutting (non-discrimination, participation, accountability, impact and sustainability) criteria were detailed by the UN Human Right Council in 2011, encouraging further progress worldwide.

Indeed, progress is not evenly shared and billions of people especially most marginalised groups are still using unsafe water. Amongst all solutions developed by different regions and communities to face their dynamic needs and challenges, three domains of action were highlighted by the priority *1.1 Guarantee Access to Water for All and the Right to Water* to tackle remaining disparities and guarantee sustainable water for all:

- clear enabling frameworks and programmes at national levels
- appropriate technical, managerial and financing solutions at the local level in both rural and urban areas
- reliable maintenance, monitoring and key indicators of water services that inform action

1.1.1 Target outcomes

Practical implications of national policies to the Right to Water

Target	<i>Target 1.1.1: For 2012, highlight the practical implications of the Right to Water for practitioners by collecting and disseminating at least one example per category in each region of national policies targeting and delivering effectively better water quality, availability, accessibility, affordability at country level, all major components of the human right to drinking water.</i>
Coordinators	World Bank - Water and Sanitation Programme (WSP)
Link to Target	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=603

documents	
Link to Solutions	www.solutionsforwater.org/objectifs/1-1-1-national-policies-delivering-on-the-major-components-of-the-right-to-water-in-practice

Whilst several national policies (Brazil, Mexico, Pakistan, South Africa, Ukraine, etc) address one dimension of the Human Right to Water, efforts should be made to consider all criteria. Decision makers should use documented evidence to be more strategic through establishing country-specific long-term vision and prioritising feasible actions tailored to each context.

To be successful in the long term, national initiatives towards achieving the Right to Water must be flexible to adapt to the dynamic nature of settlement patterns and demographic changes. They should also take into account the sustainability of the service providers to ensure maintenance and the continuity of services. Besides the Platform of Solutions, good national practices are also documented in the UN Special Rapporteur's "On the Right Track" Compendium, as well as the UNECE's "No One Left Behind" study.

Rural water for all – the river may be wide but it can be crossed

Target	<i>1.1.2: Ensure that the global rural population without access to safe water decreases, with special attention to the poor.</i>
Coordinators	Rural Water Supply Network (RWSN)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=604
Link to solutions	www.solutionsforwater.org/objectifs/1-1-2-global-rural-access-to-safe-water

The world is failing the rural poor with respect to access to rural water supplies. A Global Action Plan could focus on four key objectives: (1) Equity, inclusion and non-discrimination in access to water services, (2) Increase of human and financial resources, (3) Balance between capital expenditure for access and recurrent expenditure for maintenance, (4) Improvement of skills and expertise for professional ways of working.

Incremental approaches can be decisive in improving water supply in rural areas and it is essential that active organisations document and share good practices and enable those in the field and in decision-making roles to learn from each other. Inspired by experiences in India, Kenya or Moldova champions should build on solutions identified under the categories equity and inclusion, national programmes or large projects, management and support, Self-Supply, sustainable use of groundwater resources, multiple uses of water, and specific new technologies.

Global urban water security: moving towards universal & sustainable access to drinking water by 2025

Target	<i>1.1.3: Ensure that the global urban population without access to safe water decreases, with special attention to the poor.</i>
Coordinators	UN Habitat and International Water Association (IWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=605
Link to solutions	www.solutionsforwater.org/objectifs/1-1-3-global-urban-access-to-safe-water

The development of water supply in cities is often outpaced by urban growth and life conditions are in average regressing in urban areas. The strategy for urban water security should be based on efficient water use through sustainable urban planning and design with optimal density and diversity, planning in advance and scaling expected growth of the city along with the planning of basic water and sanitation networks.

Financial flows to water and sanitation should be increased and incentives among town councillors, utility providers, and citizens which could deliver sustainable solutions should be aligned. In terms of governance, legislation should be reinforced and transparency and participation should be strengthened to allow citizens to take part in infrastructure investment and management decisions. Different solutions from cities around the world range from the management of non-revenue water, to water demand management, sustainable planning and education.

Financing mechanisms for local water and sanitation service providers

Target	<i>1.1.4 (merged with CS2.4): By 2015 more than half of countries in each continent have set</i>
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	<i>up financial mechanisms that suit the needs of local authorities and local operators.</i>
Coordinators	International Secretariat for Water (ISW) and Agence Française de Développement (AFD)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=606
Link to solutions	www.solutionsforwater.org/objectifs/1-1-4-financial-mechanisms-that-suit-the-needs-of-local-authorities-and-local-operators

The decentralisation of water infrastructure services and responsibilities has created large investment needs among local governments and public, private or associative service operators. Local actors can access funds through three channels: (1) Local financing with tariffs and local taxes; (2) National financing with transfers, subsidies or guarantees for local authorities, and with more strategic mechanisms such as frameworks for price setting and structuring or soliciting the capital markets; (3) International financing through aid.

Transparency, bankability and accountability are key factors for success. Financial decentralisation has to go hand in hand with i) clear roles and responsibilities of the various actors, ii) capacity strengthening in planning, coordination and management, iii) effective regulation and iv) monitoring. Solutions range from predictable flows of subsidies and taxation mechanisms of sector basket funds, technical and financial North-South partnerships and mechanisms to facilitate local capital raising.

Monitoring of water services delivery

Target	<i>1.1.5: By 2020 more than half of countries in each continent have organized a simple, inclusive and reliable reporting mechanism for water supply that includes every local water service providers in rural and urban areas.</i>
Coordinator	Agence Française de Développement (AFD)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=243
Link to solutions	www.solutionsforwater.org/objectifs/1-1-5-simple-inclusive-and-reliable-reporting-mechanism-for-water-supply

New local monitoring and evaluation mechanisms, including information management tools and financing systems, are needed to move beyond construction to consider service delivery, sustainability and performance into account, and to inform local decision making and corrective action. Inclusive monitoring can also lead to better transparency on tariff structure for everyday users, and a more efficient use of available resources. Last, it can help monitor the implementation of all criteria of the Right to Water. It was stressed that data collection and their quality must be adapted to monitoring goals and that monitoring and reporting costs can be recovered on water tariffs or assumed by national budget. Examples showed that based on centralised solutions, decentralised solutions or adopting specific technological tools, monitoring can be implemented by national regulatory agencies or by a third party, if agreed by the government.

Monitoring drinking-water supply beyond 2015

Target	<i>1.1.6: By 2015, elaborate key global indicators regarding water quality, accessibility, availability, affordability and non-discrimination, all major components of the human right to drinking water.</i>
Coordinator	WHO/UNICEF Joint Monitoring Programme (JMP)
Lin to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=609
Link to solutions	www.solutionsforwater.org/objectifs/1-1-6-key-global-indicators-on-all-major-components-of-the-right-to-water

The adoption of the Millennium Development Goals, with specific targets and the establishment of indicators have helped track global progress and proven the importance of national and global monitoring. WHO and UNICEF initiated a platform to prepare the next generation of potential global targets, key indicators and the sources of data and methods of collection, taking into special consideration the full scale of the drinking water supply situation especially all aspects of the Human Right to Water. Developing additional indicators with appropriate monitoring systems is feasible but requires time, resources, progressivity and commitment. The challenge will be to find ways to ensure comparability between countries and connections with national processes as each country must develop its own targets and ways to achieve them. Inspiration can be drawn

from the Water Regulation Information System in Kenya, the International Benchmarking Network of Water and Sanitation Utilities and the UNECE's Protocol on Water and Health.

1.1.2 Key messages

- Stop talking about beneficiaries and start talking about partners to address the communities
- Talk to people and take communities' priorities and capacities into account
- Use the recognition of the Right to Water for awareness raising & advocacy
- Translate the Right to Water into national policies considering all its dimensions with indicators and deadlines
- Commit to predictable and long term partnerships in order to move towards universal and sustainable access, both in rural and urban areas
- The Right to Water implies economic costs that must be recovered to ensure the continuity of service through the sustainability of public, private and community-based service providers
- Giving financial responsibility to local stakeholders creates an opportunity for i) additional resources, and ii) improved governance; this has to go in hand with clear roles, capacity strengthening & regulation and monitoring
- Monitoring performance needs to be fully linked to accountability and action
- We need new global measurable targets that: i) take into account all aspects of the Right to Water, ii) foster progressive and effective implementation

1.1.3 Commitments and Follow-up

The Core Group and target coordinators of 1.1 commit to join forces through a Task Force for the Implementation of the Human Right to Water (www.solutionsforwater.org/commitments/task-force-for-the-implementation-of-the-human-right-to-water) to maintain the momentum and boost action on:

- Linking the 4 As: Boosting global links between the Acquisition of data (monitoring), Analysis, Advocacy and Action
- Strengthening Local Capacities and Financing: Boosting capacity building and access to finance at the local level
- Encouraging National Campaigns and Dialogues: Boost wide exchanges and long term partnerships at the national level and in both rural and urban areas.

Three additional high level commitments were also secured during the Forum:

- Ato Johannes, Director for Water Supply and Sanitation, Ministry of Water and Energy, Government of Ethiopia announced that Ethiopia is committed to establish *Self Supply* as a service delivery mechanism for rural water alongside *Community Managed Approaches* within its national WASH programme in order to reach some of the more than 30% citizens who still lack access to safe water in the country (See more at: www.solutionsforwater.org/commitments/national-guideline-for-self-supply-in-ethiopia-approved-january-2012)
- Hon. Maria Mutagamba, Minister for Water & Environment, Uganda presented the main commitment from the Kampala Rural Water Supply Network Forum, which was held in December 2011 and approved and endorsed by its 480 delegates (See more at: www.solutionsforwater.org/commitments/kampala-rural-water-commitments).
- Private Water Operators commit themselves, through their international federation, AquaFed, to engage constructively with governments and public authorities to contribute to the delivery of good quality water and sanitation services and to solving local and global water challenges (See more at: <http://www.solutionsforwater.org/commitments/aquafed-and-private-water-operators-commitments-to-the-6th-world-water-forum>).
- Last, the Swiss Development and Cooperation Agency agreed to undertake further documentation of the *Basic Sanitation Model (SABA)* in Peru so that other rural water supply implementing organisations and development partners can learn from it and consider adapting it to their needs (See more at: www.solutionsforwater.org/commitments/one-national-wash-consolidated-programme-and-consolidated-wash-account-in-ethiopia).

1.2 Priority 1.2: Improve Access to Integrated Sanitation Services for All

Coordinators	International Water Association
Link to PFA documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=675 www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=694

The proportion of people with access to improved sanitation has noticeably increased from 49% in 1990 to 63% in 2010. However, significant steps must still be taken to reach the MDG target for 2015 and beyond to improve sanitation for the remaining 2.5 billion people and to ensure waste water is disposed of and treated adequately. The 1.2 priority and targets' sessions brought the issue forward and galvanised efforts through a three-pronged approach that confronts age-old taboos and conventions:

- **The right to basic sanitation: equity and access:** the implementation of the human Right to basic sanitation with a strong emphasis on equity and access, including renewed attention to specific needs of women and disable people
- **An integrated approach to sanitation service provision:** the integration and monitoring of services across the whole sanitation value chain to improve the social and environmental impacts of wastewater and help close the sanitation loop in favour of public health, green growth and the preservation of the environment
- **Planning to achieve sanitation at scale:** the development of coordinated national and local planning and strategies to achieve scale and adequate investments in partnership with all stakeholders

In line with the 2011 WHO Assembly Resolution 64/24 and the water and health sessions, speakers also stressed the strong links between water, sanitation, hygiene and health and the mutually beneficial impacts of investing in sustainable sanitation to reduce water-borne diseases and contamination. All actors, from national governments to regional and local authorities, from regulators to operators and to communities, have a key role to play to accelerate the implementation of sanitation solutions that integrate the collection, evacuation, treatment and possibly re-use of wastewater. All should be supported by adequate capacity building.

1.2.1 Targets outcomes

- **The Right to basic sanitation: equity and access**

Basic sanitation and hygiene for all

Target	<i>1.2.1: By 2050 whole population/communities (every one and especially children) use and properly maintain appropriate sanitary toilets (MDGs).</i>
Coordinators	Water Supply and Sanitation Collaborative Council (WSSCC)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=695
Link to solutions	www.solutionsforwater.org/objectifs/1-2-1-access-to-and-maintenance-of-appropriate-sanitary-toilets

Sanitation is now a human right and to end open defecation at scale, we need a range of inclusive financing and design solutions that adopt a lifecycle approach with facilities that respect different needs: children, disabled, ill, puberty and menstruating girls and women, old people, etc. Listening to users allows building these differences up front into facilities design and service delivery to be more cost effective, as in the Community-Led Total Sanitation initiatives.

Systems sustainability and management of waste also require specific attention for a long term success. A community of practice could help discuss challenges, issues and solutions in an honest and constructive manner to further progress on the ground.

Scope and practical implications of the Right to Sanitation

Target	<i>1.2.4: For 2012, clarify the scope of the internationally-recognised Human Right to Sanitation taking into account national experiences, and publish 1 document highlighting the practical implications of the Right to Sanitation for practitioners.</i>
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Coordinators	Portuguese Water and Sanitation Regulatory Agency (ERSAR)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=714
Link to solutions	www.solutionsforwater.org/objectifs/1-2-4-scope-and-practical-implications-of-the-right-to-sanitation

For each actor, capacity building is required to understand and demystify the content of the Right using the criteria of accessibility, availability, quality, affordability and acceptability and taking into account the geographic, demographic, economic, social or cultural characteristics of each country or region. Building on the definition of sanitation and states' obligations to respect, to protect and to fulfil the human right, the session agreed that states must implement comprehensive and holistic approaches based on a combination of strategic, institutional, legal, governance, economic, financial, technical, operational and social elements.

Specific measures should be included in the national legislation to ensure access to users in different situations, not only when public service is available, but also in areas where there is no public sewer system and in the case of public sites. The implementation of the Right can be progressive and prioritised according to the baseline situation and people's main concerns. Public figures can be instrumental in driving attention to the issues. A range of national implementation solutions were collected from global case studies from Portugal to Zimbabwe to Ukraine.

- **An integrated approach to sanitation service provision:**

Access to appropriate wastewater collection and treatment

Target	<i>1.2.2: Reduce by 20% by 2020 the percentage of urban people whose wastewater is neither collected nor treated properly in 10 countries.</i>
Coordinators	Groupe de Recherche et d'Echanges Technologiques (GRET)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=699
Link to solutions	www.solutionsforwater.org/objectifs/1-2-2-access-to-appropriate-wastewater-collection-and-treatment

Latrines and toilets represent only the first segment of "sanitation value chain". Evacuation and treatment of wastewaters are as important and should be more considered, especially in developing countries. From sewer systems or on-site pit emptying to the use of adapted treatment technologies, it must be taken into account by all stakeholders so that faecal sludge and wastewaters are well managed, from their point of production to their release into nature. It was stressed that carrying out a comprehensive sanitation service approach supposes to think about the responsibilities, the operation, the maintenance, and the cost of investment and management of the evacuation and treatment systems. Manual or motorised pit emptying, small-bored sewer systems, solar or planted drying beds, anaerobic baffled reactors: various technical solutions for wastewater evacuation and treatment adapted to the physical, climatic and human contexts of developing countries exist and must be disseminated at various scales. Storm-water management also appeared as a key issue in relation to the sanitation value chain.

Urban waste-water and excreta re-use

Target	<i>1.2.3: By 2025, increase by 25% urban wastewater and excreta re-use in different sectors (agricultural, tourism, municipal uses, energy generation) where financially and culturally viable, and especially in water-scarce and drought-prone regions.</i>
Coordinators	Japan Sewerage Works Association (JSWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=701
Link to solutions	www.solutionsforwater.org/objectifs/1-2-3-urban-waste-water-and-excreta-re-use

Wastewater reuse has become increasingly important in water resource management for both environmental and economic reasons. Although public attitude is still hesitant towards waste water reuse, challenges such as growing water scarcity and water resource deterioration are pushing for quicker adaptation. Besides, the valorisation of wastewater and faecal sludge can be a source of revenue to make wastewater management and

related investments profitable. The quality and safety of treated wastewater is paramount to avoid all health risk. Significant efforts, including international standardization like ISO 24510/11/12, can help change public attitudes whilst respecting traditional cultures. Solutions from Japan and other countries show how involving the public in the decision making process can strengthen waste water reuse in traditional sectors like agriculture and help extend it to new areas such as municipal uses and energy generation.

Comprehensive monitoring of appropriate wastewater treatment

Target	<i>1.2.7: By 2025, regular comprehensive monitoring of appropriate wastewater treatment at national and global levels.</i>
Coordinators	Korea Environment Institute (KEI)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=717
Link to solutions	www.solutionsforwater.org/objectifs/1-2-7-regular-comprehensive-monitoring-of-appropriate-wastewater-treatment

Globally, the amount of wastewater discharge to water bodies is approximately 2 million tons a day and is rising with development and population growth. 80 to 90% of this is discharged without treatment. Wastewater treatment facilities are gradually established worldwide and monitoring provides quantitative and qualitative information that helps limit improperly treated discharge with residuals of organic compounds and toxic materials threatening water quality, public health and aquatic ecosystems. Establishing such local monitoring systems and datasets and extending those to national and global levels are two major challenges. In both cases, cross-functioning can be supported by building on existing systems and technology (convergence technology, conventional systems, portable monitoring stations, etc).

A few identified solutions were WEPA partnership, WPEP project, Water TMS remote technology, and peer monitoring. Supporting affordable technologies, monitoring pathogens and building capacity should become a priority for developing countries.

Operator efficiency and effectiveness in urban wastewater collection and treatment

Target	<i>1.2.8: By 2025, improve the efficiency and effectiveness of operators to manage and treat wastewater according to appropriate standards in 100 cities across a range of city size.</i>
Coordinators	International Water Association (IWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=756
Link to solutions	www.solutionsforwater.org/objectifs/1-2-8-operator-efficiency-and-effectiveness-in-urban-wastewater-collection-and-treatment

There is insufficient investment in facilities to treat the residual wastewater flows. Even in situations where investments have been made, the efficacy of the investments to reach the desired result is severely compromised when wastewater treatment assets are poorly operated or maintained. Building the capacity of wastewater treatment operators is a good way to improve efficiency and effectiveness of urban wastewater collection and treatment.

Policy and regulatory instruments as well as appropriate standards for technologies and management arrangements can provide a strong institutional framework to these specific efforts. Solutions discussed ranged from PRODES to DEWATS to peer to peer learning.

- Planning to achieve sanitation at scale:

National sanitation planning

Target	<i>1.2.5: By 2020, at least 20 additional countries will have adopted and implemented a comprehensive strategic sanitation plan for urban, peri-urban and rural areas. The plan shall include a hierarchy of priorities for subsequent plans of actions to be implemented at national and local levels and shall cover all components of the sanitation chain.</i>
Coordinators	Sanitation and Water for All (SWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=715

Link solutions	to www.solutionsforwater.org/objectifs/1-2-5-comprehensive-strategic-sanitation-plans-for-urban-peri-urban-and-rural-areas
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A major cause of poor performance in meeting global and national sanitation targets is poor planning. Most countries have some form of national sanitation plan, but these are rarely comprehensive. Credible national sanitation planning processes must fully integrate all the components of sanitation and waste management and deal adequately with the range of approaches tailored to urban, peri-urban and rural settings. It must also include a clear definition of institutional roles and responsibilities, the developments of legal frameworks, the service standards and targets, as well as an effective approach to monitoring, accountability and transparency mechanisms.

National sanitation plans properly developed, implemented and monitored can help to engage with key stakeholders, to seek long term solutions and to guide a country to rapid improvement in sector performance. The PS-Eau guide, Country Status Overviews, regional SAN conferences, and SWA provide mechanisms to stimulate such country processes.

Local authorities' strategies and action plans covering the whole sanitation chain

Target	<i>1.2.6: By 2020, at least 500 additional urban, peri-urban and rural local authorities will have adopted and implemented, by involving local stakeholders, local strategy and action plans that cover all components of the sanitation chain and are in accordance with a national comprehensive strategic sanitation plan and priorities.</i>
Coordinators	Programme Solidarité Eau (pS-Eau)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=716 www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=675
Link solutions	to www.solutionsforwater.org/objectifs/1-2-6-local-authorities-strategies-and-action-plans-covering-the-whole-sanitation-chain

Strategic sanitation planning by local authorities responds to local demands for improved services and identifies the most appropriate sanitation technologies and service delivery mechanisms. It was agreed that it should build upon the capacities of different local stakeholders in order to prepare plans that have both temporal and spatial dimensions and that are realistic given the limitations of existing resources. Its elaboration and implementation involves a process in which stakeholders reach a collective understanding of the current situation and consensus about the way forward, where roles and responsibilities are clearly defined in the resulting plan.

Good practices include Concerted Municipal Strategies in Africa, CLUES, local Sanitation Master Plans and City Wide Sanitation Plans in India. The follow up and monitoring of action plan implementation can be ensured by a task force comprising representatives from various stakeholder categories.

1.2.2 Key messages

- Sanitation is vital for human health and well-being, and has a key role as an engine of development
- Sanitation is now a human right and achieving basic sanitation for all is an obligation for both duty bearers and rights holders for everyone's safety and dignity
- Integrated sanitation places further emphasis on the need for collective coordination and partnership working across the sanitation value chain
- Such wastewater management, including collection, treatment, de-pollution and re-use should be an integral part of integrated water resources management as well as of rural and urban development planning
- Sanitation monitoring can also be used to channel financial resources in the most effective way, track progress on given objectives, and provide information for policy decisions and reforms
- Strategic sanitation planning is a management tool to develop a long term vision and to optimize actions and existing resources (human, material, financial)
- Strong leadership is needed at the national level by a clearly identified minister/public entity and at the local level by the public local authority
- The involvement of all stakeholders enables to build a shared vision for sanitation and to facilitate its implementation, and it should be followed by changes on the ground

- A greater emphasis on capacity building is required during the process of sanitation planning and implementation, but also for sustaining investments through better management

1.2.3 Commitments

A series of commitments were secured during the preparation and at the Forum:

- IWA committed to continue its coordinating role and furthering the targets of integrated sanitation either directly through its own activities and partnership with specific cities or by supporting partners and their initiatives (See more at: <http://www.solutionsforwater.org/commitments/iwas-commitments-for-integrated-sanitation>).
- The GRET committed to establish Sanitation observatories in Mauritania and Madagascar in the period 2012-2020. The Japan Sewerage Works Association will promote a global shared framework for water reuse without anxiety based on the Japanese experience.
- The Japan Sanitation Consortium will act as a sanitation knowledge hub in the Asian Pacific Water Forum and will strengthen the role of clearing house in the field of water reuse.
- The International Standard Organisation will promote the knowledge of best practices in Management of Drinking Water and Wastewater Services (ISO 24510/11/12) as well as the future standard related to Treated Wastewater Recycling and Reuse.
- The Korea Environment Institute will expand its water-TMS monitoring parameters and apply them to integrated water quality management. Together with the Korean Ministry for the Environment, it also proposes to focus attention the development of a comprehensive scheme of global wastewater treatment monitoring and to support more than 20 governments to establish and revise their national plan of wastewater treatment monitoring.
- IGES (Japan) will share knowledge and mutual support to promote water quality management including compliance of effluent standards, it will liaise with like-minded network and organizations working for water quality improvement in Asia and it will undertake regular monitoring of water quality management in the region, including the progress of regulations, standards, and monitoring.
- Regarding Local Sanitation Planning Strategies by Involving All Stakeholders, pS-Eau committed to ensure a permanent analysis and capitalisation of the various experiences and approaches, to develop training and direct support for African local authorities to formulate their strategies, and to disseminate knowledge, tools and training. pS-Eau also committed to support African national governments in the elaboration and improvement of sanitation national policies and strategies, and to promote the integrated sanitation approach. (See more at: <http://www.solutionsforwater.org/commitments/ps-eaus-commitments-for-sanitation>).

1.3 Priority 1.3 Contribute to Improved Hygiene and Health through Water and Sanitation

Coordinators	World Health Organisation (WHO)
Link to PFA documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=766 www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1180

Overall, 5.8% of deaths and 8.4% of the global burden of disease is attributable to poor sanitation, inadequate hygiene and unsafe water. Microbial contamination of drinking-water affects catchment areas and sources through inadequate disposal of human or animal excreta or domestic or industrial waste. Contamination can also occur in the distribution system through obsolete infrastructure and inadequate treatment and storage or result from unhygienic behaviour and handling of stored water. Moreover, millions of people are exposed to unsafe concentrations of chemical contaminants in their drinking-water linked either to naturally-occurring inorganic chemicals (arsenic, fluoride) which cause cancer and tooth and skeletal damage or to a lack of proper management of urban and industrial or agricultural run-off water, with potentially long-term exposure to pollutants, resulting in a range of serious health implications.

On the other hand, access to water and sanitation along with improved hygiene practices has been statistically proven to reduce mortality rates. Improved sanitation and hand-washing have been reported to reduce diarrhoea by 30-40% each. Indeed, objectives linked to drinking-water and sanitation contribute to improving people's health and productivity, allowing women to play a more effective role in protecting their children's health and promoting their education, and reducing the burden on overstretched health services.

1.3.1 Target outcomes

Education: the key to Engagement, Empowerment and Evidence-based Decision-making

Target	<i>1.3.1: By 2015 develop ten modular education programmes, based on harmonized communication strategies, that foster a better understanding of linkages between water, sanitation, hygiene, food security and health to consumers, practitioners, policy/decision-makers and health promoters, and to deliver these programmes in 30 countries by 2018.</i>
Coordinators	United Nations University – Institute for Water, Environment and Health (UNU-INWEH)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=276
Link to solutions	www.solutionsforwater.org/objectifs/1-3-1-modular-education-programmes-and-communication-strategies-on-links-between-water-sanitation-hygiene-food-security-and-health

Key to engagement, empowerment and evidence based-decision making, education is a cornerstone for action. Many successful approaches and curricula exist for all audiences, particularly for communities and decision makers. Modules must include awareness, advocacy and evidence based information that facilitate the uptake of safe water and sanitation practices to improve hygiene, health and well-being. Pathways include understanding linkages between water, environment and public health, linking hygiene and water supplies to food safety and security and the spread of disease, and linking environmental stewardship and ecosystem services to economic activity.

Education and communication strategies and delivery mechanisms, from textbooks to performing arts, must be tailored to the target audience and be integrative, inclusive and interactive. Solutions presented included WASH programmes in formal education curricula with different teaching methods, community-based education for positive cultural paradigm shifts, and professional development and training.

Preventative risk management of the water cycle to protect public health

Target	<i>1.3.2 & 1.3.3: By 2021 the practice of water safety and sanitation safety planning will be fully rolled out in 90 middle and lower-income countries, at the policy, regulatory and operational levels, with the establishment of national health-based targets, the quantitative assessment of microbial risks, the implementation of cumulative health risk management and independent quality assessment.</i>
Coordinators	World Health Organisation (WHO) and International Water Association (IWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=705
Link to solutions	www.solutionsforwater.org/objectifs/1-3-2-incorporation-of-water-safety-framework-into-national-water-resources-strategies www.solutionsforwater.org/objectifs/1-3-3-rolling-out-water-safety-and-sanitation-safety-planning

Water Safety Plans are part of the WHO Guidelines' preventive approach of risk management for the consistent delivery of safe drinking water, improving public health and reducing poverty. WSPs link governments, water suppliers and regulatory authorities and address the root causes of contamination (faecal pollution, wastewater), risk groups (agricultural workers, consumers), the different exposure scenarios and impacts. They are holistic and proactive, promote multiple barriers and maximise existing resources contributing to the implementation of the Right to Water. WSPs are adaptable and push for continuous processes and practices improvement, reaping operational, financial and institutional benefits including risk reduction, better management, country and community ownership, inclusion, and science-based decision making. It was agreed accreditation and regulation play a significant role for scaling up WSPs, and a series of training and capacity building tools can be used to support regional and national implementation. Sanitation Safety Plans are also being developed through a similar multi-stakeholder approach. Linkages with other WASH control measures and asset management issues need to be explored further.

Strengthening WASH financing reporting and inter-sector collaboration

Target	<i>1.3.4: By 2015 at least 50% of countries report on total expenditures on water, sanitation</i>
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	<i>and hygiene promotion, that include funding flows from governments, external sources and households, and have developed appropriate platforms for sharing experiences and coordinating actions on this process with the health and education sectors</i>
Coordinators	Sanitation and Water for All (SWA)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=706
Link to solutions	www.solutionsforwater.org/objectifs/1-3-4-financial-reporting-and-appropriate-coordination-platform-with-the-health-and-education-sectors

The lack of reliable and comprehensive financial information is a major constraint to sound planning and decision-making in the WASH sector. From a low base, much progress has been made recently in developing tools to strengthen WASH financial flows monitoring. This robust evidence can inform policy options and help successfully advocate for additional resources for the sector, including sanitation and its effectiveness at scale. Up to now, national WASH funding has been skewed towards drinking water, urban areas and capital expenditure. It was agreed that more work is needed to capture the full range of household and government expenditures on WASH and to embed monitoring systems with global and national statistical initiatives. Drawing from the incremental development of such tools in the health and education sector, WHO/GLAAS 2012 pledged to develop a tool and methodology for more effective monitoring of national WASH financial data. SWA will further investigate inter-sectorial collaboration.

Building the Evidence Base at the Water-Health Nexus

Target	<i>1.3.5: By 2015 establish 10 solid research projects in parts of the world selected for high water-associated disease burdens on multi-exposure to water contaminants and aquatic environments (communicable to non-communicable diseases, malnutrition, injuries and accidents and psychosocial disorders).</i>
Coordinators	United Nations University – Institute for Water, Environment and Health (UNU-INWEH) and French High Council for Public Health
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=275
Link to solutions	www.solutionsforwater.org/objectifs/1-3-5-research-projects-on-multi-exposure-to-water-contaminants-and-aquatic-environments

The water-health nexus is characterised by complex interactions between individuals and their environment and between socio-economic and physical systems. As we move into a less certain future, it is essential to understand these relationships impacting biological and chemical water contamination as well as vector-borne diseases. In each case research is important to build the evidence base of the nexus. Through stakeholder engagement and ongoing dialogue, it must bridge the gap between scientists and policy makers to ensure policy decisions are based on evidence and interventions are appropriate and coordinated for maximum health protection from all water-related diseases and their synergistic and derivative impacts. System-based transdisciplinary research and wider information sharing were agreed as the way forward to identify critical thresholds and linkages and to develop vulnerability assessments to biological and chemical contaminants. Poorly understood processes, such as consequences of climate change on antimicrobial resistance, multiple exposures and pathways, the impact of environmental processes on virulence and toxicity of pathogens and socio-economic determinants are key gaps in the literature.

Household water treatment and safe storage

Target	<i>1.3.6: By 2015, 30 additional countries will have established national policies and/or regulations regarding household water treatment and safe storage; by 2018, 50 countries will have reached this target; the scale-up process will be based on a gradual and measurable increase of sound evidence of the public health benefits of this approach.</i>
Coordinators	World Health Organisation (WHO)
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=728
Link to solutions	www.solutionsforwater.org/objectifs/1-3-6-household-water-treatment-and-safe-storage-and-point-of-use-water-treatment-in-school

Point-of-use and Household Water Treatment and Safe Storage is an important water supply solution and can be an effective preventive health intervention for those most at risk or in emergency situations. Many countries have national HWTS enabling policies, mostly as part of their Water or Health strategies, with government support for their implementation and scaling up. The implementation challenges lie in coordination, regulation, monitoring/evaluation, awareness and sustainability. The WHO and UNICEF have a toolkit and recommendations on evaluating HWTS to support these national efforts, whilst the International Network on HWTS further encourages the sharing of research, best practice and advocacy. Solutions discussed during the session range from filters to chlorination, solar disinfection, behavior change, self-help groups, school WASH and improved storage devices.

Primary prevention of endemic and epidemic cholera

Target	<i>1.3.7: By 2015 an evidence-based integrated approach for the primary prevention of endemic and epidemic cholera will have been anchored in 4 countries of Central Africa, with a major emphasis on ensuring sustainability through water and sanitation infrastructure development. By 2018, this approach will have been replicated in additional African high cholera incidence countries, pending on the ongoing cholera situation in 2015.</i>
Coordinators	World Health Organisation (WHO) and Veolia Foundation
Link to Target documents	www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=1177
Link to solutions	www.solutionsforwater.org/objectifs/1-3-7-primary-prevention-of-endemic-and-epidemic-cholera

Cholera is a well-known water-borne disease whose regular explosive outbreaks lead to high mortality especially in poor marginalized population groups. In 2010, there were more than 7,500 deaths out of over 300,000 cases, of which 80% in Africa alone. The treatment is simple but needs preparedness, and emergency responses work best when combined with prevention. Prevention remains difficult to organise however, particularly in transboundary regions. It was agreed that multi-sectorial and community-based coordinated approaches that link clean water supply, sanitation, hygiene and health are critical in cholera control and result in the greatest health gains. Enlarged epidemiologic surveillance is needed to monitor cholera data, map endemic hotspots, risk factors and indicators and develop studies on transmissions routes and key risk behavior and cultural practices. Strengthening the local community ownership and competences of the response to cholera is also vital for long-term improvement and preparedness.

1.3.2 Key messages

- Sound policies must be based on a holistic understanding of the critical linkages between sanitation, water, environment, health and nutrition and need strong science-policy bridging
- Primary prevention is fundamental in the public health approach to water-associated diseases: actions should mainly aim at reducing contamination, minimizing exposure and interrupting transmission
- As the decision-making often lies outside of the health sector, with water resources, environmental, infrastructure or urban planning authorities solutions are to be found in inter-sectorial action, public-private partnerships and community consultation
- Enhance knowledge, skills and attitudes to develop context-specific critical mass and to plan for better water and sanitation safety
- Community empowerment through access to information, political, economic and psychological resources is paramount so the ultimate users understand the links and are involved in the selection and implementation of chosen technologies
- Monitoring of national WASH financial data can draw from the experience of the education and health sector and help inform policy and investment options
- Transdisciplinary research is important to build an evidence base for informed decision making and interventions to address the challenges of waterborne contaminants health risks
- Political leadership, secure funding and information sharing remain key success factors.

1.3.3 Commitments

Many organisations from cooperation agencies to professional associations are involved in rolling out Water Safety Plans and will report on progresses at the upcoming Water Safety Conferences. The World Health Assembly resolution 64/14 on cholera: mechanism for control and prevention was presented as it calls attention to the role of clean water, including HWTS and sanitation in cholera prevention and requests the WHO to revitalize the Global Task Force on Cholera Control.

1.4 Prevent and Respond to Water Related Risks and Crises

Coordinators	Action against hunger
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1299 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1301 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1310

Escalating risks and losses from water disasters worldwide led to discussions around three main principles that remain crucial in the disaster risk reduction process. Firstly, the prevention principle modelled in the Hyogo Framework for Action (HFA) was highlighted as a cornerstone to build a culture of risk avoidance and foster policies that strengthen resilience of people and economies by reducing exposure and vulnerability. By promoting countries' infrastructures and improvement of technical expertise, cooperation and financial strategy, the mitigation approach and the humanitarian answer were also pointed out. From this perspective, strengthening operational coordination of WASH response by promoting Cluster approach and ensuring adequate funding would allow an early recovery transition between emergency and reconstruction/development.

1.4.1 Target Outcomes

National policies for disaster risk reduction and resilience

Target	<i>1.4.1: By 2015, 100 countries have adopted a national policy for disaster risk reduction and resilience and made it a local priority with a strong institutional basis for implementation</i>
Coordinators	UNISDR, Ministry Of Public Administration and Security (MOPAS), Republic of Korea
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=632
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-1-national-policies-for-disaster-risk-reduction-and-resilience

Making DRR an economic necessity and a strategic priority requires a complete understanding of risk generation, tolerable risks and underlying risk factors at both national and local levels. Indeed, nations should focus on resilience through community-based perspectives (decentralized approach). The monitoring of the Hyogo Framework combined with Integrated Water Resources Management should allow the integration of DRR and resilience into national development planning. Policy guidance should combine "soft" and "hard" measures that pool eco-efficient infrastructures and ecosystem management (participation and consciousness, data collection and sharing). Understanding the integration of issues, raising awareness and scaling up innovative solutions is strategic in capacity development. At last, increasing global and regional cooperative partnerships on delta as well as bilateral and city-to-city cooperation would guarantee the process sustainability.

Monitoring Disaster Risk and Developing an Early Warning System

Target	<i>1.4.2: By 2015, 50 countries have identified, assessed and monitored disaster risk and developed an early warning system.</i>
Coordinators	China's Institute of Water Resources and Hydropower Research
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=638
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-2-monitoring-disaster-risk-and-developing-an-early-warning-system

Monitoring and early warning are keys to reducing damages caused by water-related events. In terms of early warning there is no single recipe. Even though access to data is critical, every country should develop its own warning strategy while adopting the HFA. Software solutions are not suited to every situation but informing people about the critical events they could experience is crucial all over the world. Hence, priority is given to address issues, share experiences and data, and support technology transfer from a country to another. In addition, many more are required to introduce grassroots organizational structures for disaster prevention and to integrate community based knowledge. Regarding the emergency response, a real time comparison between current and normal conditions along with a geographic information system should be helpful to decision-making process.

Disaster Risk Reduction Policies focusing on reducing Social Vulnerability related with Water-related Hazard

Target	<i>1.4.3: By 2015, 25 countries have developed social policies to reduce the vulnerability of their most at risk populations.</i>
Coordinators	Korea Institute of Construction Technology, Ministry of Land Transport and Maritime Affairs (MLTM)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=641
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-3-social-policies-to-reduce-the-vulnerability-of-most-at-risk-populations

The reduction of social vulnerability lies in implementing appropriate disaster risk reduction policies through a comprehensive and integrated system that allow disaster prevention and put people at the heart of planning. It becomes possible with the integration of sociologists, psychologists and not merely engineers in the development and implementation of DRR policies. Broadly speaking, information and solutions have to be shared with the public in an accessible and understandable way, as it was the case in the Niigata Region (Japan). This plan included vagaries maps, a public awareness campaign, collaboration with cell phone companies to send short messages of caution to the population, radar detection system and radio distribution to the population by town councils. Improvement of synergies and interactions turns out to be a success as such it should be scaled up at regional level of cooperation.

Preparedness plans at all levels

Target	<i>1.4.4: By 2015, 50 countries have an effective disaster preparedness plan for response at all levels.</i>
Coordinators	Action against hunger
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=643
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-4-disaster-preparedness-plan-for-response-at-all-levels

A preparedness plan for disaster risk management needs to build up a collective memory of challenges, lessons learned, problems and constraints that will be part of a plan because such strategic planning will be used in a complex and uncertain environment that sometimes supersedes the capacity of foresight and prediction. It is possible to minimize the human and economic losses thanks to guidelines resulting from the disaster experiences, and most specifically with reference to the ways the disaster response unfolds: pre-crisis, during crisis and post-crisis actions. These three stages are underlines by for principles: do not wait, do not work alone, learn from the past and be aware. Create an emergency operating committee, support education, communication and social mobilization along with a real time transmission of data and early warning system are among the key elements for success, and many contribute to promoting water terrorism.

A strategy for Mitigating Disaster-Related Losses in the Poorest Nations

Target	<i>1.4.5: Reduce disaster-induced economic losses, in 25 countries with lowest HDI, to <10% of GDP by 2020, <7% GDP by 2030 and <5% GDP by 2050.</i>
Coordinators	UNESCO-ICIWaRM
Link to Target	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=647

documents	
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-5-reducing-disaster-induced-economic-losses

Regarding mitigation, keys of success lie in the hands of NGOs, international donor agencies and banks as they bear joint-liability in creating preparedness disaster frameworks. Indeed, improving governance in the water sector is a way of anticipating natural hazards and of addressing socio-natural risks before any catastrophe occurs. From this perspective, local government, communities and NGO's should be empowered to perform disaster mitigation at their respective scales. Also, ground and satellite based hydro-meteorological data have to be collected to improve the community resilience to water-related disasters. Furthermore, south-south cooperation would help significantly in building countries' mitigation strategies since it also allows best practices sharing and standards formalization. Notwithstanding these recommendations, state sovereignty implies that international community can only act in areas where they are invited to.

Linking humanitarian answer to water related disaster and development

Target	<i>1.4.6: By 2015, 100% of the level one crisis has been addressed in an effective, coordinated and accountable way, through the humanitarian reform approach and with systematically consideration for rehabilitation.</i>
Coordinators	Solidarités International
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=650
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-4-6-adressing-level-1-crises

The main challenge is: how to fill the gap between the humanitarian answer and the transition toward post-disaster, perennial development? Although emergency was controlled and development was framed long before, transition seems to remain rather uncertain in most instances. More generally, the overall humanitarian access has three pillars: scaling up emergency funding; strengthening leadership in view of more strategic guidance and improving the partnerships between different actors. Transition delays between emergency and reconstruction result from a lack of knowledge of the field, insufficient funding and an inadequate reconstruction knowledge.

To overcome this deficiency, reconstruction has to begin very early on so as to develop community resilience. Thus, it is central to ensuring access to basic services to the population through appropriate choices jointly prepared by the magic square (NGOs, donors, technical partners and government authorities).

1.4.2 Key messages

- The implementation of DRR policies firstly requires a national will.
- To achieve an appropriate policy, nations should understand risks and stakes at local, regional or national scales while including all stakeholders in the planning process.
- From this perspective, priority is given to data sharing, technology transfer and promotion of grassroots organizational structures for disaster apprehension.
- As Japan showed the example, decrease social vulnerability represents a huge challenge for national policies that should facilitate information and solution circulation in the public domain.
- Preparedness plan tremendously help improving community resilience via the creation of an emergency operating committee, the strengthening of education and social mobilization, a real time transmission of data and an early warning system at every crisis steps.
- To implement disaster mitigation on their respective scales local governments, communities and NGO's should be empowered along with the enhancement of hydro-meteorological technologies.
- Regional organizations should play an important role in undertaking research, training, education and capacity-building in the field of water-related disaster risk reduction.
- Finally, it is crucial to guarantee the link between emergency and reconstruction through adequate and considered actions.

1.4.3 Commitments

On the one hand, the Global WASH Cluster's participation in this session already implies their commitment to reach the target's goal. What should come next is a debriefing and a follow up at their annual meeting, end of

2012, during which the Global WASH cluster is strongly recommended and encouraged to address the question of the link between emergency response, reconstruction and development (ERD).

1.5 Contribute to Cooperation and Peace through Water

Coordinators	UNESCO – PCCP, International Network of Basin Organisations (INBO)
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1294 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1305

Global challenges such as population growth, economic development, water scarcity and urbanization and climate change are straining the world's water resources in new, less predictable ways. These challenges may exacerbate the existing political tensions over transboundary river basins and its management, which arise due to countries' competing requirements for development. On the other hand, water can be a catalyst for cooperation and peace between countries, regions and communities as water is a condition sine qua non for human life (e.g. the many international river commissions, joint infrastructure projects, and capacity-building programmes). In this context, the aim of Priority for Action 1.5 was to bring together international organizations, decision-makers, local authorities, basin organizations, water professionals, research, academia, individuals and other stakeholders, to discuss main challenges, exchange solutions and make commitments, related to achieving cooperation and peace through water.

1.5.1 Target Outcomes

Why does water law matter to you? Exploring local to global perspective

Target	<i>1.5.1: Increase the political acceptance and implementation of the principles of existing international, regional and local water law (i.e. principles, customary law, state practice, conventions, bilateral or multilateral agreements, significant judicial decisions and writings, etc.) in the international community</i>
Coordinators	International Union for Conservation of Nature
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=844
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-1-acceptance-and-implementation-of-the-principles-of-existing-water-law-in-the-international-community

The improvement of legal and institutional frameworks is a necessity to enhance peace and cooperation over transboundary water resources. The diversity of instruments composing the legal landscape of transboundary waters, and the way they mutually reinforce one another, are key to delivering solutions. Principles permeating these different instruments should be accepted by all nations. Their endorsement relies on the awareness of the value that norms can play in strengthening water resources management and conservation, as well as enabling the sustainable and cooperative development of these resources. International water law informs local and municipal-level governance regimes, as well as the different types of arrangements that can be adopted on those scales (e.g. non-binding agreements between border communities). Ad hoc arrangements, in turn, offer bottom-up support that gives reality and meaning to international norms, putting them into practice. They also reinforce State actions, focus on basin specificities and promote the ecosystem vision. Fair negotiations between parties are fundamental in avoiding or solving conflicts. Integrations and synergies have to be explored across all geographical and sectoral levels. Successful cases serve as guiding models, while agreements have to be tailored to the specificities of each basin in question. Sound norms, institutions and policies are developed based on a wide range of parameters (scientific data, economic and political situations). Parties may therefore seek experts' support, and agreements should be assessed by experts as to their coherence with international legal and scientific principles.

Effective regional agreements

Target	<i>Target 1.5.2: Increase the number of new agreements and revise/enhance the quality of existing agreements related to transboundary surface and/or groundwater.</i>
Coordinators	International Network of Water-Environment Centres for the Balkans
Link to Target	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=551

documents	
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-2-agreements-related-to-transboundary-surface-andor-groundwater

Bi- and multilateral agreements on transboundary rivers, lakes and aquifer systems management are important tools for effective cooperation in transboundary basins. There are three main obstacles for developing and implementing these agreements: (1) lack of political willingness, (2) differences in socio-economic and cultural levels between riparian countries and (3) conflicting objectives and priorities of parties. When existing, in many cases, bi- or multilateral agreements on transboundary surface and groundwater resources are outdated, incomplete or obsolete. There is therefore a need to increase the number of such agreements and provide tools to enhance their quality and facilitate their implementation.

The main challenge is to address the key issues related to the set-up of such agreements (e.g. science, collaboration mechanisms, identification of complexities, timing of decision-making process). It is therefore necessary to fully engage with all stakeholders as early as possible in the process, especially with scientific, institutional, political and economic actors, towards the development of effective agreements and harmonized regulations. Technical cooperation indeed facilitates the development of cooperation agreements.

Strengthening international cooperation for the sustainable and peaceful management of transboundary aquifers

Target	<i>1.5.3: By 2020, develop or improve cooperation mechanisms for joint management of transboundary aquifers considering the UNGA Resolution 63/124 on the Law of Transboundary Aquifers.</i>
Coordinators	International Association of Hydrogeologists Internationally Shared Aquifer Resources Management
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=553
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-3-cooperation-mechanisms-for-joint-management-of-transboundary-aquifers

Much of the world's available groundwater lies in aquifers, many of which underlie politically constructed international boundaries. These transboundary aquifers are a prime example of common-pool shared natural resources whose effective management requires conditions of peace and multi national cooperation. In many instances, transboundary aquifers have been exploited unilaterally without any bilateral or multilateral institutional arrangements to promote cooperation. There are more than 270 identified transboundary aquifers. The United Nations General Assembly (UNGA) Resolutions on the "Law of Transboundary Aquifers" adopted a number of Draft Articles elaborated by the UNILC and UNESCO-IHP. A number of case studies already showcase successful examples of concrete application of the principles contained in the Draft Articles as well as innovative solutions for the sustainable and peaceful management of transboundary aquifers. A number of methodologies and initiatives also support the efforts made for the understanding and implementation of these articles. Among these, the WHYMAP global inventory of River and Groundwater Basins of the World; the UNECE Water Convention; the Transboundary Aquifer Systems Methodological Guidebook; mechanisms for joint assessment of transboundary aquifers (IGRAC).

More Efficient Basin Organizations in the world for a better sustainable water Management

Target	<i>1.5.4: By 2018, increase by 30% the number of institutions within transboundary basins and/or aquifer systems capable of ensuring sustainable management of water resources.</i>
Coordinators	International Network of Basin Organisations (INBO)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=554
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-4-transboundary-basins-andor-aquifer-systems-institutions-for-sustainable-water-management

Surface and groundwater resources whether national or transboundary, have to be managed according to hydrological boundaries, that is to say, based on river or lake basin units or aquifer system basins. A specific institution facilitates the cooperation among the riparian countries sharing the same basin. According to the

context, such institutions take various forms. Their key characteristic remains however to offer a clearly identified entity, including a secretariat with enough human and financial means to ensure the coordination between the riparian countries, facilitate the development and implementation of strategies addressing both water uses and water protection, and the elaboration and implementation of joint long-term management plans. To strengthen the performance of these organizations, many initiatives can be taken, such as, the set-up of a permanent secretary, enhancement of information exchange systems, establishment of long-term plans, set up of common management tools, encouragement of stakeholders' participation). Basin organizations will always direct their efforts on conflict prevention, the promotion of win-win decisions, and identification of tools and concrete solutions from known experiences around the globe to ensure their sustainable development.

Making the most of local context to address water challenges and conflicts

Target	<i>1.5.5: In local and international conflict situation develop pragmatic solutions to water related issues through cooperation and dialogue involving the principal actors at the level of the conflict.</i>
Coordinators	International Committee of the Red Cross
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=555
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-5-pragmatic-solutions-to-water-related-crises-in-conflict-situations

Understanding the local context in addressing water resource security challenges in conflict and post-conflict areas, is essential. Equally important is, the identification of conditions under which practical solutions encourage cooperation and the development of international norms. Under this framework, collecting data, sharing information, promoting soft regulation, using local know-how and indigenous/traditional knowledge, are the best ways to build practical-based approaches that generally lead to enhanced water management. Taking into account a bottom-up approach and including all stakeholders contribute to sustainable solutions and conducive environments where further dialogue and effective cooperation take hold at the local level and possibly at the broader conflict level. Shared risks require shared solutions, and an enhanced dialogue between stakeholders allows to spur creativity in overcoming obstacles, e.g. in using local and global materials, best practices, and appropriate technologies. The resilience of the beneficiary community itself is strengthened when humanitarian and emergency interventions factor in the local context. Solutions showcased during the Forum exemplified principles of good governance, access to information, meaningful dialogue and participation, which are demonstrative of best practices in the field and which are becoming normalized and absorbed into international law.

Sustainable Financing of Transboundary Water Management

Target	<i>1.5.6: By 2015, create sustainable financial mechanisms to finance transboundary water institutions.</i>
Coordinators	Global Environment Facility
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=556
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-6-financial-mechanisms-for-transboundary-water-institutions-and-their-water-management-plans

Appropriate financing of transboundary water frameworks is key for the development of sound legal and institutional frameworks, the enhancement of institutional capacities, the implementation of joint programmes and the optimization of equitable use and protection of the resource. Financing of transboundary water institutions varies broadly across the globe, utilizing a mix of financing tools and mechanisms: from national budgets and externally funded projects to more strategic programmes like public-private partnerships. Only institutions standing on viable long-term financial footing and benefiting from a strong political will can ensure sustainability and stability in facilitating cooperation among states sharing a water body. Experience proves that such investments do not need to be paid only by national budgets. They can be lifted to regional organizations, with in return the transboundary institutions covering their costs through a fee system based on benefit sharing. All traditional and innovative financing mechanisms, e.g. user/polluter-pays principle, financing

solidarity, payment for ecosystem services, inter-riparian financing, are options providing sustainable financing to transboundary cooperative frameworks.

Sharing and monitoring information at a transboundary system

Target	<i>1.5.7: By 2018, develop mechanisms to share and monitor information at transboundary level especially on: (i) Scientific and social data for information systems: contribution to an online inventory and establishment of a water observatory and (ii) Indicators and guidelines for programmes monitoring the quality of cooperation and impact of the lack of access to water on cooperation and peace-building</i>
Coordinators	Euro-Mediterranean Water Information System
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=557
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-7-mechanisms-to-share-and-monitor-information-at-transboundary-level

Moving towards sustainable management of water resources requires that Water Information Systems are established to allow a wide access to reliable and up-to-date information for decision-makers, practitioners and citizens at all relevant levels. A Water Information System provides a unique opportunity to improve the overview of quantitative, qualitative and ecological status of water systems, of pressures and causes of water stress, and water uses. There are different categories of solutions to develop high-quality Water Information Systems (e.g. integrated information systems, methodologies, knowledge sharing, user participation support, platforms, and capacity-building) and a number of conditions to fulfil (e.g. involvement of organizations producing and using data, development of information systems answering to their needs to ensure their long-term participation, production of useful outputs according to their needs, transparency and confidence). Furthermore, accompanying measures enhance the systems if they allow to compare data, raise the awareness of political and technical people in charge and define a common semantic language. These Water Information Systems should serve as the objective basis for dialogue, negotiation and decision-making between stakeholders.

Training can avoid conflict

Target	<i>1.5.8: By 2020, double the training in transboundary water management and conflict resolution of the following target groups: 1. Decision makers, 2. Senior and high-level water professionals, 3. Junior water professionals, 4. Media professionals and 5. Public at large.</i>
Coordinators	UNESCO-IHE
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=558
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-8-training-in-transboundary-water-management-and-conflict-resolution

If done properly transboundary water management can and will contribute to peace, but this requires that all involved are well-informed and aware of the cooperation potential of water. High quality trainings in transboundary water management and conflict resolution focus on concepts as well as on skills and practice. It covers interstate as well as local and regional conflicts. It helps better understand not only one's own but also one's adversary's interests and priorities, which may lead to better outcomes. And it builds on, and exchange experiences of, existing training activities. The improvement of both the quantity and quality of trainings in transboundary water management for decision-makers, senior and junior water professionals, media professionals is necessary. A major challenge is to seek new and alternative funding options for these trainings. Not only trainees need to the extent possible to contribute themselves to it, which can enhance the learning experience and ownership, but one option may also be to finance these trainings from reassigning a modest part of the defence budgets to corporate responsibility commitments. A one stop (web)shop is also required for all known water conflict management training activities to be listed and referenced.

Establishing twinning for cooperation and peace

Target	<i>1.5.9: By 2015, establish and support programmes of ‘peer-to-peer’ twinning between basin organizations, water centres and other concerned institutions, to foster knowledge and exchange</i>
Coordinators	EU Twin Basin Project
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=559
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-5-9-programmes-of-peer-to-peer-twinning

Developing twinning processes between transboundary river basin organisations and their sub-basins organisations at national, regional and local levels is a simple and cost-effective way to offer great synergies among those institutions. Indeed, even if it is costly on the short-term, twinning avoids the repetition of mistakes made by sister-institutions and allows a better understanding of shared management on long-term perspectives. Benchmarking and twinning experience show that investing in natural infrastructure is often a better option than engineered ones, in terms of cost and benefits for the water – energy - food security nexus. Activities such as twinning provide the opportunity of improving and promoting cooperation. A simple, cost-effective way to make progress is indeed to develop twinning processes between basin organizations in order to favour mobility of staff, who can learn on the ground about the know-how, practices, knowledge used in other organizations. Such methods enable to take full advantage of past and present experiences in administrative, technical and institutional matters.

1.5.2 Key Messages

- Transboundary river basin cooperation does not accept “copy and paste” solutions. Each basin is specific and calls for its specific solution.
- However a number of general guiding principles need to be taken into account wherever an intervention aims at improving cooperation and peace in a transboundary basin.
- Indeed, the improvement and strengthening of legal and institutional frameworks for surface and groundwater resources, as much as the exploration of multi-dimension solutions (from data sharing methods to programme monitoring), are a necessity to contribute to cooperation and peace in transboundary water management.
- Furthermore, the increase in professional training for transboundary water management and conflict resolution, and the establishment of partnerships between basin organizations and other institutions, can considerably enhance the chances of achieving effective cooperation and peace over transboundary water resources.
- In a local context, bottom-up approaches and the use of indigenous knowledge, enhance dialogue between stakeholders, aim at finding common interests and therefore bring greater acceptance of solutions to those water conflicts.
- Finally but most importantly, strong political commitment, participation of all stakeholders and long-term financing are sine qua none for the achievement of cooperation and peace in transboundary water management at various levels.

1.5.3 Commitments

- The Finnish Ministry of Agriculture and Forestry and Ministry of Environment together with the Finnish Environment Institute are committed to give technical expertise to support the implementation of the UNECE Convention on Protection and Use of Transboundary Watercourses and International Lakes;
- The Butterfly Effect, WWF, and Green Cross International, commit to further promote international legal cooperation and peace and access to water, as well as the 1997 UN Convention as the only global existing tool today and its ratification by a sufficient number of States (such as Luxembourg who committed and is in the process of ratifying the Convention) and to further promote the development of basin organizations.
- Several key international organizations such as INBO, UNESCO, UNECE, GEF, GWP are involved in a commitment to elaborate the practical “ Handbook for Integrated Water Resource Management in Transboundary Basins of Rivers, Lakes and Aquifers”, launched in Marseille;
- French water agencies will keep on providing support to institutional twinning river basins for foreign countries seeking to promote the establishment of river basin organizations or strengthening existing structures. By 2015, the ONEMA and the French water agencies will be involved in the implementation of two new support programs (policy change and institutional support);

- The GEF (Global Environment Facility) is committed to increase by 2015 its support to institutions helping manage transboundary basins and aquifers compared to the last 4 years;
- The International Committee of the Red Cross (ICRC) is committed to: 1) Identify and assess 3 local and or international conflict settings where pragmatic solutions to water-related issues were undertaken with the use of local know-how and traditional knowledge, best practice and a concerted effort to establish effective cooperation through enhanced dialogue; 2) By 2012, assess the extent to which the identified local and or international conflict settings where pragmatic solutions were found to water-related issues were successful because of the utilization of traditional knowledge of the local environment, international best practice and a concerted effort to establish effective cooperation and enhanced dialogue; 3) By 2013, assess the extent to which the local first, bottom-up approach provides a potential for broader dialogue and effective cooperation; 4) By 2014, develop a set of guidelines based on the lessons learned; 5) By 2015, disseminate operational guidelines, best practices and lessons learned at international fora.
- All TSG 1.5.1 members committed to create a platform to support States in the implementation of new and existing water agreements.
- ISARM, the Internationally Shared Aquifer Resources Management Initiative, is committed to advancing the knowledge on transboundary aquifers (data collection, mapping, characterization, dissemination), to support UN Member States in the implementation of the UNGA Resolution and the Draft Articles on the Law of Transboundary Aquifers, to establishing and reinforcing partnerships with global actors (e.g. OECD, AMCOW, OAS) and national/local organizations, to enhance the capacity-building and education through regional centers for groundwater and transboundary aquifers (e.g. Tripoli, Montevideo, Nairobi, IGRAC), to build consensus on a regional and global level on groundwater governance with an agreed framework for action based (e.g. GEF Groundwater Governance Project)
- UNESCO will lead the celebrations for the 2013 UN International Year on Water Cooperation and the 2013 World Water Day on the same topic.

2. Strategic Direction 2 : Contribute to Economic Development

2.1 Balance multiple uses through IWRM

Coordinators	American Water Resources Association (AWRA), French National Committee of International Commission on Irrigation and Drainage (AFEID)
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=560 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=560 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=561

There are many diverse uses of water to meet quantity and quality needs. Growing populations, increasing demands for food, expanding cities and industrial activities claim water and related land uses. To address competition for water for various uses, there is a need for optimal management of land and water resources based on clear decision criteria. Everywhere water is necessary for basic life needs (drinking water and hygiene), it is also required for the production to feed the same people, and thus for irrigating gardens and fields. Furthermore, as living without having an economic activity would have no sense, other important uses must be considered as workshops, factories, mills, transportation etc. When water comes often from Multiple Water Resources (MWR), each of them may be dedicated to a specific usage, or all resources may be combined so as to complement each other. In both cases, whether the different uses are served by dedicated specific systems or by Multiple Use Systems (MUS), the challenge is to manage the resources in good coordination and to ensure a high efficiency of the withdrawal, the transport, the distribution and the treatment if necessary.

2.1.1 Target outcomes

Countries adopt processes that encourage/ensure the participation of all stakeholders in IWRM

Target	<i>2.1.1: By 2015, according to their laws and regulations, 25 new countries adopt processes that encourage/ensure the participation of all stakeholders in IWRM, and thus set up and empower appropriate Integrated Water Resources Management authorities at relevant levels, representing the stakeholders</i>
Coordinators	Pakistan Water Partnership, AWRA

Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=608
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-1-countries-adopt-processes-that-encourageensure-the-participation-of-all-stakeholders-in-iwrm

At least half of the Millennium Development Goals for 2015 are associated with the provision of, and access to clean water supply for poor people and sanitation services. The true integration of horizontal and vertical water sector (approach that targets the poor, especially in the rural irrigated agriculture sector and rapidly expanding urban slums of many of the major cities) and the development of a longer term strategy for IWRM implementation are evidences of master water planning efforts. Institutional fragmentation and service delivery inefficiencies in many aspects of water management are often not affordable to many developing nations. Timing therefore is strategic: for a developing nation that has not started any IWRM-related action, the right moment to implement IWRM is tied up to a number of constraints; the level of economic development, an increase in productivity and reduction of poverty, or by the decision to improve at least one essential service (e.g. access to safe drinking water; increased and reliable delivery of irrigation water; reduction of flood losses, etc.). It follows that attention focused on developing an Action Plan to reach a way to decide on the best entry point, based on an account of the constraints with emphasis on the group of countries with a low Human Development Index (HDI)".

Make water resource planning a reality by adopting IWRM (Master) Plan

Target	<i>2.1.2: By 2018, the same 25 countries make water resource planning a reality by adopting Integrated Water Resource Management (Master) Plan (IWRMP) at various scales within the perimeter of the IWRM authorities they have constituted and empowered</i>
Coordinators	Dutch Ministry of Economic Affairs, Agriculture and Innovation
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=612
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-2-make-water-resource-planning-a-reality-by-adopting-iwrm-master-plan

The distribution of costs and benefits, the prioritisation of existing information, water audit mechanism along with the combination of dialogue and models can effectively structure the decision making process. There is clearly a shift from more technical approach of inventories, analysis, models and tools to measure and monitor, towards implementation directed lessons and advice, towards social innovations, governance and stimuli towards a more business-like approach with more socio economic parameters to be considered. However economics isn't the only criteria for allocating water and IWRM does not need to be practiced exclusively at the top policy level –solutions can be introduced at the local and project level (e.g. Nepal and Lebanon) – as long as they are consistent with good IWRM practices. Also, the role of donor agencies (World Bank, ADB, USAID) and most specifically the more forceful advocacy role in promoting IWRM is strategic: donors' impetus and imprimatur are keys conditions to making progress. Furthermore, education on more responsible water use and creating awareness to let stakeholders see the benefits of sustainable water use (open communication with use of social media media) are keys to implement IWRM and thereby to improving the combination of all interests in the Basin.

Frame of reference related to the quantity and the quality required for different uses

Target	<i>2.1.3: By 2015, establish a worldwide recognized frame of reference related to the quantity and the quality required for different uses, through joint work between international professional associations representing all usages of water and scientists</i>
Coordinators	International Water Resources Association (IWRA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=614
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-3-frame-of-reference-related-to-the-quantity-and-the-quality-required-for-different-uses

For countries to improve their national set of Water Quality standards for different uses, especially for irrigation water, the need to streamline existing Water Quality international references through the making of

a compendium about Water Quality Guidelines, especially for reuse of treated waste water (TWW) is put forward. The reuse of treated waste water, mostly for irrigation purposes, meets difficulties in numerous regions of the world, both the standard derivation stage and the enforcement stage. Here too, the tolerable risk is dependent on local conditions and its meaning needs to be discussed more openly. A strict supervision of quality of the waste water is the key to its acceptability. A strict supervision of quality of the treated waste water (TWW) is key to its acceptability and hence its development (technical groups made of water use and water quality experts should be established). When it comes to promoting reuse, the financial and technical challenges are strategic, and most significantly the cost of recycled water (advanced treatment and separate distribution system) in comparison to the costs associated with other sources of water supply (Imported water, groundwater...). Reuse's institutional and social challenges are different for developing and developed countries.

Frame of reference related to the methodology for valuing water according to its various uses

Target	<i>2.1.4 (merged with 2.4.4): By 2015, establish an internationally recognized frame of reference related to the methodology for valuing water according to its various uses, through joint work between international professional and water user associations representing all usages of water, scientists and economists</i>
Coordinators	Organisation for Economic Cooperation and Development (OECD)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=635
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-4-frame-of-reference-related-to-the-methodology-for-valuing-water-according-to-its-various-uses

Under business-as-usual with no improvement in the efficiency of water use, water demand is projected to overshoot supply by 40 per cent in 20 years time and OECD foresees that about 60% of global population would live in water stressed areas by 2050. In this context it is essential to work on improving water valuation: (1) sizing the benefits of mobilizing water ecosystem services before ruining them, and (2) sizing the economic impacts of a growing water scarcity before costly crisis and severe conflicts, notably amongst categories of users, and to the detriment of water security of poor populations and threatened ecosystems. As water quality is regressing in many basins, it becomes more expensive to put clean drinking water at the disposal of consumers (enterprises, public services, or private consumers). All over the world, water authorities are more and more aware that preventative measures are almost always less expensive than depolluting processes: in this context, dimensioning the payments for ecosystem services (PES) appears as a way out (e.g cities securing their water provision with payments for environmental service). Reference methods for guiding the economic valuation of water resources and ecosystems are needed for business, governments and finance institutions to inform their decisions. Such reference methods ought to become standardized to support a systematic inclusion of water economic values and ecosystem services into decision making and national accounts.

Elaborate models to be used as tools by decision makers to implement IWRM

Target	<i>2.1.5: By 2015, elaborate and validate models which could be used as tools for helping decision makers implement IWRM to balance multiple water uses to best achieve desired goals</i>
Coordinators	Global Water Partnership
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=615
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-5-elaborate-models-to-be-used-as-tools-by-decision-makers-to-implement-iwr

How do we ensure that an enabling institutional environment for a sustainable use of the modelling framework is created? This issue calls for the need to elaborate models which can be tools for helping decision makers implement IWRM. The development of a set of criteria for elaborating and validating modelling tools to assist decisions makers in implementing IWRM encompasses a set of best practices with respect to the capability of the system, the interaction between supplier and receiving agency (implementation), the proper use of the system (applications activities) and its sustainability (through training, technical support and education). Historical data ought to be replaced with multi-model downscaled data, for general climate related information (precipitation, temperature, etc.) is of better quality and more diversely distributed than hydrological data

(gaps). Models outputs should be in the public domain (greater transparency). New business model, thanks to model developers and users working together make up an enabling environment for sustainable use of models. Selected water management measures should be robust and flexible enough (inherent uncertainties with modelling results).

Guidelines to manage multiple resources and MUS systems

Target	<i>2.1.6: By 2015, water service professionals, jointly with international associations representing all usages of water, issue appropriate guidelines (with indicators of impact assessment on health, environment, resources management and hydraulic system sustainable operation) for managing multiple resources, either surface or groundwater (implementation of IWRM in groundwater-dominated systems) and multiple use (hydraulic) systems (MUS) in line with those approved by international organizations and funding institution</i>
Coordinators	AFEID/ICID
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=616
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-6-guidelines-to-manage-multiple-resources-and-mus-systems

How to obtain more benefits per drop from multiple uses and functions? How to bridge sectors to strengthen multiple uses and functions of water services? How to allow multiple-use services to reach more MDGs per drop? Making water available for different uses at better cost – and thus at best price of service – implies that physical systems are constructed for off-taking, transporting, producing and distributing water, and are operated so as to ensure the water service expected by the users. Related costs as amortization of investments, costs of credit and of operation and maintenance cannot be ignored. They must however be optimized, or even controlled, as there is no possible balancing by an actual "supply - demand" control. Common grounding principles were agreed upon:

- Multiple use oriented water service is a way to alleviate poverty, improve livelihood at limited additional cost
- Involving stakeholders from all sectors (politics, economy, social) at all levels (international if transboundary, national, local) is a key of success
- Sustainability relies on proper long term careful management of water resource and physical asset
- Overcoming reluctance to consider other needed water uses requires the development of a culture of putting heads together and may be helped by using appropriate tools like role playing games

Methods & recommendations on accounting/measurement equipments of used and returned flow water volumes

Target	<i>2.1.7: By 2015, Integrated Water Resource Management authorities, jointly with water service professionals will identify reliable methods and provide recommendations on appropriate equipment for accounting/measurement of withdrawn water resources as well as produced, distributed, consumptive use and return flow water volumes. As part of this process International Organizations will develop recommendations regarding which water related information should be retained or shared</i>
Coordinators	International Water Resources Association (IWRA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=617
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-1-7-methods-recommendations-on-accountingmeasurement-equipments-of-used-and-returned-flow-water-volumes

To focus on Water Accounting to accurately assess and understand the relative quantities used by different sectors are important steps to succeed in elaborating and disseminating methods for water systems efficient operations. A number of recommendations may stem from such methods and thereby inform decisions as to how water related data should be retained and/or shared. Evidences have shown that the integration of weekly forecasts in the website can raise awareness among managers as regards water resource savings. This way, water accounting procedures provide better understandings of the relative quantities used by different

sectors and are indications of sub-basin water management performances (water authorities, service professionals and users within the IWRM framework). Water accounting also allows consumers, civil society groups and the investment community to compare different companies' water risks and consequently decisions. In sum, the ability to effectively account for corporate water use and impacts is essential in helping companies drive improvement (the Water Footprint Network's water footprint, Life Cycle Assessment and online tools are solutions). IWRA will look at issuing a Guidance Report on institutional arrangements, tariff structures, training and educational dimension of water accounting system and a joint Water Supply & Water Demand Management report (which could be prepared in collaboration with INBO).

2.1.2 Key messages

Participants actively sought to design a framework and emphasised all stakeholders but also flora and fauna should be taken into account in IWRM plans. Shared understandings to dialogue with users, framing policy questions, maximizing use of available data are also strategic steps. Discussions highlighted the need to create a compendium on Water Quality Guidelines (an overview of international and national frames of references for water quality) so that countries may improve their national set of Water Quality standards for different uses, especially irrigation water. While specific expressions of commitment on IWRM master planning occurred during the Forum week, participants also committed to work further on performance indicators, pilot-testing and making data transparent, in the run-up to the 7th World Water Forum in South Korea.

2.1.3 Commitments

Donor institutions need to renew their advocacy for IWRM and increase financial support for capacity development. As a result, Malawi, Nigeria, Mozambique, South Africa, Benin, India, S Korea and Radjastan have all made specific expressions of commitment on master planning IWRM (LOI per region). Furthermore, a key issue to be addressed is the information required about both the quality and the quantity of water needed in different types of uses which is essential for balancing water use optimally and the clear need to integrate water reused & recycled into Water Resources Management, that UNEP along with EUREAu and IWA responded by committing to issue "A Compendium on Water Quality Guidelines" for the 7th WWF in 2015.

Finally, the MUS Group, committed to continuing working on issuing - jointly with international associations representing all usages of water - appropriate guidelines (with indicators of impact assessment on health, environment, resources management and hydraulic system sustainable operation) for managing multiple resources, either surface or groundwater (implementation of IWRM in groundwater-dominated systems) and multiple use (hydraulic) systems (MUS) in line with those approved by international organizations and funding institutions".

2.2 Contribute to food security by optimal use of water

Coordinators	International Commission on Irrigation and Drainage / Food and Agriculture Organisation (FAO)
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=565 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=566 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=569

Despite global food production meeting the current demand (consumption and losses) and a stable global food stock, population growth combined with the expected rise of living standards and climate change contexts will require a substantial increase of food production to ensure sustainable food security. The current patterns of production bring a lot of risks and have to change: agricultural practices and strategies must now adapt to changes and declining water resources. Achieving the required increase in food production with an optimal use of water seems to be possible, provided that improvements are made along the full chain of options from supply to demand (i.e. from producer to consumer).

2.2.1 Target outcomes

Sustainably increase land & water productivity of rainfed agriculture

Target	2.2.1: By 2020, rainfed land productivity (yield per unit area) will sustainably increase
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	<i>by 25% in Africa, and by 15% in Asia – as compared to 2005 – 2007 baseline. Water productivity (yield per unit of water) of rainfed agriculture will sustainably increase for grains by 20% in Africa and in Asia by 15% compared to 2005-2007 baseline</i>
Coordinators	International Center for Agricultural Research in the Dry Areas (ICARDA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=618
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-1-sustainably-increase-land-water-productivity-of-rainfed-agriculture

Rainfed agriculture (80% of agricultural lands globally) holds the highest potential for poverty reduction and water productivity gains (in some countries, GDP is correlated with Rainfall variability). Groundwater depletion, the challenging reallocation of surface water as well as the reduced blue water quantity and quality are issues justifying new paradigms. Improved rainwater management, thanks to science-led watershed development (which may be an entry point to improve rural livelihoods, protecting environment, empowering the poor, and developing social capital) needs to be interlocked with development projects (profitability vs. sustainability) with technology at reach of small-holder farmers, would allow rainfed farming systems to contribute to achieving food security. Intensification of agricultural production to reduce yield gap (rainfed, rangelands, and irrigated areas) should be developed yet in a sustainable and adaptive way: thanks to water harvesting and to the choices in the crops varieties, significant yield gaps between farmers' yield and achievable may be fill (provided that specific production zones are targeted). Agriculture through sustainable intensification ought to be considered as the engine of rural growth and for that innovative business model, such as watersheds' public-private-partnerships, should be established.

Sustainably increase water productivity of irrigated agriculture

Target	<i>2.2.2: By 2020, sustainably increase by 15% – as compared to 2005 – 2007 baseline – water productivity per unit land and per year (yield per m3, per ha and per year) of irrigated agriculture (for specific crop categories)</i>
Coordinators	Water for Food Institute, Nebraska University
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=619
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-2-sustainably-increase-water-productivity-of-irrigated-agriculture

How to feed more people with less water? We must grow more food with less water and sustainable irrigated agriculture provides the most reliable means (1/3 of world's population suffering from water shortages): past year's schemes must be modernized for coming needs (changing demographics). As irrigated agriculture produces 40% of the world's food supply on 20% of cultivated land worldwide, cultivated areas must be improved, in particular those without a water management system to improve the livelihood of small-holder farmers. Furthermore, yield potential must be based on current agronomic practices within existing cropping systems and areas with largest unexploited yield gaps must be clearly identified: there cannot be food security in arid and semi-arid areas if we do not promote sustainable development of flood-based farming (quintessential adaptation to climate change). Agriculture being responsible for 70% of all water withdrawals, applying technological innovations, improving Operations and Maintenance (hence financings) of services to agricultural services are required. ADB, FAO, IWMI and APWF encourage stakeholders to look beyond conventional recipes and to invest outside the irrigation sector.

Sustainably increase water productivity and lower costs of water management

Target	<i>2.2.3: Increase sustainable productivity and lower costs of water management (yield per ha, per m3 of water and per unit production cost) in such a way that by year 2025 there is food security at affordable prices for all</i>
Coordinators	International Commission on Irrigation and Drainage (ICID / AFEID)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=620
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-3-sustainably-increase-water-productivity-and-lower-costs-of-water-management

To reach 50% of agricultural landscape managed with irrigation and 20% with a drainage system by 2035, sociocultural challenges are as important as the technical innovation itself in the attempt to increase productivity: technologies should be suited to local techniques, economically fair, ecological and lead by strong institutions. Organization and coordination between farmers, ministries and agencies operating in the same territory must lead to a coordination of water resources management which is the only way to reducing segmentation of assistance and decision. Rethinking agricultural water management by adopting a watershed management and an ecosystem approach for the large scale production zones are the way forward. From this perspective, prioritizing research and making informed agricultural policies are key steps to ensure global food and water security. The balance between production costs, farm gate and consumer prices is also a huge challenge to ensure both availability and food access for all at affordable prices. Full cost of food may be hard to be paid by all consumers, but on the other hand farmers must get a fair income for their production: too low prices will prevent them to stay in agriculture thereby forcing them to move onto other crops or the city. Worldwide institutions and international development partnerships have to focus on local markets, products and techniques to get the best of local potentialities in term of water management.

Increase the safe use of non-conventional waters in agriculture

Target	<i>2.2.4: By year 2015, increase by 25% – as compared to 2005-2007 baseline – the safe use of non-conventional waters, either treated wastewater or saline water, in agriculture and aquaculture, together with an increase in the number of countries recognizing the WHO-FAO-UNEP Guidelines for wastewater use in agriculture and aquaculture where insufficiently treated wastewater is used</i>
Coordinators	International Center for Biosaline Agriculture (ICBA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=617
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-4-increase-the-safe-use-of-non-conventional-waters-in-agriculture

Already the demand for water outpaces available supply in an increasing number of regions and watersheds, the water recycling and reuse provide a unique and a viable opportunity to face this challenge (providing disposal methods and a source of food and income). The reuse of wastewater however will require more complex management practices and stringent monitoring procedures than when good quality water is used. Justification of projects may be diverse (water scarcity, pollution, a paradoxical situation where farmers use untreated wastewater to produce vegetables that are mostly consumed raw resulting in health risks); the challenge is how to use this water without harming human health or the environment. Health impacts and environmental safety especially linked to soil structure deterioration, increased salinity and excess of nitrogen, standards and regulations, are necessary (adequate to deal with certain existing, reuse practices). Thus, special attention urgently needs to be given to the technical constraints, including insufficient infrastructure for collecting and treating wastewater, inappropriate set up of existing infrastructure (not designed for reuse purposes), improper functioning of existing infrastructure.

Increase the capacity of water storages in support of irrigated agriculture

Target	<i>2.2.5: Increasing capacity of water storage in support of irrigated agriculture in an environmentally sufficient and socially sound management</i>
Coordinators	International Commission on Irrigation and Drainage (ICID / AFEID)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=622
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-5-increase-the-capacity-of-water-storages-in-support-of-irrigated-agriculture

For many countries with insufficient water storage capacity, the case for creating storages should form part of its food and energy security agenda. Nature as infrastructure (aquifers, wetlands, etc.) can be a solution to water storage challenges. Furthermore, small reservoirs are a reality worldwide; they benefit millions of smallholders in rural areas (productive and environmental benefits). They usually perform below expectations and appear as an expensive way to invest in agricultural water management, but remain nonetheless very often the only way to provide water. Investments to manage the natural resource base and to develop

practices that foster sustainable and intensified food production - both in primary agriculture and related sectors - will have to come from private sources: primarily farmers themselves purchasing implements and machinery, improving soil fertility, etc. However, farmers will invest in agriculture only and only if their investments are profitable and relatively low-risk. It follows that, a close look at trade structures, which can disrupt national and local market, is needed (especially in least developed countries).

Regional visions and agriculture plans

Target	<i>2.2.6: By 2015: develop and adopt at least two macro-regional visions optimizing water use for food security; and by 2020 develop 200 sub-regional (national, local, large area, etc.) sustainable agriculture plans</i>
Coordinators	Arab Water Council
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=624
Link to Solutions	http://www.solutionsforwater.org/objectifs/target-6-by-20yy-develop-and-adopt-two-%E2%80%9Cregional%E2%80%9D-visions-for-food-security-and-water

Today's agriculture sector is agriculture the biggest user of water on the globe and agricultural policy is the main challenge. Agriculture has to meet multiple demands: more and better food production, rural opportunities, environmental sustainability and local and national growth. Thus, each country has to find its solution: the spatial differentiation of the food and water crisis and its underlying causes emphasizes the "regionalization of the optimal use of water for food security" for strategic reflection and action. Ensuring food security needs to cross economic agriculture strategies and territorial challenges at relevant territorial scale (solutions should be a mix between technological and institutional/policies solutions), developing and adopting macro-regional visions to optimize water use and sustainable agriculture plans and to mobilize major professional actors (women should be integrated and recognized as key agents of change) for the development of sustainable agriculture and food security (regionalised governance of agricultural water may lead for example to an appropriate choice of changing crop pattern).

National strategic action programmes for key "hotspot" aquifers exploited by intensive agricultural use

Target	<i>2.2.7: By 2015, develop national strategic action programmes for key 'hotspot' aquifers exploited by intensive agricultural use (% aquifer depletion, % pollution), including a local definition of maximum admissible drawdown (MAD) and local definition of maximum admissible pollution levels (MAP) for agricultural uses</i>
Coordinators	Food Agricultural Organization (FAO)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=6252
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-7-national-strategic-action-programmes-for-key-hotspot-aquifers-exploited-by-intensive-agricultural-use

Most irrigated areas depend on groundwater (almost 40% worldwide) causing in many places over-exploitation issues (e.g. downward trends in Morocco, Pradesh, Peru and North of China, and evidence of quality decline in Mississippi). Most solutions are likely to be aquifers-specific (indicators may vary with the location). National strategic action programmes for key 'hotspot' aquifers (% aquifer depletion, % pollution), include local definition of maximum admissible drawdown (MAD) and local definition of maximum admissible pollution levels (MAP) for agricultural uses. Delimiting the aquifer systems at user level, despite the critical level of user engagement (how 'clubbable' are groundwater users?) is a key step. Having participatory monitoring along with reliable water accounting is essential. Today, despite doubts remaining on the level of precision of groundwater information, aquifer monitoring policy requires a tightening of controls and a better public education and strategic mid-to-long term (e.g. 5 years) plan with objectives (integrating management of rainwater and surface water). As farmers aren't very aware of the functioning of aquifer systems, large-scale information (e.g. social marketing) along with better territory planning will allow them to anticipate and face water shortages. Finally, access to groundwater is in some regions constrained by land rights which calls for very local/site-specific responses.

Water-related components of a sustainable diets & food supply chain efficiency strategy

Target	<i>2.2.8: By 2015, define water-related components of a strategy that will improve food supply chain efficiency by 50% and promote sustainable diets, including steps for its implementation by 2025</i>
Coordinators	Stockholm International Water Institute (SIWI)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=629
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-8-water-related-components-of-a-sustainable-diets-food-supply-chain-efficiency-strategy

The promotion of sustainable diets has to involve business, small food industry, privates, so as to build an economic support for the recycling chain of food but also requires a strong government participation, to create the enabling environment. Government should encourage retailers to disclose cost figures on food waste as well as on environmental performance and bring about changes as regards the EU laws on supermarkets' obligation to throw food away. From that perspective, significant efforts remain to be done to reach standardized definitions on wastes and losses (avoidable and unavoidable) and on valuing waste. Furthermore, as production and consumption are gradually matched at a regional level, spatial planning also may become a strategic tool (high value crops within 20-200 km radius of cities). The pathway to reducing food waste and losses also includes post-harvest actions whereby investments in storage containers and cool chain increase and local communities are encouraged to build collective storage capacities for more efficient use of stocks. At the processing stage, it is strongly recommended to develop farmer-scale processing and farmers' cooperation to process for a region (e.g. develop manufacturing potential in Africa). Finally, farmers should have greater access to markets, especially in developing countries; thanks to training but also to improved transport infrastructure and increased connectivity (roads, communication, phone, etc.).

Reduce the percentage of small-holders without access to training, credit & markets

Target	<i>2.2.9: Improve water management for more food production and increased access to water for smallholder farmers</i>
Coordinators	Coordination SUD / CCFD - Terre Solidaire (Comité Catholique contre la Faim et pour le Développement)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=630
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-2-9-reduce-the-of-small-holders-without-access-to-training-credit-markets

Land and water grabbing has a significant impact on the potential of smallholders agriculture; which includes vulnerable and traditional farming systems relying on family labor. Access rights to land and water of small farmers should be protected for allowing them to produce and commercialize food for rural areas and cities. Once smallholders have access to the resource, they know how to use it efficiently. Smallholder farmers resilience is linked to water storage (small reservoirs / rainwater harvesting), improved knowledge, greater planning and re-shaping of storage structures and governance (integrating multiple-uses in the design). The added-value of working at different levels of governance, integrating all actors interested, and stimulating their interaction across scales should be recognized: this way tailored and flexible approaches to agricultural and rural development policies may come about. Small-holder farming needs to be integrated with the non-farm sector, both at the input side and at the output side of the farm and more able to adapt. Actions to lower barriers to the development of farm/non-farm linkages may include addressing deficiencies in infrastructure, improving agricultural technology, promoting farmer organizations. Indeed, building and strengthening social capital (using "bottom up" process) is the best way to allow them to manage their way out of poverty, thanks to support in term of access to upfront investments.

2.2.2 Key messages

As far as water management is concerned the real contribution to the required increase would have to come from improvement and extension of agricultural water management - from storage to management. At the 6th World Water Forum, the largest number of solutions was technical and pertained to improving water productivity of irrigated agriculture. But strategies, plans and measures at national levels have to take into consideration socio-economic relationships (between urban and rural spaces as well as between agricultural and non-agricultural activities).

Private sector investment are needed at all stages in the value chain – as input to the farm, in seed and fertilizer production and distribution, and after harvesting in processing, marketing and distribution. Furthermore, a strong and innovative rural financial system that allows the rural poor to have access to capital and their own savings, as well as insurance schemes, is quintessential. As without political and legal frameworks, no solution can be implemented, governments need to create a favorable investment climate and address issues such as lending policies to agriculture to bring about a step-change in production and productivity. At the Forum, the debate did not sufficiently focus on political solutions even though educating politicians is a good manner to get a policy reform package.

2.2.3 Commitments

Food security includes all the following four elements: food access, availability, stability (which may reduce the risk of adverse effects: political instability, soaring food prices and prices volatility, ecological deterioration, etc.) and nutritional requirements (adequate diet). Various organizations estimate that a 70-100% increase in cereal production is required over the next 25 - 30 years.

The food security issue should continue to be a top priority on the international agenda and for that, a prioritized set of highly operational proposals on water and agriculture have to be made part of the forthcoming discussions at Rio+20 Summit. The French government has put forward this question to G20 summit, and a section on agriculture has been added to this summit negotiation and conclusions.

2.3 Harmonising water and energy

Coordinators	International Hydropower Association (IHA), International Water Association (IWA)
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=581 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=587 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=585

There is an intrinsic link between the challenges we face to ensure water security and to manage the world's rapidly growing demand for energy. This increasing interaction has become obvious during recent years through significant events: power outages in Brazil caused by drought, need to shut down nuclear reactors in Europe during a heat wave because of the concerns on the temperature of the rivers used for cooling, dependency of water supply systems in arid countries from energy intensive desalination, economic equilibrium of water utilities threatened by electricity price hikes, etc. Hence, the challenge is to meet water and energy demand through efficiency improvements and shifts in supply, without impacting the other resource. The World Water Forum presents a unique opportunity to bring key actors together and to bring issues out of silos to discuss them on an international, regional and intersectoral level. The targets of this Key Priority addressed individual challenges of the water-energy nexus, including urban water supply, desalination, sustainable hydropower, biofuels and oil and gas. It was realized that research for the several issues is at different stages of maturity and that follow-up actions differed accordingly.

2.3.1 Target Outcomes

Energy efficiency of urban water systems

Target	<i>2.3.1: Measures are implemented by public authorities and water utilities in cities totalling 500 million inhabitants, aiming at a minimal improvement of 20% of energy efficiency of municipal water and wastewater systems by 2020 compared to 1990 level</i>
Coordinators	International Water Association (IWA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=642
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-1-energy-efficiency-of-urban-water-systems

Energy represents the first variable cost component of water utilities; improving energy efficiency therefore represents a critical challenge. Energy efficiency improvement has a cost which recovery is not systematically guaranteed, which results are not easily measurable and wherein information sharing is not straightforward.

However, energy positive wastewater treatment plant concept was pointed out as a role model and an achievable one. Furthermore, systematic work is needed to enhance performance indicators and generate the necessary information for optimization and to further amplify and accelerate the importance and feasibility of investment in utility efficiency. Objectives will focus on improvement rate of 20% of the energy efficiency of WSS. The Forum was an opportunity to explore different incentive systems, voluntary agreements (decided either by local authorities and /or utilities), as well as regulatory frameworks, with an ultimate objective of promoting commitments on the implementation and up-scaling of relevant solutions. Innovation is necessary and business as usual is not an option, since more stringent standards for waste water treatment would imply more energy consumption: forerunners have proved that this trend can be reversed.

Best Available Technologies on desalination

Target	<i>2.3.2: Create an Energy Task Force, and develop a guide allowing to achieve a 20% energy reduction in desalination by 2015</i>
Coordinators	International Desalination Association (IDA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=644
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-2-best-available-technologies-on-desalination

Desalination technology is an energy-intensive process which implies high operating costs. To meet this challenge of reduced energy footprint and lower costs, special attention should focus on the reduction of energy consumption of desalination plants and increase in renewable energies. Gradual but constant change in perspectives and environmental understanding drive technology towards more efficient environmentally friendly options and energy optimisation. Sharing best practices for energy efficiency and sustaining ongoing efforts, may make desalination suitable also for developing countries which finances do not always allow such investment. International Desalination Association (IDA) has set up an Energy Task Force (ETF) enabling to share best practices and build on existing initiatives to produce a guide allowing to achieve a 20% energy reduction in desalination by 2015. To promote the goals of the ETF, IDA also established the IDA Desalination Academy to inspire innovation and excellence in the practice of desalination and water reuse, not only today but also for the future. The IDA Desalination Academy is a global institute for specialized training in desalination and a higher school for specialized study in this field for individuals, utilities, companies, institutions, universities and other organizations interested in desalination.

Isolated communities are powered by affordable energy sources

Target	<i>2.3.3: By 2015, build a 'collaborative task force' which will promote a multi stakeholder approach to enable a better access to energy & water</i>
Coordinators	Electriciens Sans Frontière
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=645
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-3-isolated-communities-are-powered-by-affordable-energy-sources

Among the 1 billion people without access to an improved source of drinking water, many are also deprived of access to electricity: how can access to safe water for off-grid communities be facilitated when water access is considered as one of the ripple effects of energy poverty? Affordable and reliable access to energy happens to be very complicated in some isolated communities and can hinder access to safe water. It is necessary to come up with new ideas and solutions propelled by affordable energy sources and follow a few key recommendations. These include: to avoid "copy and paste" solutions, project should fit context requirement; the project should rely on a fair economic balance and organization; the project has to be a lever of capacity building, enhanced by a strong implication of local key stakeholders.

Evaluation & reporting of energy impacts on water

Target	<i>2.3.4: Paving the Way for the Development of a Conceptual Framework of Energy</i>
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	<i>Impacts on Water: by 2015, establish a conceptual and analytical framework for evaluation and reporting of the energy impact on water</i>
Coordinators	EDF
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=646
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-4-evaluation-reporting-of-energy-impacts-on-water

Existing scientific research and methodologies for assessing energy impacts on water still needs to be advanced to allow for comparison between technologies and regions. Energy production and electricity generation have water quality and quantity impacts which are not yet measurable. Water is used from the sourcing to the delivery of services, for example extraction of different fuels (biofuels, oil, gas, uranium, etc.), energy production and conversion, as well as in other processes (amongst others, refining, storage, and transportation) Given that opportunity cost of water use in energy production depends on local conditions, assessed at the river basin scale, adequate indicators and assessment tools must be established to inform decision-making that only well-chosen and sector-relevant actors can produce in dialogue. Under the leadership of EDF and overseen by the World Water Council and World Energy Council as advisory bodies, a conceptual and analytical framework will be established to define the way to work in an efficient and sustainable way for greater understanding, reporting of the impacts of energy on water (water for energy), practicality, consistency, and applicability. It is the intent to present the outcomes of this work at the 7th World Water Forum in 2015.

Sustainable hydropower schemes

Target	<i>2.3.5: By 2015, in at least 20 countries covering the five major regions, an assessment tool on hydropower sustainability (covering economic; social and environmental dimensions) – developed through a multi-stakeholder process – is applied to advance preparation and implementation/operation of sustainable hydropower schemes</i>
Coordinators	International Hydropower Association (IHA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=648
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-5-sustainable-hydropower-schemes

The Hydropower Sustainability Assessment Protocol is an enhanced sustainability assessment tool which is being used to measure and guide performance in the hydropower sector. It is a framework for assessing the sustainability of hydropower projects, providing a consistent, globally-applicable methodology. The Protocol distils hydropower sustainability into over 20 clearly-defined topics covering environmental, social, technical and financial issues. The Protocol is the result of intensive work from 2008 to 2010 by the Hydropower Sustainability Assessment Forum, a multi-stakeholder body with representatives from social and environmental NGOs (Oxfam, The Nature Conservancy, Transparency International, WWF); governments (China, Germany, Iceland, Norway, Zambia); commercial and development banks (Equator Principles Financial Institutions Group, The World Bank); and the hydropower sector, represented by IHA. It was officially launched in Brazil in June 2011 and is governed by a multi-stakeholder council, comprising a governance committee and a management entity, the latter residing within IHA. The Protocol is currently managed by the International Hydropower Association. Implementation of the Protocol is made possible by the assistance of the European Commission's Life+ programme.

Oil & gas production impact on water

Target	<i>2.3.6: By 2015 a virtual collaboration platform between oil & gas professionals from International Oil Companies, National Oil Companies, Service Companies & International Trade Associations to drive responsible water management in oil & gas exploration and production is operational. This platform will address water use, impact, opportunities, assessing performance and communicating.</i>
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Coordinators	Institut Français du Pétrole et des Energies Nouvelles (IPFEN)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=649
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-6-oil-gas-production-impact-on-water

Assessment of water needs and use along the value chain of oil and gas activities is an important first step in effective water management. There are several sector specific tools which are in development or in use to better understand water use, water discharge and subsequent impacts. The outcomes of this assessment can be helpful in identifying opportunities, assessing performance and communicating it to other water users. Understanding water at both the global and local levels is important. For example, IPIECA and the WBCSD recently issued the Oil and Gas Global Water Tool and an Oil and Gas version of the GEMI Local Water tool is currently in development. There is an overall objective to establish a framework for a wide application of such tools. There is the potential to compliment these tools by developing a system to share best practices in management response plans seizing opportunities to proactively addressing the identified impacts.

Best water management practices for biofuels production

Target	<i>2.3.7: By 2015, develop and implement a conceptual framework providing guidance on best water management practices for biofuel production, both on a project level (voluntary standards) and on a policy level (regulations).</i>
Coordinators	Roundtable on Sustainable Biofuels (EPFL - RSB)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=652
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-7-best-water-management-practices-for-biofuels-production

Biofuel production can have both negative and positive impacts (energy security, growth, etc.) on water resources. On the negative side, particularly in water scarce areas, water used for biofuel feedstock production may redirect water from other usages and thereby, create social pressure and indirectly impact food security, biodiversity and related ecosystem services. In addition run off from both feedstock production and conversion processes as well as leakage from transportation and storage of biofuels may lead to deterioration of water quality. Given these considerations, water could be a limiting factor on where, what, how and ultimately which biofuels can be produced sustainably. Policy instruments can directly and indirectly influence how biofuels production affects water availability and quality, and they need to be designed to help avoid long-term adverse consequences while maximising potential benefits. The collected solutions were categorized in Analytical, Technological and Policy by recognizing that no single solution can address the target in its entirety but that a mix is required. The development of a conceptual framework on water management practices in the bioenergy sector should incorporate water concerns and issues into sustainability assessments. These assessments can support the development and establishment of a methodology, which then recognizes the specific implications, limitations, opportunities and ramifications of biofuel systems.

Network of water and energy policy makers

Target	<i>2.3.8: By 2015 establish a network of water and energy policy makers involving at least 10 developed and 10 developing countries to increase levels of dialogue and awareness of all aspects of the water-energy nexus</i>
Coordinators	Climate, industry and Technology Department Ministry of Petroleum and Energy, Norway
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=654
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-3-8-network-of-water-and-energy-policy-makers

Water is needed throughout the energy sector and vice versa. Relevant policies, however, are most often made solely from either water or energy perspectives in the respective ministries and or government

departments. This approach has resulted in a call for more coherent cross-sectoral policies in order to optimize water and energy resources. Under the leadership of the Norwegian Ministry for Petroleum and Energy, this target brought together policy-makers from developed and developing countries from the water and energy sectors in order to exchange experiences. In the follow up to WWF6, it will draw on existing expertise from practitioners and researchers with the aim will be to develop a better understanding of the impacts of policy-making in one sector on the functioning of the other. It is the intent to present the outcomes of this work at the 7th World Water Forum in 2015.

2.3.2 Key messages

- Water supply and sanitation services, as well as agricultural and industrial water use, should contribute to greenhouse gas reduction targets, notably by improving energy efficiency in water services (pumping, treatment, end use).
- To this very end, it was noted that appropriate regulations and incentives should be developed which allow the energy potential of waste water to be harvested as an energy source, as well as appropriate measures, policies and mechanisms by policy makers (at all levels) –such as fiscal and tariff instruments- needed to implement sustainable technologies and foster behavioural changes.
- The 6th World Water Forum was the opportunity to formulate for the first time with key players of water and oil sectors that a regulatory framework should be developed to encourage primary energy providers, energy conversion players (e.g. the power and refining sector) to systematically account for water use, assess performance and communicate remedial action and the water sector to account for energy use and efficiency performance.
- Finally, Key Priority 2.3 considered energy requirements for water and water requirements for energy and culminated with the creation of a Water-Energy Policy Network to develop better understanding of the water and energy nexus and to select priorities to improve policies' coherence.
- This requires among other things, closer interactions between World Water Fora and World Energy Fora and dialogue between both sectors' actors, including industrial actors: a governmental platform could help harmonize water and energy policies (involving researchers, practitioners and policy-makers).

2.3.3 Commitments

Broadly speaking, “water for energy” and “energy for water” mechanisms have to be integrated into a sustainable and long term process. Although many efforts have been made to improve energy production impacts on water and energy efficiency of water services, research and investment still bears potential for improvement in many areas. Increased collaboration between the water and energy sectors is essential. To this end a number of commitments were reached:

- the World Water Council and the World Energy Council have vowed to increasingly link relevant items of their work programmes and those of their members. This was formalized in a joint statement in Marseille by Pierre Gadonneix, Chairman of the World Energy Council (WEC), and Loïc Fauchon, Chairman of the World Water Council, who announced their commitment to join forces and cooperate in the long-term to promote greater energy efficiency in the management of water, recognise and improve energy usage in the water sector, and facilitate cross-sector dialogue (See more at: <http://www.solutionsforwater.org/commitments/commitments-by-the-world-water-council>).
- Pertaining to the work on target 2.3.4, EDF committed to coordinate an initiative to produce by 2015 an Evaluation Framework on Energy Impacts on Water, which will work through a number of expert groups on the individual energy types and draw on the advice of a scientific reference group (See more at: <http://www.solutionsforwater.org/commitments/edfs-commitments-in-water-and-energy>).
- Regarding desalination, IDA has committed to produce a guide allowing to achieve a 20% energy reduction in desalination by 2015.
- In the area of sustainable hydropower, the International Hydropower Association has committed to apply the Hydropower Sustainability Assessment Protocol in at least 20 countries on five continents by 2015 (See more at: <http://www.solutionsforwater.org/commitments/hydropower-sustainability-assessment-protocol-implementation-2>) .
- Finally, to create an accommodating policy environment, the Norwegian Ministry for Petroleum and Energy has committed to carry forward the Water-Energy Policy Network to the 7th World Water Forum.

2.4 Promote green growth and value ecosystem services

Coordinators	International Union for the conservation of Nature, The Nature Conservancy, Korean Water
Link to PFA Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=1126 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=599 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=597

Pressures on resources are increasing: over the last hundred years, fossil fuel consumption rose 14 times, while global energy demand rose by 96% compared to 167% growth in GDP over the last 35 years. The world today is characterized by the depletion of natural resources and the destruction of ecosystems, water being central to those. Basic needs are still not being met in many developing countries so that water and sanitation goals are crucial to uphold. Green growth is about fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies. It is also about fostering investment and innovation which will underpin sustained growth and give rise to new economic opportunities.

2.4.1 Target outcomes

Green growth: Policies and Enabling conditions

Target	<i>2.4.1: By 2012, propose a framework for action on water in green growth, in support of the MDGs and implementation of Rio+20 agreements, that address local, national and regional action and could be included in the Forum's political declarations</i>
Coordinators	World Water Council
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=655
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-4-1-greengrowth-policies-and-enabling-conditions

Evidence shows that a lack of integration of water, agriculture and energy development during project conception and planning results in significant economic and natural capital losses, most often to the detriment of the poorest and most vulnerable populations. The aim is decoupling economic growth from environmental pressures and water consumption, and mobilizing ecosystem services into the water economy. Without collaborative, holistic and integrated strategies and given cross-sectoral demands and multiple uses for water, sustainable development is untenable. A common knowledge base of practical recommendations and assessment toolkits is needed to be used by stakeholders in applying green accounting, valuation and compensation in cash or kind of water-related resources and ecosystem services in economic assessments of projects and plans for water infrastructure, food security and energy development. to developing countries. IWRM, with participation of all stakeholders, is one of the solutions and finally the development of water markets facilitates the reallocation of water to higher value uses. But it requires careful regulation. Economic value must integrate social value as well not only now, but in the future also.

Boost innovations

Target	<i>2.4.2: Returns from public and private investments in innovative, eco-efficient technologies and (re)building of natural capital to supply ecosystem services are quantified, so as to create the evidence needed for growth in these investments</i>
Coordinators	FP2E
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=656
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-4-2-boost-innovations

There have been, in the last decade, real advancements in the development of innovative technologies and management practices for having sustainable water services, which are adaptable to different contexts and countries. However for these technologies to be applied and grow throughout the years, there is a need for genuine and long term commitments from stakeholders. Are current investment sufficient compared to

potential benefits? Should WSS receive higher priority in the allocation of public funds (prioritizing investments)? Further research on biodiversity and water looking into the valuation of water related ecosystem services, the costs of policy inaction and benefits of long term investments, studies to quantify impacts on poverty reduction (developing countries' economic impacts of NOT investing in improved sanitation), protection of the environment and job growth are needed. Transition towards green growth requires innovative financial mechanism (PES and Green Water Credits), institutional arrangements, policy commitment, science for development and stakeholders to be aware of connectedness.

Sustainable financing (charging structures)

Target	<i>2.4.3: By 2015, Water Resource Management Plans in five countries in each world region explicitly consider economic instruments to manage water resources in a green growth perspective. Namely, they make use of some economic instruments to allocate water where it creates more value, to promote water efficiency, to incentivise low cost options (including green infrastructures), and to channel financial resources to water infrastructures, services, and policies</i>
Coordinators	Organisation for Economic Cooperation and Development (OECD)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=657
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-4-3-sustainable-financing-charging-structures

How to engage stakeholders in a way that enhances participation and ownership? To implement green growth; three prerequisites should be addressed: Finance, Governance and Policy coherence. Targeted actions related to basic infrastructures' investments and to allocating water where it creates most value, stimulating innovation, and considering green infrastructures ought to be taken. Innovative management approaches may include cost-effective conservation finance mechanisms and models – e.g. Public / private partnerships - which can be applied in different contexts: replicating water funds (self-sustaining once fully launched) in Latin America and PES scheme in Central Asia. In addition to the complex issues associated with such solutions (e.g. land ownership policies; low number of buyers; unpredictable weather pattern; degraded public lands), the clear identification of which services are being provided is challenging. Moreover, shifting water allocation can be challenging and requires policy reforms that overturn expectations about “rights” to existing uses by different stakeholders. Gaining support for such reforms is a major challenge for policy makers: building a strong constituency and aligning incentives are keys. The use of economic instruments can promote water efficiency across users, allocate water where it creates most value, incentivize low cost options, and generate financial flows to finance water-related infrastructures, services and policies.

Ecosystem valuation

Target	<i>2.4.4 (merged with 2.1.4): By 2015, reference methods for guiding the economic valuation of water resources and ecosystems are available to business, governments, and finance institutions. By 2018, those reference methods are standardized to support a systematic inclusion of economic values of water resources and ecosystemic services in decision making</i>
Coordinators	French Ministry of Ecology
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=635
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-4-4-ecosystem-valuation

OECD foresees that about 60% of global population would live in water stressed areas by 2050. In this context, it is necessary to improve water valuation: (1) sizing the benefits of mobilizing water ecosystem services before ruining them, and (2) sizing the economic impacts of a growing water scarcity before costly crisis and severe conflicts, notably amongst categories of users, and to the detriment of water security of poor populations and threatened ecosystems. As water quality is regressing in many basins, it becomes more expensive to put clean drinking water at the disposal of consumers (enterprises, public services, or private consumers). All over the world, water authorities are more and more aware that preventative measures are almost always less expensive than depolluting processes: dimensioning the PES appears as a way out (e.g. cities securing their

water provision with payments for environmental services (PES) are increasing worldwide). PES are connected with capacity building or technical progress or training, and the improvement in natural resources management they imply, leads often to improved agricultural yields. Reference methods for guiding the economic valuation of water resources and ecosystems are needed for business, governments, and finance institutions to inform their decisions and strategies and should be standardized.

Green accounting and data improvement

Target	<i>Target 2.4.5: By 2020, green accounting methodologies fully incorporating the environmental, social and economic dimensions of water are demonstrated in national accounting case studies for 3 countries</i>
Coordinators	WWAP UN Water
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=660
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-4-5-green-accounting-and-data-improvement

The principal challenge in the field of monitoring water resources is not the identification of a set of key indicators, but the systematic generation of a core data set to be calculated to meet the many different needs of the potential audiences. Currently, many of these data items are not reliably or systematically collected, which makes it difficult to generate any useful indicators on a regular and comparable basis. This constrains the monitoring (of performance and of trends) in the water resource sector. Global drivers such as climate change, population growth, changing diets are challenges which will require intelligent and innovative policy and management responses at many levels to sustain both human activities and the environment, as well as to support the poor communities that will bear the brunt of the impacts. To guide and monitor these responses, a flow of reliable is crucial for informed decision making, but this is actually getting poorer. Only limited disaggregated information exists and the data that is available shows deficiencies in validity and homogeneity providing poor information on trends. This is symptomatic of a larger challenge: national accounts largely focus on economic performance and growth, with the environment treated as an externality. Therefore, decision-makers need a revised model of “Green accounting” that incorporates basic data on water stocks and flows, uses (households and other sectors), its value, the costs incurred in developing, protecting and restoring water resources and services, and how these items impact the measurement and reporting of national economic performance...The overarching target is to inform different policy perspectives for water.

2.4.2 Key messages

Water pricing can be part of the solution but it is not a silver bullet (improving the quality of the information we are gathering to achieve accurate pricing of water use and efficiency is essential), since above all innovation is key. Wastewater treatment and re-use are important green growth tools (less pollution, better health, lower economic risk from scarcity). Furthermore, to eliminate subsidies and only keep them where need is means tested while practicing restraint in the way that we use water is key. In effect, maintaining and managing nature as a part of green growth and sustainable development needs to be fully integrated into policy frameworks. Innovation is needed in technical and financial terms but also in the ways stakeholders interact. To be sure, green growth is not proposed as a replacement for sustainable development, but rather as a way to operationalize it. For that, we need clearer recognition of the private sector’s role in responding to green growth and water challenges – particularly from the UN. From a business perspective, we need to move away from social responsibility towards social investment.

2.4.3 Commitments

At the 6th World Water Forum, participants examined further the place and role that water plays in greening growth and it helped establishing a network to advance on the subject. The fact that valuing water and ecosystems is, for the moment, a concern of developed countries is recognised as a strategic gap to overcome.

As a result, and in view of the forthcoming events (Rio +20 and the World Water Week in Stockholm), a report describing the key issues for action to make green growth a reality, thereby continuing to make the best of the network was put together for the Forum’s purpose. Marseille 2012 was only the beginning of a global effort to address these gaps and thereby to bring water and green growth to the attention of Governments and other

stakeholders. In the run-up to the next 7th World Water Forum, the project will continue to identify case studies on water and green growth, monitor on-going projects already identified in the project report.

Furthermore, the joint Water and Green Growth Project between the Korean Government and the WWC is scheduled to continue until the 7th World Water Forum in 2015: by the end of 2012, a policy framework for action on water in green growth to decision makers that considers, amongst other things, issues of innovation, economic valuation, investment and accounting should be formalized. As such, it should support policy work on meeting the MDGs and implementation of Rio+20 agreements and commitments, at local, national and regional levels, and take into account the 6th World Water Forum’s political declarations.

Green growth sessions have shown that we are at the start of a networking process that has a very high potential value. From this perspective, members of the working group have committed to pursue together the learning process on Green Growth.

3. Strategic Direction 3: Keep the Planet Blue

3.1 Improve the quality of water resources and ecosystems – Table formatting

Coordinators	Wetlands International
Link to PFA documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=425?tx_amswwf_pi2[uid]=425

How to balance the development focused uses of water against the more traditional uses that underpin many communities? By setting up mechanisms that value ecosystems as an infrastructure, by improving participation at the community level but also by implementing the related monitoring actions and inclusive basin level planning, this goal can be reached. It will necessitate a greater implication of the political and financial levels (especially national governments and investment institutions), but also bridging fields of thoughts such as economics and ecology.

3.1.1 Target outcomes

Policies and strategies to protect and sustainably use water

Target	<i>3.1.1: By 2015, additional countries shall have established policies and strategies to protect and sustainably use their water resources and the ecosystems so that they that provide enough water, of adequate quality, as well as other ecosystem services, and by 2018 these policies and strategies have been institutionalised in the mandates of a number of champion national organisations and platforms</i>
Coordinators	WWF Netherlands
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=428?tx_amswwf_pi2[uid]=428
Link to Solutions	www.solutionsforwater.org/objectifs/3-1-1-policies-and-strategies-to-protect-and-sustainably-use-water

There is not only one “magic ingredient” for water policies, but more general principles that, when combined, can prove to be a recipe for success. By adopting a collective approach, based on cooperation and partnerships, it is possible to improve resource management by putting the emphasis on ecosystem services. This concept is already well understood and widely used at the international level, but it is still lacking local institutional mechanisms to make it fully operational. In the process of building a common management plans, actors need to recognize that environmental concerns are part of the solutions, and not of the problem. Ethics and principle also play a crucial role in building governance and scientific structure and could prove to be innovative solutions for solving governance issues.

Regional principle, practices and capacity building at basin level

Target	<i>3.1.2: By 2015 establish regionally-defined innovative principles and practices and establish capacity in a number of priority basins to manage the flows and quality of surface</i>
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	<i>and groundwater to maintain or improve the health of inland and coastal waters and of the corresponding ecosystems</i>
Coordinators	eFlowNet and UNESCO IHP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=429?tx_amswwf_pi2[uid]=429
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-1-2-regional-principle-practices-and-capacity-building-at-basin-level

If we often associate ecosystems with surface water flows, groundwater is often neglected whereas it can be a major contributor to environmental flows or support ecosystems independently. In order to be able to reach this target, both are to be considered in a strategy that needs to include new partners on board and to translate its recommendations into more specific, comprehensive and actionable guidance. This would rely mainly on knowledge and information sharing with individuals and institutions leading to action learning from concepts to practices. It has been proposed to help the creation of community-based education systems, post-graduate courses on groundwater-dependent ecosystems to link up to existing environmental flows courses, and assistance to decision-making, noteworthy regarding legal issues.

Reducing nutrient inputs and pollutions

Target	<i>3.1.3: By 2015, each country will set a quantitative target, with an agenda, on reducing nutrient inputs and pollution from urban wastewater effluent and land-based activities, supported by a national prioritization decision to protect and enhance the quality of water for human well-being and to support the sustainability of water resources and ecosystems. The target will be supported by strategic multi-stakeholder collaboration and by increasing scientific and technical cooperation at the international level</i>
Coordinators	UNESCO IHE
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=430?tx_amswwf_pi2[uid]=430
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-1-3-reducing-nutrients-inputs-and-pollution

The protection of water quality is essential for both freshwater ecosystems and human well-being. Technical solutions such as Total Maximum Daily Load (TMDL) system for reducing nutrients, biological treatment (lagoon systems) for urban wastewaters can be implemented. Besides this, technical solutions, governance paths can be followed to increase water quality. For instance, farmers can be considered as contractors and agro-environmental responsibility contracts with quantified targets can be set up and prove to be efficient. The interests and behavior of various actors are to be understood and financial incentives can be set up to help them changing. UNESCO and the Ministry of Environment of the Republic of Korea have highlighted the urgent need of protecting water quality, emphasizing that this target is an important contribution to addressing the global water quality challenge.

River basin and water resource management plans and related implementation strategies

Target	<i>3.1.4: By 2018, a set of pilot river basin and water resource management plans and related implementation strategies safeguard and restore ecosystem services</i>
Coordinators	Wetlands International
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=431?tx_amswwf_pi2[uid]=431
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-1-4-river-basin-and-water-resource-management-plans-and-related-implementation-strategies-safeguard-and-restore-ecosystem-services

Solving people's water problem directly depends on our ability to sort out nature's water problem. Therefore, there is a widely shared sense of urgency about the management and restoration of water ecosystems. In order to overcome the dichotomy economy/ecology, one has to be aware of the complexity of ecosystem restoration and management programmes as well as of the different constraints at stake. Therefore, the solutions should acknowledge the environmental requirements in terms of ecological flow but they cannot succeed without engaging strongly the local population, including the private sector and put emphasis on

decentralization and learning from limited experiences to upgrade them. Several basin and river organisations (Senegal River Basin Organisation, Danube International Commission, Niger Basin Authority) committed to defining inclusive improved management plans.

3.1.2 Key messages

- Political will and the national governments/authorities' commitment is critical.
- Need to prioritize the water quality at the highest authority level and identify which pollutants to target/take into account new pollutants
- Need of consistent and coherent policies between different areas including under other priorities such as green economy
- Identify the stakeholders: all partners should share the same interests and benefits and create partnerships with regards to both the issues and the solutions so they become everyone's
- Need to work across different sectors and seek for win-win solutions and negotiated trade-offs.
- The ecosystem infrastructure services must be enhanced to get the business community to invest in ecosystem services.
- The ecosystems must be valued in terms of livelihood: greater participation of community-based institutions in the decision-making process
- Knowledge networks and action learning platforms should be resourced

3.1.3 Commitments

- Government of Korea with UNEP committed to developing at the international level a platform to provide technical support. By the next forum (2015) UNEP and UNESCO are to submit a first draft of water management guidelines on ecosystems to set national actions at the international level
- The French water agencies promote the implementation of management measures suitable for wetlands in the aim of covering 60,000ha by 2018. With the ONEMA they will support the operational implementation of green and blue infrastructure by 2015 ([see more at http://www.solutionsforwater.org/commitments/water-agencies-and-the-onema-undertake-to-develop-an-ecosystem-based-approach-to-water](http://www.solutionsforwater.org/commitments/water-agencies-and-the-onema-undertake-to-develop-an-ecosystem-based-approach-to-water))

3.2 Adjust pressures and footprints of human activities on water

Coordinator	United Nations Environment Programme
Link to PFA documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=541?tx_amswwf_pi2[uid]=541

In the context of unevenly distributed water resources, enhanced water efficiency and management is a major challenge not only for direct water users, water managers and policy makers but also for businesses and final consumers. In most parts of the world, the development of consistent water accounting systems both from the production and consumption perspective are in their infancy. Quantifying and accounting for water flows to meet economic and environmental needs and related impacts in the appropriate time and spatial scales through water footprint tools, would allow water managers and decision makers to attain transparent information to develop robust allocation and management systems that underpin a green economy.

3.2.1 Target outcomes

Water footprint tools and databases

Target	<i>3.2.1: By 2015, global high-resolution water footprint and water availability databases and maps, as well as environmental flow requirements, water scarcity and water pollution maps at multiple scales including river basins are publicly available and included in the Water Footprint Assessment Tool.</i>
Coordinators	Water Footprint Network
Link to Target documents	http://www.worldwaterforum6.org/en/program/detail/?tx_amswwf_pi2%5buid%5d=432?tx_amswwf_pi2%5buid%5d=432
Link to	http://www.solutionsforwater.org/objectifs/3-2-1-water-footprint-tools-and-databases

Solutions	
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The Water Footprint Network committed to developing, by 2015, a Water Footprint Assessment Tool and related databases (for agriculture and industry especially). It will provide an open platform that will facilitate the work of companies, governments, non-governmental organizations, international organizations, investors, consultants, etc. in reducing their water footprint and making it more sustainable, efficient and equitable. A first version of the WF Assessment Tool will be made available in July 2012. In line with the principles of water footprint analysis, it will allow for both geographical based and product based assessment methods. In order to be accessible to the larger public and contribute to awareness raising, the tool will also offer both a "WF Assessment highlights" and an "full Water Footprint Assessment" mode. The tool will include WF accounting, sustainability assessment, identify hotspots and propose strategic concrete actions.

Assessment and impact mitigation of water footprint at basin, regional, national and municipal level

Target	<i>3.2.3: By 2015, public sector and its appropriate bodies at the basin, regional, national and/or municipal level, have developed water footprint assessment and impact mitigation plans, specifically in water stressed areas taking into account global changes</i>
Coordinators	Water Observatory of the Botin Foundation
Link to Target documents	http://www.worldwaterforum6.org/en/program/detail/?tx_amswwf_pi2%5buid%5d=433?tx_amswwf_pi2%5buid%5d=433
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-2-3-assessment-and-impact-mitigation-of-water-footprint-at-basin-regional-national-and-municipal-level

In regions undergoing water scarcity, improving water management techniques is crucial. It requires rethinking how water is being used and what options are available to reallocate water equitably, efficiently and sustainably. Water footprint tools can be precious decision-making supports, when it comes to recomposing governance to reach these goals. The Water Observatory of the Botin Foundation will carry out a detailed application of the Water Footprint Analysis concept in seven countries in Latin America and Spain by 2013 to show how water footprint tools can help mapping and understanding water scarcity issues better, therefore contributing to the move towards water efficient policies.

Assess and reduce the water footprint of food waste

Target	<i>3.2.4: See 2.2.8 (merged targets)</i>
Coordinators	ASVF
Link to Target documents	http://www.worldwaterforum6.org/en/program/detail/?tx_amswwf_pi2%5buid%5d=629?tx_amswwf_pi2%5buid%5d=629
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-2-4-assess-and-reduce-the-water-footprint-of-food-waste

The promotion of sustainable diets has to involve business, small food industry, privates, so as to build an economic support for the recycling chain of food but also requires a strong government participation, to create the enabling environment. Government should encourage retailers to disclose cost figures on food waste as well as on environmental performance and bring about changes as regards the EU laws on supermarkets' obligation to throw food away. From that perspective, significant efforts remain to be done to reach standardized definitions on wastes and losses (avoidable and unavoidable) and on valuing waste. Furthermore, as production and consumption are gradually matched at a regional level, spatial planning also may become a strategic tool (high value crops within 20-200 km radius of cities). The pathway to reducing food waste and losses also includes post-harvest actions whereby investments in storage containers and cool chain increase and local communities are encouraged to build collective storage capacities for more efficient use of stocks. At the processing stage, it is strongly recommended to develop farmer-scale processing and farmers' cooperation to process for a region (e.g. develop manufacturing potential in Africa). Finally, farmers should have greater access to markets, especially in developing countries; thanks to training but also to improved transport infrastructure and increased connectivity (roads, communication, phone, etc.).

Assess and reduce the water footprint of food waste

Target	<i>3.2.5: By 2012, a water footprint awareness program in support of the other goals is launched during the World Water Forum</i>
Coordinators	Project WET (Water Education for Teachers)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=434?tx_amswwf_pi2[uid]=434
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-2-5-water-footprint-awareness-programme

Water footprint concepts and tools are already used by professionals and academics, but public awareness is low. Helping people understand water footprint and related concepts allows water users to better evaluate their direct and indirect uses of water, leading to informed personal water management decisions. By providing common tools to very diverse categories of actors, we will also allow for fertile cross-sectoral exchanges and partnerships. Project WET Foundation commits to scaling up water education to reach as many people, especially children, as possible. The commitment will be carried out using cutting-edge technology such as interactive, web-based learning as well as tried and true approaches like personal, hands-on training of educators and engaging, whole-body learning methods for kids.

Business sectors and supply chains water footprint impact mitigation

Target	<i>3.2.6: By 2015, more than 20 major businesses and their supply chains, from multiple business sectors, have developed water footprint impact mitigation and sustainable water management certification programmes</i>
Coordinators	Alliance for Water Stewardship
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=435?tx_amswwf_pi2[uid]=435
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-2-6-business-sectors-and-supply-chains-water-footprint-impact-mitigation

Companies following the principles of corporate water stewardship improve the quantity and quality of their internal water use, while simultaneously engaging with stakeholders, either in their supply chain or who share their watershed, to mitigate their water footprint. In this way, businesses, governments, NGOs, communities, and others become part of solving shared water challenges. As an essential part of this process is “learning by doing”, platforms of exchange are crucially needed to achieve significant progresses. The Alliance for Water Stewardship commits to building by 2015 a global water stewardship system that promotes responsible use of water through an international water stewardship standard and a third-party verification system.

3.2.2 Key messages

- Necessity to develop an accounting framework (understanding the fundamental structure)
- Need for transparent information on water accounting (including the environmental needs) for allocation purposes.
- Economic values are needed in the accounting system, but it is also crucial to value social/human capital
- Bring together ecosystem services and the resource efficiency work
- Technical, policy and fiscal instruments are needed to decouple economic growth from water use and impacts.
- A mindset reform is needed for the decoupling and improving efficiency while managing the land and catchment as a whole.

3.2.3 Commitments

- UNEP/SETAC life cycle initiative’s working group on water use in LCA (WULCA) commits to provide guidance to practitioners on how to properly perform water footprints of products and services in accordance with carbon footprint: It will support development of product category rules (PCR) and cooperate with UNEP and ETH Zurich for developing training material and carrying out trainings for practitioners with a special a focus on developing countries and emerging economies.
- UNEP committed to the promotion of water efficiency in cities and industrial processes, including the following initiatives: 1) Global Initiative for Resource Efficient Cities (under preparation and to

be launched at Rio+20) 2) Promotion of resource efficiency (water, energy, material and waste) in industrial production processes

- UNEP training workshops and pilot projects funded by KOICA: 1. Training workshops online, in Latin America and SE Asia. 2. Pilot projects in Latin America and SE Asia, including the apparel sector, fisheries (Colombia), tourism (Argentina and Republica Dominicana) and mining (Chile)
- The Water Footprint Network committed to developing, by 2015, a Water Footprint Assessment Tool and related databases (see more on: <http://www.solutionsforwater.org/commitments/development-of-water-footprint-assessment-tool-and-database>)

3.3 Responses to Climate and Global Changes in an urbanizing world

Coordinators	Cooperative Programme on Water and Climate
Link to PFA documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=812 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=826 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=834

The challenges of the impacts of urbanisation for water management and the implications of urban growth on floods, droughts in the urban areas as well as the provision of water services for people, industry and ecosystems have become major issues. On top of these implications of globalisation and growth on the urban environment and livelihoods come the implications for the hinterland of urban areas and the impacts of specifically climate change.

In total this Priority selected 7 Targets for 7 identified key priorities each taken care of by a consortium of globally leading partners. All of these 7 Targets have the ambition to contribute to solutions through the creation and strengthening of partnerships for a particular purpose or addressing a particular issue. Target 1 is to address the political agenda under UNFCCC on water-related adaptation. Target 2, 3, 4 and 5 all deal with capacity development and operational guidance on scenario development and modelling tools for basins and water management at global, regional down to local level. Targets 6 and 7 are on the risk proofing of urban areas and utilities.

3.3.1 Target outcomes

Water management in UNFCCC adaptation committee and Climate Fund

Target	<i>3.3.1: By 2015 Water management expertise shall be represented at the UNFCCC Adaptation Committee and water related adaptation, including building resilience to climate change in urbanized areas, shall be adequately addressed under the mechanism of the Green Climate Fund, as an outcome of COP 17 decisions and follow up</i>
Coordinators	Water and Climate Coalition
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=578
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=551

Water is critical in all environmental and social systems that underpin the global economy. Therefore, the critical importance of water should be recognized accordingly in economic development in conjunction with its social and environmental benefits. The Water and Climate Coalition (WCC) is part of the solution to bridge and overcome this gap, it ensures that water is brought to and kept on the agenda in the UNFCCC and works conscientiously to raise the profile in order to get due recognition. This session emphasized the fact that water is a cross-cutting resource, not a sector and that water expertise needs to be represented where decisions are made. Besides, water management needs to be fully integrated into climate adaptation and mitigation

measures but also to be integrated more effectively into existing mechanisms under the UNFCCC. Finally, water must be addressed through establishment of local, regional and global levels.

Management of climate change uncertainties in water planning

Target	<i>3.3.2: By 2015, develop a set of internationally recognized methodologies to assess and handle uncertainties of impacts of climate change on surface and ground water and identify priorities of awareness-raising for improving water management, in close partnership with IPCC, UNFCCC and other relevant organizations, and implement them in the preparation of a network of at least 10 river basin management plans within key vulnerable regions</i>
Coordinators	French Water Academy, UNESCO-IHP
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=710
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=552

This TSG aimed at, on the one hand, increasing awareness and enhancing knowledge shared between water and climate specialists, and on the other hand, opening a dialogue between scientists and river basin managers with a view to develop a set of methodologies for water planners to integrate uncertainties into water policy planning and implementation. During the session many propositions emerged as the production of a scientific review and synthesis on the impacts of climate change on groundwater resources including management recommendations, and the initiation of a networking platform for researchers and water managers as a water science-policy interface to provide relevant inputs to help develop effective management and climate change adaptation strategies. It was also decided to provide a networking platform of basin organisations for the collection and exchange of best practices and experiences on the implementation of climate change adaptation strategies. Finally, stakeholders agreed on the development of methodological guidelines based on gathered information and lessons learned from both networks, to promote the creation of new tools of governance for decision-makers to better integrate climate change impacts into water resources planning and management.

Scenario based Global Water Outlook

Target	<i>3.3.3: By 2015, a next scenario-based Global Water Outlook is published based upon the results of collaborative work on scenario development and modeling by several internationally renowned applied research institutions with outlooks at global, regional and local levels</i>
Coordinators	UNESCO WWAP
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=1174
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=553

The goal of this target was to bring together a consortium of institutions working on the preparation of the second scenario-based Global Water Outlook. Parallel to the scenario's and modeling work done by the WWAP itself, the project sought to stimulate and facilitate the implementation of a process to harmonise scenarios and models by other parties at different scales, as it is being done in many countries, basins etc. Regarding the development of scenarios and models it was emphasized that it should be driven by clients through stakeholder involvement to ensure relevancy and pertinence to decision makers. Besides, the development of scenarios at different scales (i.e. global and local) is important as they are a useful way for exploring alternative futures and opening minds of decision makers to different possibilities. Moreover, data poverty was raised as a major and increasing constraint to our ability to reduce uncertainty for decision making. Finally, stakeholders committed to develop a global water vision and respective consistent global and sub-global water scenarios for presentation at the 7th WWF in Korea.

Urban and utility development plans include risk assessment and risk management to cope with global changes

Target	<i>3.3.4: By 2015, urban and utility development plans will include a risk assessment and risk management policy to cope with increased climate and global changes</i>
Coordinators	UN-HABITAT
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=580
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=554

The target is based on follow up actions to be recommended in the upcoming UN-HABITAT's global report on the state of Water, Sanitation and Basic Infrastructure in Cities of the Future: The Scenario in 2050. The Report, to be launched during the World Habitat Day in October 2012, will set out in detail the main challenges posed by global changes, including the impact of urbanisation on water, sanitation and health, climate change adaptation and mitigation strategies, efficient use of natural resources, increasing poverty and inequity. Besides, there is a necessity to change mindsets about wastewater in order to see it as a resource and not as a burden and to develop wastewater reuse, energy and nutrient recovery. Moreover, urban water and sanitation systems need to be robust and resilient to global change pressures and governance structure should be consistent with the integrated approach for water and sanitation services. Finally, this target led to an agreement on a partnership between UN-HABITAT and the Dutch Environmental Assessment Agency (PBL) to implement the scenarios project on water supply and sanitation in 2050.

Establish the Alliance for Global Water Adaptation

Target	<i>3.3.5: By 2012, the Alliance for Global Water Adaptation is established as a global leader in providing knowledge and advice on mainstreaming adaptation to climate change in water programs, strategies, plans and projects</i>
Coordinators	World Bank, Conservation International
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=582
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=555

AGWA, an initiative of the World Bank and Conservation International and many other national and international organizations, started a process to develop an integrated decision support project that consists of four "layers": hydrological-climate information for risk assessment; finance mechanisms and economic valuation that enable mainstreaming; engineering and operations management that promote flexibility; governance to evolve and enable existing institutions to confront new challenges and processes. Across these areas there are deep silos and conversation needs to happen to address silos to get us back to the ability to inform decisions tomorrow. Besides, higher level decisions often have a very profound impact on the way these decisions are implemented at lower scales. Consequently, decision making involves multiple disciplines and multiple scales and we need to bring those together for a joint discussion to improve practical water management at all scales.

Establish a global coalition of deltas and other vulnerable areas

Target	<i>3.3.6: Establish a global coalition of deltas (countries, regions) and other specifically vulnerable geographical areas (arid areas, mountainous areas etc.) to illustrate how to deal with the cumulative pressures of global change and migration processes in an inclusive, transparent and multidisciplinary way, to create an enabling and responsabilising environment for stakeholders and citizens alike, whose action plan will be launched in Marseille in 2012</i>
Coordinators	Ministry of Infrastructure and the Environment of the Netherlands
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=589
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=556

This session aimed at developing a roadmap towards a sustainable and resilient future for delta countries; a roadmap that describes the steps to take from defining the problem to plans for investments. This target built on partnerships between countries and partnerships between government, business, knowledge institutes and NGO's, the so-called golden pyramid, both within and between the countries. Through these partnerships, people can learn and benefit from each other by exchanging their experience. There is no standard 'Delta Approach' because the situation in each delta country is different, so the structure of the partnership will be responsive to the needs of each country. However, there are a number of fixed phases within the delta programs: the initiation phase of the cooperation, identification missions are undertaken, and the identification of the water issues in each respective country is done; the planning phase in which the Dutch government and the government in the delta country will jointly choose an objective on which the partners will specifically focus in the coming years and finally comes the tender and implementation phase.

Climate-resilient urban water safety plans

Target	<i>3.3.7: By 2020, 20 integrated urban water safety plans are prepared that include risk assessment, health, floods, storm water drainage and supply portfolios to enhance resilience to climate change</i>
Coordinators	IWA
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=592
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=47&solutions-filter-target=557

The session affirmed the need for greater collaboration and coordination between various sectors and all facets of city planning, infrastructure and service delivery. Further research can play a part in investigating the relative roles of each sector in delivering integrated and sustainable outcomes, how various authorities and institutions can be structured to enable integration of these roles, and whether alternative industry structures can provide for better integration. The challenge is to develop a common language for sustainability and create networks and platforms to engage across sectors, and to link regional or national policy with local and context-specific implementation. There is a need to anticipate changes and risks. Decision support systems could be used in this instance to improve urban and basin water safety at different levels. There is an equally crucial need for integrated urban policy development that allows for cross-sectoral coordination and implementation of green strategies. Finally, we need to anticipate and plan, to develop capacity to deliver and engender good governance and to be bold enough to go beyond the politics of ecosystem services and engage in policy dialogues and collective decision-making around water pricing.

3.3.2 Key Messages

- Cities and slums are expanding rapidly, and this phenomenon has characteristics distinct from past urbanisation: in many cities, urbanisation is uncontrolled and without economic base. It is therefore necessary to prepare to ensure the planning and provision of basic services in cities.
- The opening session addressed the issue of possible futures in the context of global change, describing the complexity and offering a number of presentations on current actions.
- Stakeholders emphasized that the development of scenarios and models should be driven by clients through stakeholder involvement to ensure relevancy and pertinence to decision makers and they need to be tailor made at temporal, disciplinary and geographical scale for a particular challenge
- Although the scientific community agrees on climate change, the exact impacts of these changes on the hydrological cycle are not well predictable. Managers of water resources must learn to deal with uncertainties. Climate change calls for flexibility in the response effort.
- The European Union, France and the World Meteorological Organization (WMO) act through various programs at the local level and at the basin level, for the implementation of adaptation measures, capacity building and development of climate information service.
- Adapting to climate change must be integrated into the UN Conference on Sustainable Development (Rio +20) and in the green growth concept.
- It is necessary to develop adaptation strategies to climate change: water is transverse to the majority of adaptation policies and has to become a focus of concerns of the Climate Convention, in accordance with guidelines adopted by the COP of the UNFCCC in 2011 in Durban (COP17)

3.3.3 Commitments

- By 2012: French Government, French Water Academy and UNESCO undertake to create a platform for researchers and managers of water resources in order to facilitate communication in relation to the IPCC and other UN conventions. The objective of such a science/policy interface is to support the development of management methods and effective strategies for adapting to climate change, taking into account the IPCC projections and uncertainties related to global change and climate scales corresponding (see more at: <http://www.solutionsforwater.org/commitments/commitments-by-the-french-gouvernement>).
- By 2012: UNECE and INBO undertake to launch a platform for the collection and exchange of good practices and experiences of implementation of adaptation strategies to climate change in the field of management and water resource planning.
- By 2015 (7th World Water Forum), the French Water Academy and its partners commit to write a repository based on the methodological lessons learned from both platforms, to promote the creation of new governance tools to help decision makers better integrate climate change impacts climate in the planning and management of water resources.
- The Mexican delegation, represented by Conagua, confirmed its desire to reflect these proposals following up the decisions taken at the last Conference of Parties (COP17, Durban) to launch a theme on water in the next phase of the Nairobi work program of the UNFCCC. From this perspective, a technical workshop on water and adaptation to climate change will be organized by Conagua from 23 to 25 July 2012 in Mexico City.
- Conservation International, the World Bank and their partners commit to establish the Alliance for Global Water Adaptation (AGWA), to assist government, non-governmental, and for-profit institutions in adapting to climate change impacts by closing the gaps between pools of expertise, creating a policy landscape that fosters adaptation success, and translating the next generation of best practices into operational reality (See more at: <http://www.solutionsforwater.org/commitments/convening-a-new-dialogue-on-climate-change-water-and-development>).
- IIASA (International Institute for Applied Systems Analysis) and its partners start water programs to improve scientific understanding of water and development.

4. Strategic Direction 4: Conditions of Success

4.1 Good Governance (CS1)

Coordinator	OECD
Link to CS documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1035 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1051 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1063

The “water crisis” the world community faces today is largely a governance crisis. Securing water for all, especially vulnerable populations, is often not only a question of hydrology (water quantity, quality, supply, demand) and financing, but equally a matter of good governance. Managing water scarcity and water-related risks (floods, natural disasters etc.) requires resilient institutions, collaborative efforts and sound capacity at all levels. Good water governance is therefore a key condition of success to ensure everyone's well-being, contribute to economic development and keep the planet blue, but also to foster peace and stability. In the absence of optimality and magic blueprint to foster good governance in the water sector, mutual exchange across countries and stakeholders is the best way to learn from past success and failure and develop place-based and home-grown solutions. Well aware of the absence of one-size-fits-all answers to “good governance” in the water sector, CS1 Core Group has proposed concrete, measurable and achievable solutions to create the conditions of success in terms of: (i) effective public governance and institutions; (ii) integrated management; and (iii) better integrity and transparency in the water sector.

4.1.1 Target Outcomes

Stakeholders’ engagement for effective water policy and management

Target	CS1.1: By 2015, 50% of countries will have adopted consultation, participation and o-
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	<i>ordination mechanism allowing stakeholders at local, regional, national and international levels to effectively contribute to decision-making in a coherent, holistic and integrated way. By 2021, 100% will have done so.</i>
Coordinators	OECD and SUEZ Environnement
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=651
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=546

Participants shared views on how to (i) involve stakeholders in water management and policy, and (ii) disseminate the most effective participation mechanisms and (iii) exchange on key issues regarding their translation into regulatory and budgetary frameworks. A debate with the audience raised the following messages:

- Capacity-building and data sharing at the local level are of utmost importance in order to engage all stakeholders efficiently and in the best conditions;
- Information has become the new currency to improve water policies;
- Equally crucial are inclusive and transparent dialogue regarding the way water is managed and financed to allow for open discussions and conflict resolution;
- Participation efforts should not be carried out without clear objectives: getting all actors involved should result in better managed services and better informed stakeholders.

Performance measurement, regulation and capacity building in the water sector

Target	<i>CS1.2: By 2015, 50% countries will have strengthened regulatory frameworks and adopted performance indicators (service delivery) to monitor and evaluate water policies; and all countries will have put in place capacity-building processes at national and local level to foster good governance in service delivery. By 2018, all countries will have done so.</i>
Coordinators	ASTEÉ
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=653
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=558

This session focused on the topic of governance and performance of water and sanitation services. Overall, unclear allocation of roles in water and sanitation services, and weak and ill-defined performance indicators were identified as critical obstacles impeding an effective provision of services. Across the different panels, participants agreed on the need for enhanced performance indicators and standards, and updated databases. The latter must be coherently set and shared across all stakeholders. Performance indicators should adopt a systemic and long-term vision, taking into account the specificities of each context.

Basin Management Plan as Instrument for Water Governance

Target	<i>CS1.3: By 2021, increase by 30% the number of river basin management plans (analysis of initial status and main issues).</i>
Coordinators	OIEau – International Network of Basin Organisations (INBO)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=659
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=580

The session identified and analysed the conditions and the solutions for the elaboration, the implementation and the evaluation of long-term river basin management plans (RBMPs). The following recommendations came out of it:

- A complete check-up before elaborating a Basin Management Plan (BMP) is needed. It must take into account various aspects such as the dimension, basin vs. river, main basin vs. sub-basins, local vs. regional, the leader and the utility, the consultation, etc.;

- Existing conditions need to be taken into account ; e.g. plans more or less linked to water (adequacy);basin organization twining for know-how development;
- Information systems are a key tool and an entry-point for RBMP development;
- Public participation of the civil society, stakeholders and their representatives, municipalities, and local governments is crucial;
- Understanding the environmental, social and economic functioning aspects of the Basin is a prerequisite;
- A solid “Basin Organization” is a key tool and a pre-condition to RBMP development;
- The building process of RBMPs is well known and must be respected;
- Building a RBMP requires to design prospective medium- and long-term scenarios and build a vision of the basin with environmental and socio – economic balance and local changes.

IWRM through the lens of water security, adaptive water management and international legal instruments for good governance

Target	<i>CS1.4: By 2015, increase the number of countries with water security diagnoses and governance tools, based on existing (local, national, international) regulatory and legislative frameworks and IWRM mechanisms.</i>
Coordinators	UNESCO - IHP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=663
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=582

In this session, panelists presented their work and experiences on water security diagnoses and governance tools, and successful innovative and effective mechanisms for integrated water management in various countries. Sine-qua-non elements to foster long term, sustainable groundwater management plans were formulated: (i) set a common strategy; (ii) design a strong action plan; (iii) define strong global rules although flexible enough to be adapted to each territorial and legislative contexts; (iv) share data among actors; and (v) introduce principles for sustainable and responsible use of water and disseminate them, especially towards young generations.

Integrity and transparency to curb corruption: perspectives and solutions

Targets	<i>CS1.5: By 2018, 30 countries will have committed to promote integrity in the water sector, diagnose/map existing or potential corruption risks, and ensure that anti-corruption policies are well implemented and effective.</i> <i>CS1.6: By 2018, 30 countries will be implementing: transparent water budget processes, including information about water infrastructure investment planning and implementation (financial, technical, and socioeconomic impacts); and methods and tools for improving transparency and accountability within the water sector.</i>
Coordinators	WIN-TI and SIWI
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=669
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=584 http://www.solutionsforwater.org/solutions?solutions-filter-priority=48&solutions-filter-target=586

The session brought together water and integrity professionals to discuss transparency in water service utilities, the inefficiency of regulation, the gap in performance measurement and the absence of corrective measures. Discussions between panelists and with the audience resulted in a list of recommendations addressed to decision-makers. For water and sanitation activities to be more efficient and transparent:

- Audits must be carried out across service providers, with open budget information and data sharing;
- Elected officials should invite public medias to engage in the water sector and raise awareness on corruption activities and mismanagement of services so the responsible parties can be held accountable;
- Multi-stakeholder coalitions should be established at different levels;

- North and South regions should share their experiences and lessons learnt to reinforce local institutions and support the independent financing and regulatory agencies;
- Civil society should be invited in administrative boards to support full disclosure of activities; and
- Efforts should support the implementation of these tools in both the formal and informal sectors as the latter is often hard to assess and help.

4.1.2 Key messages

To foster good governance in the water sector, national and local political leaders should:

- Develop early warning diagnostic tools to identify key governance issues across public and private actors involved in water service delivery- including wastewater treatment and investment - and water resources management; Governance “gaps” need to be identified first, before action is taken to set-up new models where needed;
- Adopt participation, consultation and co-ordination mechanisms allowing stakeholders at (sub-) basin/aquifer, local, regional, national and international levels to effectively contribute to decision-making in a coherent, holistic and integrated way, including for groundwater management;
- Clarify and strengthen the institutional framework that underpins water governance at all levels, including regulatory aspects;
- Allocate human and financial resources in line with responsibilities of public authorities;
- Consider the governance-financing nexus to design realistic investment programmes and foster sustainable cost recovery in the water sector;
- Enhance IWRM based on national frameworks implemented at different hydrological levels with a clear vision of water resources uses, evolutions, quantity and quality;
- Adopt the principle of river basin management as the appropriate scale for managing water resources; encourage the adoption of river basin management plans and favor the systematic water security diagnoses to better cope with geographic, demographic, and urbanisation challenges;
- Foster the adoption of relevant capacity building and monitoring mechanisms (including performance indicators) to strengthen and evaluate water policies;
- E-government could be promoted as an interesting mechanism in this regards;
- Promote the implementation of internationally agreed principles containing provisions on water governance;
- Create, update and harmonise water information systems and databases for sharing water data across basin, and administrative (local, national and international) frontiers;
- Create partnerships at and between all levels and engage with media professionals to raise awareness on the damages of corruption in the water sector;
- Map potential corruption risks, publicise water-related budgets and provide public information on water infrastructure plans and investment projects;
- Strengthen integrity, transparency and accountability:
 - Map potential corruption risks;
 - Publicize water-related budgets;
 - Provide public information on water infrastructure plans and investment projects;
 - Engage with media professionals to raise awareness on the damages of corruption in the water sector;
- Encourage aid effectiveness principles applied in accordance with the international obligation to cooperate for the realization of human rights and the need to strengthen country-driven water governance for the realization of the human right to water and sanitation;
- Assess governance tools according to equity, efficiency and sustainability outcomes.

4.1.3 Commitments

In an effort to address water-related governance gaps, a number of commitments emerged from the fruitful sessions and active debates held during the week, among which:

- OECD: Creation of a worldwide network of water governance leaders to support the implementation of target action plans and maintain continuity between World Water Fora (See more at: <http://www.solutionsforwater.org/commitments/network-of-water-governance-leaders-under-oecd-leadership>);

- SUEZ Environment: SUEZ will set up Governance Committees when new agreements are signed with cities with a population of over 300,000. In particular, these committees will formalise dialogue with the local stakeholders through overhauled methods of governance (See more at: <http://www.solutionsforwater.org/commitments/commitments-by-suez-environnement>).
- INBO: Signature of a “World Pact for Better Basin Management”, to involve all stakeholders in an integrated and joint approach, organized in cooperation with the river basin units and for the sustainable use of water resources (See more at: <http://www.solutionsforwater.org/commitments/world-pact-for-better-basin-management>);
- IWA: Creation of a stakeholders’ engagement taskforce to foster participation and consultation of stakeholders in the water sector;
- WIN/SIWI: Strengthening partnerships towards better integrity through the dissemination and implementation of water integrity and transparency tools;
- UNESCO: Engaging in the protection and sustainable management of groundwater resources with the development of a “Global Framework of Action”.

4.2 Financing Water for All (CS2)

Coordinators	European Investment Bank
Link to CS documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1081 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1051 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1107

Ensuring that sufficient financing is mobilised in order to reach ambitious targets and objectives for the water sector is absolutely critical. In many countries, the investments needed to deliver sustainable water and sanitation services, expand their coverage and upgrade service delivery to meet current social and environmental expectations, are huge. Throughout the world, the challenges of providing access to safe water and sanitation are further accentuated by increasing demands from other water uses due to factors such as population increase, pressures to increase food production, rapid urbanisation, degradation of water quality, and increasing uncertainty about water availability in the context of climate change. Addressing these challenges will require both large capital investments for new or upgraded infrastructure, on-going investments in operations and maintenance and funding of critical “soft” activities, such as governance reforms or capacity building.

The benefits from such investments for society are substantial. Yet, most systems are underfunded with dire consequences for water and sanitation users, especially the poorest.

4.2.1 Target outcomes

Strategic financial planning for water supply and sanitation

Target	<i>CS2.1: By 2015, a number of countries are aware of and have expressed support to the concept of strategic planning for WSS and most of these countries have engaged in the process of developing a strategic plan or have set a clear timeline for when to do this.</i>
Coordinators	OECD, World Bank
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=664
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=680

SFP is essential as we cannot afford to waste resources: too many projects are failing for lack of sustainable financing. Special attention should also be paid to improving service efficiency, so as to reduce costs while providing better service. The case of Zambia demonstrated that a long term plan of improving efficiency and increased metering led to improved financial sustainability, coming from both reduced unit costs and better access to revenues from different sources, including commercial sources. As stressed by the UNSGAB’s Special Advisor, local currency markets should be developed so as to mobilise financing from local sources (e.g. pension funds). The next steps to be taken include: a) creating a knowledge platform on strategic financial planning that will enable experience-sharing from all over the world in 2012; b) adopting SFP in the process of

providing financial support to the WSS sector in all major International Financial Institutions and a number of countries by 2014; and further developing the strategic financial planning toolkit in order to make it accessible in a cost-effective manner by 2015.

Financing of soft measures

Target	<i>CS2.2: By 2015, a number of countries allocate an agreed percentage of the resources identified through strategic financial planning to “Soft measures” (capacity building, project preparation, etc.)</i>
Coordinators	World Bank, Loughborough University Water Engineering and Development Centre (WEDC)
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=881
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=681

Just like every other activity, the water sector needs R&D, maintenance and marketing to ensure the sustainable development of the services. Investing in soft measures improves the chances that investments will be successfully implemented, generate sustainable services and effectively used by communities to generate economic dividends. The current lack of priority for investing in “soft measures” is partly explained by a lack of systematic evidence on their effectiveness. We do not know how much is being invested and towards what results. Effort still needs to be made to encourage the implementation of soft measures in most cases. Soft measures need to be included in the calculation and the costs need to be quantified. Incentives can be put in place to encourage more funding and the implementation of soft measures. Stakeholders present have committed to pay more attention to the issue.

Sustainable cost recovery

Target	<i>CS2.3: By 2015, 10 countries, cities or providers (at least 2 per region) have inscribed in their water policies the achievement of sustainable cost recovery through a combination of Tariffs, Tax-based subsidies, and Transfers from abroad (e.g. ODA, remittances) that is financially sustainable, reliable, and socially equitable</i>
Coordinators	European Investment Bank (EIB), International Water Association (IWA)
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=913
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=682

During the session it was emphasized that all parties must play their part and pay their bills. All costs of service provision must be clearly understood. The 3Ts (Taxes, Tariffs and Transfers) is an important tool that can be adopted according to the importance of each element. Not all 3Ts are equal: tariffs can generate the bulk of financing but they are still a controversial issue so tariff reform must be handled with care. Regulation (and regulators) can play an important role in achieving this difficult balancing act. The next steps include developing a glossary of key terms and drawing up a toolkit with key definitions concerning SCR endorsed by national and local governments, public and private sector providers (or their associations), regulators, consumer groups and financial institutions (public, private, international). Principles of Sustainable Cost Recovery should also be included in the process of providing financial support to the WSS sector by all major International Financial Institutions and a number of countries by 2014. Finally, a SCR toolkit will be prepared, in coordination with the SFP toolkit mentioned in Target CS2.1, by 2015.

Financing local stakeholders and local cooperation

Target	<i>CS2.4 (merged with 1.1.4): By 2015, more than half of countries in each continent having transferred competence in the water and/or sanitation sector to the local authorities will have set up a financial mechanism allowing direct access to financing to local authorities through (i) adequate and predictable flows of taxes and/or (ii) access</i>
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	<i>to repayable financing.</i>
Coordinators	International Secretariat for Water (ISW), Agence Française de Développement (AFD)
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=606
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=683

Giving the responsibility to local stakeholders for planning and managing the finances can be a way to i) foster additional financial resources and ii) improve governance of the water and sanitation service. The adequate integration of local stakeholders can contribute to better transparency, bankability and accountability which are key factors for success. Besides, in order to limit risks, financial decentralisation has to go hand in hand with i) clear roles and responsibilities of the various actors, ii) capacity strengthening in planning, coordination and management, iii) effective regulation and iv) monitoring. During the session, the milestones have been updated and follow-up actions have been included. Finally, participants stressed their willingness to further develop and scale up their experiences in the matter of:

- Basket funds for small towns and rural areas (eg. Nicaragua, AFD);
- Revolving funds and subsidy mechanisms for local authorities and water utilities (eg. Ethiopia, Colombia, AFD);
- Domestic private sector initiatives (eg. Laos, USAID, WSP, GRET);
- Specific financial products for the urban poor (Morocco, Véolia, Suez-Environnement);
- Financial and technical partnerships between local water stakeholders (eg. Grand Lyon, International Platform for Decentralized Solidarity Mechanisms).

Innovative financing for local stakeholders

Target	<i>CS2.5: By 2015, the resources mobilized through innovative financing mechanisms inspired and promoted by the "1% water and sanitation solidarity levy" have increased.</i>
Coordinators	UNDP
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=929
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=684

Whereas ODA never reached its objectives, Decentralised Solidarity Mechanisms (DSM) may provide an essential acceleration strategy to meet the Millennium Development Goals. On a voluntary basis, local governments (typically located in the North) agree to facilitate access to financial resources, capacity building and technology transfers as a gesture of solidarity and support to sub-national institutions and local governments (typically located in the South). They will need scaling-up, and this will require overcoming institutional and technical obstacles. To reach this objective, the group focused its efforts on two lines of actions:

- The establishment of the International Platform for the Promotion of Decentralized Solidarity Mechanisms in water and sanitation (IPPDSM). The specific objective of the IPPDSM is the development, diffusion, replication and scaling up of existing water and sanitation DSM;
- The promotion of DSM in the water and sanitation international agenda, leading to concrete commitments from key sector actors, including local authorities, national governments, specialized public agencies, private institutions and civil society organizations from the water and sanitation sector. These commitments will facilitate the creation of an enabling environment for the development of decentralized solidarity mechanisms.

Financing Water in an integrated approach

Target	<i>CS2.6: By 2015, OECD countries and 20% of other countries will have financing options to support (i) water resources management and to ensure the integrity and sustainability of ecosystem services and (ii) sustainable cost recovery for agricultural and irrigation water.</i>
Coordinators	Asian Development Bank (ADB), Artois-Picardie French Water Agency

Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=941
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=685

A number of solutions to attract new funds to support water policies were raised such as the promotion of private involvement in water management (Morocco) the payments for ecosystem services (China), Financing from Multiple Water Services (FAO) and Basin financing (Lao People’s Democratic Republic).

There were also suggestions about solutions to strengthen governance, as a condition for efficient financing such as integrated water rates (France), water markets and pricing (Australia, New South Wales).

Pro-poor finance solutions

Target	<i>CS2.7: By 2015, leading services providers, financing agencies and governments in 5 countries: a) are making use of financial and other incentives to provide sustainable water and sanitation services to low income consumers ; b) have mechanisms in place to ensure that capital maintenance and support costs are financed to ensure water and sanitation services that last to low income consumers.</i>
Coordinators	International Water and Sanitation Centre (IRC), Water and Sanitation for the Urban Poor (WSUP)
Link to Target documents	http://www.worldwaterforum6.org/fr/programme/detail/?tx_amswwf_pi2[uid]=957
Link to Solutions	http://www.solutionsforwater.org/solutions?solutions-filter-priority=49&solutions-filter-target=686

Six key solutions for achieving pro-poor financing of water and sanitation were presented at Marseille. Progress-Linked Finance was voted the most promising, but all six solutions can clearly make major contributions to pro-poor financing. In particular, there was clear consensus that life-cycle costing approaches are essential in water and sanitation investment planning. The next step requires leading services providers, financing agencies and governments in 5 countries to make use of financial and other incentives to provide sustainable water and sanitation services to low-income consumers, and to put in place mechanisms to ensure that capital maintenance and support costs are financed to ensure water and sanitation services that last to low income consumers.

4.2.2 Key messages

To foster the objective of financing water, all key messages were emphasized among stakeholders:

- Providing access to water services and preserving water resources requires adequate financing
- Governments and utilities should plan strategically and be financially realistic: investment plans should reflect available financial resources
- Costs should be covered from an adequate and sustainable mix of the 3Ts
- There can be no right to water without sustainable cost recovery
- Strengthening the capacity of governments and utilities is a key condition to attract investment
- Additional funding can be mobilised from new sources, including Decentralised Solidarity Mechanisms
- Concessionary funding should increasingly use progress-linked and/or output-based mechanisms that incentivise sustainable pro-poor services delivery
- Creation before the end of 2012 of a knowledge platform on strategic financial planning that will enable experience-sharing.
- By 2015, further develop the strategic financial planning toolkit to make it accessible in a cost-effective manner for countries that are resource or data poor, as well as make it useful for local authorities.

4.2.3 Commitments

In an effort to address water financing-related gaps, a number of commitments emerged from the fruitful sessions and active debates held during the week, among which:

- By 2014, all major International Financial Institutions and a number of countries have undertaken to include strategic financial planning as an integral part of the process of providing financial support to the WSS sector, consistent with the undertakings in CS2 Target 2 on “Financing Soft Measures”.
- By 2014, WSUP, IRC and key WASH institutions in 5 countries commit to adopt at-scale pro-poor progress-linked financing mechanisms tied to life-cycle costing.
- The Asian Development Bank Water commits to implement an Operational Plan 2011-2020 to foster adoption of the CS2.6 solutions and improved financing within the framework of the action plan to achieve the CS2.6 target (See more at: <http://www.solutionsforwater.org/commitments/foster-adoption-of-cs2-6-solutions>)
- By 2013, the United Nations Development Programme (UNDP), together with the Swiss Agency and the French Ministry of Foreign and European Affairs undertake to join forces for the development of the Global Water Solidarity (GWS) Programme dedicated to the promotion of Decentralized Solidarity Mechanisms (DSMs) (See more at: <http://www.solutionsforwater.org/commitments/global-water-solidarity>)

4.3 Enabling Environment (CS3)

Coordinators	UNESCO-IHE
Link to Solutions	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1277 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1288 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1316

The world is facing ever increasing and diversifying challenges to manage its limited water resources and ensure good water governance. Anthropogenic pressures due to an urbanising and growing population will impact on water resources and its fair use; natural changes and climate change will exacerbate an already delicate and complex situation. While it is clear that the implementation of water policy and the application of water management practices are at the forefront of addressing the above challenges; robust scientific knowledge, technological progress and education can and must provide the objective input that is needed to enable sound policy making, integrated governance and effective cross-sectoral management. These partnerships between scientists, policy-makers and on-the-ground actors allow a better understanding of complex multi-disciplinary challenges that call for new modes of relations between science and decision-making. In particular, a continuous transfer of knowledge must be actively involved in the formulation of research questions so that research remains policy-relevant.

4.3.1 Target outcomes

Science and Water Policy Interface

Target	<i>CS3.1 (merged with EU10): By 2015, design and implement a programme, including in developing countries, to improve the delivery of research for water governance with a view to increase capacity/strengthen leadership of decision makers at various levels through establishing effective science-policy interfaces</i>
Coordinators	French National Agency for Water and Aquatic Environments (ONEMA)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=545
Link to Solutions	http://worldwaterforum6.spisession.oieau.fr/index.html

Right to water information should go in parallel with the right to water but concerns remain on the gap between science and policies that urgently need to be filled. To this end, a broader recognition of the importance of knowledge brokers has to be done to reconcile research and policy. A solid international scientific community on water and the implementation of a process aiming to elaborate common research agenda would significantly help to deliver scientific information associated with uncertainties. Effective science-policy interfaces will help in updating guidance on effective research dissemination and up taking practices and instruments to support water policies. To this end it's recommended to encourage mix of communities and people, and public involvement and to encourage a reciprocal understanding between policy makers and scientists. Research dissemination and transfer should be improved and knowledge brokering

platforms and specialists should be established. Citizens should also be engaged in the process and be empowered to influence policies through the development of an online platform where innovation value chain should be inclusive from scientists to end users. Transfers between different geographic locations within consistent regions should be enhanced as well as mobility of people between research and policy domains.

Sustainable Solutions Through Water Education: Effective Strategies For Local Solutions Through Education of Children, Youth and Communities

Target	<i>CS3.2: By 2015, a programme is designed and implemented to ensure development and sustainability of vocational water training centres, in order to ensure implementation of a water technician and workers capacity building programme by 2020</i>
Coordinators	Water Education For Teacher, UNESCO-IHP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=731
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs-3-2-global-capacity-development-programme

Water education is a decisive point to empower individuals and communities in a context of global changes. But there are challenges and barriers to water education: curricula competition, literacy school attendance, exclusion of education process (vulnerable populations). Besides, many inadequacies remain in the learning approach. To fill those gaps, UNESCO and IUPAC set up the Global Water Experiment (GWE) which designed four simple, easy to do experiments made for and by young people that require no special chemicals or materials. The GWE has allowed the setting-up of an online-community to create, improve, and share content that should be massively diffused. Water education should strengthen water sector, and improve decision-making for sustainable development, because in today's world, most of the decisions is made outside the water sector. Evidently, water education is a long-life learning process; but under the UN decade for education to sustainable development, people have to be aware of the relationship between their health and water resources and so, become catalysts of change.

Sustainability of Vocational Water training centres/ Vocational Training, a Vital Tool For Boosting the Efficiency of Water and Sanitation Services

Target	<i>CS3.3: By 2015, a programme is designed and implemented to ensure development and sustainability of vocational water training centres, in order to ensure implementation of a water technician and workers capacity building programme by 2020</i>
Coordinators	International Network of Water Training Centres
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=743
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs-3-3-water-training-centers-global-network-of-water-professional-training

The sustainability of vocational trainings lies in three main actions. First, to integrate capacity building and development of vocational training in the water sector policies by bringing consistency based on the assessment of needs and defining terms of reference for training, with quantifiable requirements on quality. Second, to incorporate vocational training into human resources development strategies by defining some tools for assessments and performance indicators, supported by tailor-made processes should make possible the assessment of the training impact and the actual return on investment. Third, it is necessary to back up vocational training with sustainable financial mechanisms through the advocacy for sustainable financing of this sector. The pursuit of financial autonomy of water training centres, the creation of "earmarked Funds" at national levels for developing vocational training, and the inclusion of staff training in water operators' budgeting (public and private) at a minimum of 1% of the total wage bill should significantly improve the sustainability of vocational Water training centres.

Effective Water Education through Global and Integrated Knowledge Networks

Target	<i>CS3.4: By 2015, develop a globally validated comprehensive competency profile for water education along with the establishment, by 2020, of a global and integrated tertiary water education network by establishing and connecting water educational</i>
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	<i>institutions of higher learning in regions where the issues are, with a view of halving the number of water professionals to be trained to meet the international development goals</i>
Coordinators	UNESCO-IHE Institute for Water Education, UN-Water Decade Programme on Capacity Development (UNW-DPC)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=759
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs-3-4-globally-validated-competency-profile-and-water-education-network-for-professionals

Two issues appear when talking about developing countries and knowledge networks: a lack of well-educated water professionals, and the brain drain effect. Related to those issues, there is also a lack of good training institutions. Indeed, there is a concrete need to rethink the way water professionals are trained, insisting on technical competencies, but also on communication skills in order to bring water education to T-shaped competencies profiles. Particularly in developing countries, it is a huge necessity to build and retain capacities, and so for, to develop partnerships between training institutions. The global and regional level has to be taken into account given that those knowledge networks are considered as effective mechanisms but the success of networks will be achieved through ownership of developing countries in participation and funding as well as a focus on local conditions able to integrate committed local stakeholders. To facilitate the diffusion of knowledge in the coming years, platforms should be created where one can find, exact data, and education tools.

Effective Water Communications and Awareness Raising through Global and Integrated Networks

Target	<i>CS3.5: By 2015, strengthen and establish effective public awareness raising networks of professional actors and young professionals in the water and sanitation sector by appropriate PR campaigns on water issues using, inter alia, new social media and by improved geographical coverage as well as by better quality of information, respectively; Develop guidelines regarding communication on drinking water, sanitation, hygiene, food security, and health issues towards specific audiences using appropriate technologies</i>
Coordinators	UNESCO-IHE Institute for Water Education
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=780
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs3-5-effective-public-awareness-raising-networks-of-professionals

In today's world there is an increasing variety of useful channels, including new social media- available to create and sustain advocacy networks and campaigns. Formulating guidelines on communicating and reporting on water and sanitation issues can help professionals in the water field to use these channels effectively. A crucial element for communicating on water and establishing awareness raising networks is access to accurate and useful information. This requires not only high quality information that is publicly accessible, but also skills to find the right information. To find this information, it is essential to have an overview of "who does what?" in the water sector and to know which actor produces what kind of information. An online platform that provides such an overview would greatly contribute to improved communication of media professionals, communicators and other young professionals in the water field. Three main outputs and actions have to be implemented: an online open source water communication toolkit, an online water communication network, which can be a network of networks, and training session for water communicators.

A global Mechanism to Measure, Monitor and Share Scientific and Social Data

Target	<i>CS3.6: By 2020, set up a global mechanism to measure, monitor and share scientific and social data (on resources, access, treatment, cooperation, regulation, performance, footprints, financial flows...) at various levels and provide best practices and solutions to better inform policy making</i>
Coordinators	UNESCO WWAP, U.S. Army Corps of Engineers, Environmental and Water Resources Institute (EWRI)
Link to Target	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=792

documents	
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs-3-6-global-mechanism-to-measure-monitor-and-share-scientific-and-social-data

There is a perceived gap and lack of communication between data holders/producers and policy makers. Through a mediated approach, a bargaining process should begin where the parties shall eventually develop a consensus on what is needed, what can be offered and how the global mechanism to measure, monitor and share scientific and social data can be created, populated, and served to the users in the long run. The mediated approach will use a multi-criteria assessment where criteria will be selected (e.g., availability of data, scale, maintenance/management/storing cost, ease of production, etc.). As well, the heavy time constraint on deliverance of information has to be reduced in order to deliver to user at the time they need it. All parties agreed that unity is important in order to move forward on a global network, and should be favoured through a distributed system. In addition, authors need to change their style to think about how their text can be linked to other authors and contribute to shared information.

How to Characterize the Future for a Sustainable “Water World”?

Target	<i>CS3.7: By 2015, build a long-term vision, with appropriate scenario assessment toolkit including the development of relevant key global indicators, for water issues covering educational, technical, historical, ethical, social, economic, environmental and institutional aspects as well as those of cultural diversity.</i>
Coordinators	Global Water System Project International Project Office
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=940
Link to Solutions	http://www.solutionsforwater.org/objectifs/cs-3-7-long-term-scenario-assessment-toolkit-and-global-indicators

Building scenarios and assessment toolkits in the long run help in determining the water future. It should take into accounts all the relevant aspects of water education: technical, economic, scientific, institutional, cultural, etc. To this end, it is a necessity to involve all stakeholders, not only scientists, but actors from different fields of work. As long as water is mostly a local problem, it is also important to develop scenarios at several levels (global, national, and local). The so-developed scenarios are the basis of political decisions and they must be robust. To accomplish the previously stated goal, trade-off analyses must be integrated into scenario development, especially since it may facilitate dialogue with policy makers. Scenario building constitutes a very good academic tool to promote cross-disciplinary work and dialogue between different backgrounds. It may also involve younger generations in drafting and thinking about long term visions on given issues by improving and creating new generations of models.

4.3.2 Key messages

Since water education is a decisive point to empower individuals and communities in a context of global changes and challenges, the focus should be on access, training quality, and network improvement all over the world. Science-policy interfaces represent important supports in updating guidance on research dissemination and up taking practices and instruments to bolster water policies. At this moment, many gaps remain unfilled due to a lack of information (e.g., between data-holders and policy-makers, within water communication, within vocational trainings, inequality of data between developing and industrialised countries, etc.). International community believe online platforms would greatly contribute to improve communication at all scales, from media professionals, water communicators to other young professionals in the water field. In addition, there is a critical need to rethink how water professionals are trained in order to get consistent and complete competency profiles particularly through the integration of communication skills into technical trainings.

4.3.3 Commitments

- European Commission DG RTD will reinforce dissemination and exploitation of research results, including social science and involvement of citizens in research projects. They will also continue to support and engage in the water framework directive common implementation strategy science-policy interface activity, pledging for a more mature/permanent activity within the WFD CIS.

- UNESCO-IHE will facilitate the establishment of a Global Campus for Water Education and Research, which will strengthen the cooperation of many partners and increase the impact of water education and research in particular in the so-called Global South.
- UNESCO-IHP and French Water Academy commit to develop linkages between CS3.1 (SPI recommendations) and target 3.3.2 recommendations. A task force will be established to implement the recommendations of the Target 3.3.2, in coordination with WMO in particular on Global Framework of Climate Services (GFCS) effort
- UNU-INWEH commits to develop their “K Star” platform on knowledge brokerage
- UNEP: In collaboration with WHO and FAO to continue to work in dissemination of research results and support training for developing countries
- ONEMA will be active in water science-policy interface at 3 levels: at a global level (set up a dedicated mechanism, together with UNESCO), at the EU level (CIS–SPI mechanism together with DG RTD), at the national level (promote pilot and demonstration sites involving scientists and policy-makers)

III. Regional Process

Introduction

The Regional Process at the 6th World Water Forum highlighted the challenges, solutions and actions on water and sanitation in four continental regions, Africa, Americas, Asia-Pacific and Europe, and two cross-continental areas, the Mediterranean and Arab countries¹. The preparation process started about 15 months before the Forum. One representative regional organization was selected in each geographic or cross-continental region and the contact person was nominated as ‘Regional Coordinator’ (RC) or ‘Cross-Continental Coordinator’ (CCC).

Taking into account the results and messages from previous World Water Forums and other international and regional activities, stakeholders were mobilized and consulted to identify prioritised issues in the region and to elaborate SMART targets accordingly. 53 regional targets were finalized: 9 in Africa (AF), 11 in the Americas (AM), 8 in Asia-Pacific (AP), 12 in Europe (EU), 5 in the Arab countries (AR) and 8 in the Mediterranean (MED). Each target was coordinated by one organization playing a major role in target related activities while many other partner organizations joined the target working groups along the process.

The working groups aimed at achieving their targets through setting target action plans, seeking solutions to the identified issues, building up commitments, and following-up on the outcomes until the next Forum. A report per target and a synthesis per region were developed during the preparatory process and eventually finalised after the Forum to reflect the full process and outcomes. Besides the working groups, the grand public gained their access to contribute to the solutions through the online platform. By the time of the Forum around 450 solutions were published under the regional process.

To better monitor the regional process and assist the work of RC/CCCs and target groups, the IFC Secretariat together with the Regional Commission organised 5 regional process commission meetings, and 3 coordination meetings to enhance understanding and collaboration between the thematic and regional processes. Each region also organized on average 4-5 regional/sub-regional meetings for consultation, revision and adoption over the targets, solutions, and commitments.

At the Forum over 50 sessions were organized under the regional process at both target and regional level. Concrete commitments and projects that came out of the Forum are summarized in this chapter. While different needs and challenges were identified across the regions, several topics were also shared, including: 1) access to water and right to water; 2) contribute to cooperation and peace; 3) balance multiple uses through IWRM; 4) Contribute to food security; 5) respond to climate and global changes; 5) good governance; and 6) enabling environments.

1. The Africa Region

Coordinator	African Ministers Council on Water (AMCOW)
Link to Synthesis Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1255

The Africa Region process was built on the outcomes from the 5th World Water Forum, the 2nd and 3rd African Water Week, the roadmap for implementation of the Sharm el Sheik commitments, and the Africa Shared Water Vision 2025. Through the coordination of the African Ministers Council on Water (AMCOW), the Africa Region identified nine targets related to sanitation and drinking water supply, youth and gender, transboundary water resources, financing, water governance, information and knowledge management, sector learning as well as water security and climate change. While the region faces important challenges on access to safe water and proper sanitation, the political will for change has been strongly expressed. Notably the Ministerial declaration of “Partnership for Strengthening Water Security in Africa” was adopted at the Forum and financial support to the Rural Water Supply and Sanitation Initiative and the African Water Facility was committed by the AfDB and national governments.

¹ Hereafter “region” refers to the regional or cross-continental units of the regional process.

1.1 Target Outcomes

Each target identified through the Africa process is presented and summarised in a table. This includes the links to access the target reports and Forum session outputs (session reports, session presentation, etc.).

African Home-Grown Innovative Solutions for Water, Sanitation and Hygiene: Successful and Promising Solutions in Achieving the WASH MDGS in Africa

Target	<i>AF1: Develop and implement sanitation and water plans to bring back on track the underserved areas including post conflict countries, informal settlements and slums, rural communities, and small towns by 2015</i>
Coordinators	CREPA (Water and Sanitation for Africa-WSA)
Link to Target Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=498
Link to Solutions	http://www.solutionsforwater.org/objectifs/af1-develop-and-implement-sanitation-and-water-plans

In a continent where two-thirds of people have no adequate access to sanitation and where diarrhoea is the biggest killer of children under the age of five, this target focused on the implementation of water and sanitation plans in the context of urban development with special attention to the previously underserved areas. Follow-up recommendations include Water for African Cities implemented by UN-Habitat in Accra and analysis of workable approaches for Community Led Total Sanitation (CLTS) for sanitation in Africa being implemented by WSA. The participation of civil society during planning and preparation has encouraged more focused capacity building for Think Tank operations in advocating for home-grown solutions. The business model aims to scale-up urban sanitation services delivery to low-income areas and development of services in the underserved areas by improving pit-emptying services, low-cost sewers and sludge treatment. WSA and partners are currently supporting the National Sanitation Office of Senegal in structuring faecal sludge market for possible replication in Africa. This involves engaging the government and private sector such as the public private partnership in Rwanda rural water supply, as well as mapping out the different components of the sanitation value chain, and analysing how each component is linked to the others upstream and downstream.

Develop youth and water strategy by 2012 and AMCOW Gender Strategy implemented in all countries by 2015

Target	<i>AF2: Implementation of the AMCOW Policy and Strategy to mainstream gender in Africa's Water Sector by 2015; and development of an African Water and Youth Policy by 2012</i>
Coordinators	Global Water Partnership (GWP)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=504
Link to Solutions	http://www.solutionsforwater.org/objectifs/af2-develop-youth-and-water-strategy

This target recommends the integration of gender policy into policy planning frameworks of national governments, both in terms of strategic planning and resource allocation. It requires institutional mechanisms that involve human resources, policy, planning and implementation units of governments, as well as gender structures in related agencies such as statutory bodies and civil society. To implement the Gender Mainstreaming Strategy for the Water Sector in Africa, five processes and methods are required: 1) developing gender standards; 2) collecting and analysing sex and age disaggregated data; 3) capacity building with knowledge and skills on gender equality; 4) creating a roster of gender experts; 5) partnership building with diverse stakeholders. Regarding the development of the Youth and Water Policy within the AU and AMCOW, the working group will pursue its work along the recommended process: 1) identify issues of youth and water; 2) analyse policy choices; 3) develop policy instrument development including forming steering committees and preparing TORs; and 4) draft and adopt the policy.

Title	Towards a Wider Consensus on International Legal Frameworks of Shared Waters
Target	<i>AF3: Conduct regional dialogues on the 1997 UN Convention on International Watercourses and on the UNGA Resolution 63/124 on the Law of Transboundary Aquifers, and compile points of agreement and objections for wider consensus by 2015</i>
Coordinators	CEDARE
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=577
Link to Solutions	http://www.solutionsforwater.org/objectifs/af3-conduct-regional-dialogues-on-the-1997-un-convention

The challenge of a consensus on the international legal framework of shared waters has to be tackled in Africa given the high number (63) of transboundary basins in the region. Currently there are disagreements on the application of related hard laws such as the 1997 UN Convention Amendment vs. the 1997 UN Convention global ratification. But there are also common grounds: riparian countries need to develop IWRM strategies and proposals based on mutual agreement to realise equitable and reasonable use of shared water resources. Financial methods were proposed such as using regional banks as financial backing for shared water related projects. Dialogues between technical and legal experts should also take place immediately to bridge the gap of understanding. Both CEDARE and the Arab Water Council committed to facilitate dialogues to reach consensus on sensitive issues around the 1997 UN Convention. Besides a project is being developed between the Global Water Partnership (GWP), the Nile Basin Initiative and UNEP for mapping hotspots and “hospots” within the basin to define ecosystems-based adaptation options at all levels.

Centres of Excellence in Africa: Improving Water and Sanitation Services through the Use of Centers of Excellence Leading to Productivity and Growth in Africa

Target	<i>AF4: By 2015 establish five sub regional and ten national centres/networks of Excellence</i>
Coordinators	AfWA
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1282
Link to Solutions	http://www.solutionsforwater.org/objectifs/af4-establish-regional-and-national-networks-of-excellence

The African economy faces crucial needs in highly skilled technicians, engineers and researchers. Developing regional Centres or Networks of Excellence could play a major role in educating new professionals and in generating and adapting research and innovation. This target aims at identifying regional initiatives that have brought or will bring substantial innovation to high-level education as well as raise the attention and participation of a large spectrum of partners. Through gathering major stakeholders and enlightening successful initiatives, this target aims at establishing five sub-regional and ten national centres/networks of excellence within the next 3 years. Successful regional centres and networks of excellence, such as 2iE, NEPAD and AfWA, have already demonstrated their ability to create high level results in Science and Technology. These centres and networks should become key stakeholders in implementation of regional hubs. Monitoring of the target action plan will be carried out by the members of the core working group.

Advances in Financing of Water and Sanitation in Africa: Sharing Most Effective and Improved Financing Mechanisms

Target	<i>AF5: Develop and implement in all countries innovative financial mechanisms – including the 3Ts to meet the MDGs financial requirements by 2015</i>
Coordinators	AfDB
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=506
Link to Solutions	http://www.solutionsforwater.org/objectifs/af5-develop-and-implement-innovative-financial-mechanisms

While water financing directly and deeply affects the development of the water sector and its service delivery in Africa, most countries are still using a limited range of financial mechanisms. This target aims to contribute to closing the financing gap for achieving the water-related MDGs. This requires meeting three milestones: 1) the recognition by regional stakeholders that the development of strategic financing mechanisms are key to achieve sustainable development; 2) the endorsement by political leaders (by 2014); and 3) their actual implementation by African countries (by 2015). The African Development Bank together with AFUR, AfWA, ANEW and DWA are currently leading this three-step process. The main financing mechanisms being currently used are government allocations to executing agencies and utilities, water supply tariffs, ODA projects and IFI loans. A strategic financing framework is needed and should include a water financing policy; a strategic financial planning process; strategies and mechanisms to spend available resources better and to ensure that capacity to spend does not become a bottleneck; lastly a reliable countrywide financial information, monitoring and evaluation system. The implementation of such innovative financing mechanisms is heavily dependent on improvements in sector governance and management to ensure sustainability of services at affordable costs for the users.

Strengthening Africa’s Water Management Function at Sub-Regional Level: A High-Level Discussion among AMCOW’s Regional Partners

Target	<i>AF6: Create fully functional water divisions within RECs / AMCOW sub-regional Secretariats / organisations supported by resources pools by 2015</i>
Coordinators	GIZ, AUC and AMCOW
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=507
Link to Solutions	http://www.solutionsforwater.org/objectifs/af6-create-fully-functional-water-divisions-within-recs-amcow

Tangible benefits out of the technical and institutional solutions hardly trickle down to the community level owing to the weaknesses in the regional actors’ engagement. As a result most commitments and declaration are not translated into targeted and implementable action programme at regional, national and sub-national levels. This target therefore aims to develop an agreed inter-partner cooperatives governance approach and strategy outlining directions, methods and priorities for engagement in order to assure both the fulfilment of the Sharm-el-Sheikh Commitments and continuity of interventions beyond the triennial workplan. Particular focus was placed on mechanisms for joint planning and resources mobilization; monitoring, reporting and information exchange; and operationalisation of AMCOW sub-regional structures. The SADC Water Division offered to provide office space and contribute to the recruitment of a dedicated resource person to support the implementation of the action plan in the region. The outcomes of this target will thus form the basis for developing operational approaches ensuring both broader and active stakeholder involvement and engagement.

The Pan African Water and Sanitation M&E and Reporting on Sharm El Sheikh Commitments: Which Strategies for a Harmonized Mechanism to Report Progress at the African Union Summit?

Target	<i>AF7: Develop harmonized national, basin and regional knowledge management and water information mechanisms to support a harmonized methodology of M&E for the water sector in Africa and a pan-Africa state of the water report by 2015</i>
Coordinators	GIZ and AUC
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1304
Link to Solutions	http://www.solutionsforwater.org/objectifs/af7-develop-national-basin-and-regional-knowledge-management-and-water-information-mechanisms

This target supports efforts in implementing a pan-African monitoring and evaluation (M&E) initiative. The recommendations by the target working group are two-folds: i) harmonisation and linkages with existing solutions, and ii) specific recommendations to AMCOW as leading institution of the pan-African M&E process. The 6th World Water Forum offered a large platform to expose the pan-African M&E mechanisms worldwide and both benefited from synergies with similar initiatives and increased collaboration with international partners. The working group set an operational action plan: 1) By 2012, the 1st Continental Report on progress

in implementing the Sharm El Sheikh Commitments is produced in preparation of the AU Summit; 2) By 2013, harmonized water sector M&E and a reporting mechanism are put in place for a unique state of Water Report for the African Continent; 3) By 2015, national M&E systems are strengthened to allow systematic and regular water and sanitation reporting to the AU Summit; 4) By 2015, sub-regional and continental M&E systems are strengthened to be consistent and harmonized with countries M&E systems; and 5) By 2017, drawing from the M&E outcomes, compacts for updating national strategies and actions programmes to reach the African Water Vision 2025 are delivered.

Improving Governance of Water Resources in Africa: Legal and Institutional Reforms for Effective Governance in WSS and WRM

Target	<i>AF8: All African countries undertake legal and institutional reforms to ensure accountability, participatory, efficient and sustainable WSS and WRM at national (2015) and basin (2025).</i>
Coordinators	IUCN
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=508
Link to Solutions	http://www.solutionsforwater.org/objectifs/af8-undertake-legal-and-institutional-reforms

This target draws on the Africa Water Vision for 2025 calling for a new way of thinking about water and for a new form of regional cooperation. It focused on drinking water and sanitation, and the management of water. About half of the 63 international rivers in Africa are shared by three or more riparian countries and 10 basins are shared by four or more countries. While this calls for partnership and solidarity between countries sharing water basins at regional level, this also requires fundamental changes in policies, institutional arrangements and management practices at national level. This implies the adoption of participatory approaches, management at the lowest appropriate level, and mainstreaming of gender and youth issues. Public awareness, decentralization and participatory processes were presented as key factors of local scale and sustainable reforms. Both policies and strategies also have to adapt to the changing social context, mitigating policy reforms for the poorest and most vulnerable people. Successes based on local government leadership and utilities in sanitation are critical for the improvement and management of services. Therefore it is recognized that strong leadership, political stability and strategic aid modalities are the main levers for achieving large scale, systemic, and service access.

Water Security and Climate Resilient Development in Africa: Investments, Infrastructure and Institutional Solutions

Target	<i>AF9: Integrate water security and climate resilience into country national development plans and enhance African Water sector representation in the negotiation on climate change starting by COP 18 to ensure access to incremental funding by 2015</i>
Coordinators	GWP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=509
Link to Solutions	http://www.solutionsforwater.org/objectifs/af9-integrate-water-security-and-climate-resilience-into-national-development-plans

Climate variability increased by climate change lies behind much of the prevailing poverty, food insecurity, and weak economic growth in Africa today. This target recommends a range of climate adaptation strategies including: new financing strategies for enhancing water security and adaptation to climate change and creating solidarity between sectors for identifying new opportunities for no/low regret investments; transferring finance from environment and special climate funds to water sector development; developing local financing mechanisms; implementing action plan for Green Cities; developing data analysis and information sharing tools; mobilizing stakeholders and partnership at all levels and enhancing cooperation. The target working group advised the implementation of a “Framework for Water security and Climate Resilient Development”, a robust tool for identifying, prioritizing and integrating response measures to adapt to climate change. They also

recommended the development of monitoring processes and indicators measuring implementation progress and outcomes at short, medium and long term.

Special session: Partnership for Strengthening Water Security in Africa

High level meeting on the Rural Water Supply and Sanitation Initiative and the African Water Facility (closed session). This day-long session has brought together African finance and water ministers as well as development partners to discuss ways to enhance support for the development of the water and sanitation sector to ensure water security in Africa. Special attention was given to the Rural Water Supply and Sanitation Initiative, and the African Water Facility, two Africa-led initiatives that have made a significant contribution to the sector by promoting the attainment of the 2015 Millennium Development Goals and the African Water Vision 2025. Their success in mobilizing additional financing has stirred water project development in Africa, which has positively impacted the lives of millions of people across the continent. The conference has also provided an opportunity for African governments and development partners to reiterate their support for the two initiatives and to reconfirm their commitments to build water infrastructure and prioritize the provision of basic water and sanitation services targeting those most destitute, particularly in rural areas where the need is greatest.

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1244](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1244)

1.2 Key Messages

- Multiply the workable solutions that already exist;
- Establish a framework for pan-African Water Governance Systems and Management Structures;
- Ensure effective AMCOW leadership in Monitoring & Evaluation;
- Advance access to water and sanitation through multi-stakeholder dialogue at national scale. This includes:
 - Promoting the right to water and sanitation and adapt the legal instruments accordingly;
 - Developing high quality and just services for all with special attentions to the rural population;
 - Strengthening local capacities for service management and developing technology to produce locally materials and equipments needed for water and sanitation programmes;
 - Preparing for and managing water-related risks and crises;
 - Harmonizing energy and water;
 - Applying IWRM and an approach based on solidarity;
 - Improving governance and finance water for all.
- Regional communication and cooperation on transboundary water management;
- Consider the conservation of resources for future generations and enhance youth's involvement and contribution in the sector.

1.3 Commitments

- A project is being developed between the Global Water Partnership (GWP), the Nile Basin Initiative (NBI) and UNEP for mapping hotspots and "hopespots" within the basin to define ecosystems-based adaptation options at all levels.
- The representative of the Nile Basin Discourse (NBD) programme signed a memorandum of understanding with NBI to facilitate implementation of their proposed solution including bridging the Nile Information gap.
- The Climate Development Knowledge Network committed 500,000 € and the Austrian Development Agency committed 1.5 million € for Water Climate Development Programme (in total 12 million € of fund) implemented by GWP in support of AMCOW. See more details at:
<http://www.solutionsforwater.org/commitments/water-climate-development-programme-in-africa>
- The synthesis session presented a strong commitment by the Ministers of Finance and Ministers of Water to mobilize the required resources and make all necessary efforts to achieve MDG target for water supply and sanitation in Africa. See declaration at:
http://www.worldwaterforum6.org/uploads/tx_amswwf/RWSSI-AWF_Conference_Declaration.pdf

- Others institutions or countries committed during the Forum regional synthesis session:
 - AfDB agreed to increase significantly its financial support to Water and Sanitation programmes.
 - Representatives of Italy, Switzerland, Austria, South Africa, Nigeria agreed to provide resources to support water and sanitation programmes to Africa.
- AMCOW will assist in disseminating best practices and help monitor the commitments and milestones as a result of the Africa process as well as keep communicating the regional messages in the international activities.

2. The Americas Region

Coordinator	Intergovernmental Council of the IHP-UNESCO
Link to Synthesis Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1252

The Americas process identified 11 targets, ranging from access to water and sanitation for all, water and food security, water and energy, governance for IWRM, and quality of water resources and ecosystems. The vision built, during the regional process, shows a region that is water resource-privileged but inequitable, not only due to the distribution of its water resources in space and time, but also due to the level of development that countries have achieved in the management efficiency of these resources. The water related, political, economic and social diversity of the region offers a varied spectrum of challenges in water management that are faced from the perspective of different visions, offering a broad range of solutions, many of which were analysed within the framework of the 6th World Water Forum.

2.1 Target Outcomes

Each target identified through the Americas process is presented and summarised in a table. This includes the links to access the target reports and the Forum session outputs (session reports, session presentation, etc.).

Access to water and sanitation for all and the human right to water and sanitation in the Americas

Target	<i>AM1.1: Human Right to Water and Sanitation! And NOW What? Multi-stakeholder Dialogue on Implementation of the Human Right to Water and Sanitation</i>
Coordinators	Fresh Action Network
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=564?tx_amswwf_pi2[uid]=564
Link to Solutions	http://www.solutionsforwater.org/objectifs/am-1-1-by-2012-all-countries-in-americas-are-aware-of-the-declaration-of-water-and-sanitation-as-human-rights

“Ensuring universal access to water and sanitation” is a challenge the Latin America and Caribbean (LAC) region has been trying to reach for the past three decades. Although the adoption of the ‘Declaration on the Human Right to Water and Sanitation’ by the Assembly of the United Nations represents considerable progress, implementation of those rights at various scales remains a crucial step beyond. Some countries have already incorporated an explicit recognition of this right into their Constitutions: Mexico, Nicaragua, Uruguay, Bolivia, Ecuador and other like Paraguay and Costa Rica recognised it in other legal regulations. Nevertheless the vast majority of countries need to transpose this human right into their respective legal systems and to update their legal national frameworks. In particular they need to define an action plan that translates into the universalisation of drinking water and sanitation in an “adequate, safe, acceptable, physically accessible and financially affordable way”.

Universalisation of access to both water and sanitation in the Americas: challenges and directions to follow as well as innovative solutions and successful experiences towards this goal

Target	<i>AM1.2: Universalisation of access to both water and sanitation in the Americas: challenges and directions to follow as well as innovative solutions and successful experiences towards this goal</i>
Coordinators	ABDIB
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=567?tx_amswwf_pi2[uid]=567
Link to Solutions	http://www.solutionsforwater.org/objectifs/am1-2-by-2020-at-least-half-of-the-countries-have-decreased-the-existing-gap-in-access-to-water-services-and-to-wastewater-treated-by-50

The target is affordable, provided: 1) national commitments and related policies; 2) regulatory structure; 3) economies of scale and high quality management; 4) adequate tariff policies; and 5) public and private partnerships. The road map to reach this target requires an enabling environment, active governance and adequate financing. The list of commitments covers: more targeted subsidies for both expansion and tariffs to serve the low income areas; improving the sector financing, particularly adopting more results-based approaches and access to financial markets; implementing partnerships with the private sector (operators, investors) to increase sector capacity; improving sector governance (planning, regulation, corporate), in particular expediting the full implementation of the federal guidelines law at state and municipal level and stimulating modern corporate governance practices of service providers. A proposal for the water sector goals 2030 was made, supported by an estimate of associated costs and by a public policy framework and governance, based on the experience and good practices of the region.

Solutions from the Regional Policy Dialog (RPD) on Water and Climate Change adaptation in the Americas

Within the framework of a Regional Policy Dialog (RPD), more than 20 organisations in the Americas have come together to increase the technical understanding and knowledge of how best to adapt to climate change. They established a platform to share water-based adaptation experiences, honing this perspective down into a series of messages reaching outside the “water box”. Both targets have aimed to support the implementation of the 9 RPD’s public policy recommendations on water and climate change adaptation.

Targets	<i>AM2.1 & AM2.2: Top-down or bottom-up approaches to water-based climate change adaptation in the Americas: the chicken and egg syndrome</i>
Coordinators	CONAGUA and IADB
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=570?tx_amswwf_pi2[uid]=570 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=571?tx_amswwf_pi2[uid]=571
Link to Solutions	http://www.solutionsforwater.org/objectifs/am2-1-by-march-2012-carry-out-an-inventory-of-water-related-climate-change-adaptation-experiences-in-the-americas http://www.solutionsforwater.org/objectifs/am2-2-stimulate-specific-inclusion-of-water-resources-in-new-or-existing-national-and-local-adaptation-plans

The first target, on the ‘Inventory of Water and Adaptation Actions in the Americas’, aims to provide a platform for compiling information and sharing experiences on water-based adaptation activities in the Americas. The inventory of actions at the time of the Forum contained more than 100 actions from 90% of the countries of the Americas. Most of these actions focus on social aspects, rather than on infrastructure developments. The inventory will continue and expand with further actions. The second target focuses on the ‘Stimulation of national and local adaptation plans that consider water resources. Of the 18 countries that have provided information on the 2009 baseline, 13 considered none of the 5 criteria established, i.e. these countries do not consider water resources in their adaptation plans. Only one country considers 4 of the 5 criteria in 2009. Surveys to assess progress will be carried out for 2012 and 2015. Several actors in the region have made strong commitments. For example, 27 million USD for the creation of at least 32 additional water funds will be provided, the Prize for Water and Adaptation Actions has been launched, and new water reserves for the

environment will be established. The RPD commits to enhance proactive adaptation measures that take water resources as their starting point, as well as to support the integration of these measures into national development planning in a more coherent way. The conclusion was that neither the ‘chicken’ nor the ‘egg’, i.e. neither bottom-up nor top-down approaches, can be successful if applied in isolation.

Good governance to integrated water and resources management (IWRM)

Target	<i>AM3.1: By 2012, create a network of legislators and mobilise networks of journalists on water resources in the Americas to contribute to the consolidation of legal and institutional frameworks on water issues</i>
Coordinators	GWP-Central America
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=572?tx_amswwf_pi2[uid]=572
Link to Solutions	http://www.solutionsforwater.org/objectifs/am3-1-by-2012-create-a-network-of-legislators-and-mobilize-existing-journalists-netowrks-on-water-resources

In the Americas water governance is a key topic. The rule of law on water and its update is essential especially where countries have outdated or no water laws and are not in a position to respond efficiently to the complexity and diversity of water issues. This has limited or negative impacts on the implementation of integrated water resources management and reduces the chances to reach efficient cooperation between countries facing common regional challenges like transboundary water management. Good water governance requires up-to-date legal frameworks, robust institutions, financial strategies, participatory mechanisms and transparency. Experiences on these aspects should be shared and capitalised. Transferring these good practices involve an active role of journalists to facilitate understanding of citizens including stakeholders of political and legal fields. A manual oriented to water policy-makers providing major milestones related to water management at international level offers a good example as it can serve as a guide for their legislative work at national level.

Good governance to integrated water and resources management (IWRM)

Target	<i>AM3.2: By 2012, identify institutional reforms implemented by the countries in the Americas which take into account financial, environmental and social sustainability in water management</i>
Coordinators	GWP-Central America
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=573?tx_amswwf_pi2[uid]=573
Link to Solutions	http://www.solutionsforwater.org/objectifs/am3-2-identify-institutional-reforms-implemented-by-countries-that-consider-financial-environmental-and-social-sustianability

In the Americas water is a cross-cutting and priority issue related to access and sanitation, ecosystems, energy, food security, and climate change where good governance is fundamental. This means reviewing and strengthening legal frameworks, creating institutional mechanisms as well as coordinating water policy at the institutional level. In addition the participation of relevant social actors is essential in proposing consensual solutions in order to: i) access information through transparency and accountability principles at the different stages of participation, ii) recognize ancestral knowledge and customs and the wealth of communal ways of water management, and finally to iii) evaluate the efficiency or limits of the existing financial mechanisms. In other words, good governance in the water context is a fundamental requirement of efficiency. It means transparency, responsibility and accountability, inclusion, participation, coherence and responsiveness.

Contributing to food security by the optimal use of water

Target	<i>AM4.1: By 2015, increase the productivity of rainfed and irrigated agriculture lands in the Americas by 15% as compared to 2005-2007 baseline and such that by 2050 there is food security at affordable prices. Promote sustainable rural development</i>
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	<i>under increased need for food production.</i>
Coordinators	University of Nebraska
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=584?tx_amswwf_pi2[uid]=584
Link to Solutions	http://www.solutionsforwater.org/objectifs/am4-1-by-2015-increase-the-productivity-of-rainfed-and-irrigated-agricultural-lands

While irrigated agriculture uses about 70% of the total water withdrawal worldwide, the majority of large-scale irrigation systems are performing well below their potential. A number of these irrigation systems are still top-down agency-managed supply-based systems with dilapidated infrastructure that lack meaningful participation of water users in their governance. Proven systematic methodologies and approaches can be helpful in the identification of investments priorities, preparation of modernisation plans, and in developing national, regional, and the Americas capacities in irrigation modernisation. Appropriate small technologies produce significant returns and improvements in nutrition and daily lives of rural communities. Moreover there was a clear agreement on the need to gather precise and very localised data related to weather, soil conditions and cultural practices in order to provide guidance to producers and policy-makers. The solutions presented have demonstrated that efforts to improve productivity per unit of water need to take place at various scales, from the farm level to the national and basin level. The main stakeholders in the modernisation processes (governments, irrigation or drainage agencies, and farmers) would have to reach agreement on the activities, responsibilities and cost sharing in this modernisation process.

Contributing to food security by the optimal use of water

Target	<i>AM4.2: By 2020 increase the use of treated wastewater and/or low quality water in agriculture in the Americas by 25% as compared to the 2005-2007 baseline</i>
Coordinators	University of Nebraska
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=600?tx_amswwf_pi2[uid]=600
Link to Solutions	http://www.solutionsforwater.org/objectifs/am4-2-by-2020-increase-the-use-of-treated-wastewater-and-or-low-quality-water-in-agriculture

The technology for treating wastewater to the selected end use exists. For example: i) the treatment level for forage crops is considerably less than the one required by crops for human consumption; ii) a higher degree of treatment will be required for industrial reuse because of the requirements of the manufacturing process. Wastewater and/or low quality waters are currently used in many parts of the world and this use will continue to increase. It is important to follow guidelines to ensure human health. There are many good guidance documents available from WHO, FAO and other sources. The use of these waters applies to both low-tech and high-tech applications and it is used in urban and rural situations. The end use of wastewater determines the level of treatment required. Acceptance of the use of water reuse is achievable, but it requires a well-articulated communication plan to assure general public acceptance.

Harmonising Water and Energy: the Water-Energy Nexus in the Americas

Energy and water are inextricably linked and the development of clean and abundant sources of water depends on the availability of clean, affordable, and sustainable energy. Likewise, providing abundant and clean sources of energy depends on the availability of clean, affordable, and sustainable sources of water. However, energy and water resources are often planned for and managed separately, and their production and use are often at the expense of the environment. We must move away from ad-hoc or 'laissez-faire' planning and management to work towards long-term, integrated processes, in which these resources are recognized as all being interconnected.

Target	<i>AM5.1. Develop a water-energy nexus collaboration network AM5.2: Inventory of significant water and energy technologies, management systems, and practices and develop a water-energy roadmap for the Americas</i>
Coordinators	AWRA and Odebrecht
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1221?tx_amswwf_pi2[uid]=1221

Link to Solutions	AM5.1 : http://www.solutionsforwater.org/objectifs/am5-1-by-2012-develop-a-water-energy-nexus-collaboration-network-for-the-americas AM5.2 : http://www.solutionsforwater.org/objectifs/am5-2-by-2015-carry-out-inventory-of-water-and-energy-technologies-management-systems-and-practices
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The challenges associated with reaching out each country in the Americas to collaborate with water and energy related government representatives, professional associations, NGOs, the private sector, academicians, water and energy users, and other members of civil society are daunting. However information is communicated and shared throughout the Americas through the Internet. An on-line community is being developed through the Water-Energy Nexus Group of the Americas wiki (<http://wwf.awramedia.org/index.php?n=Main.HomePage>) and the Water-Energy Nexus discussion forum through the Target AM5.1. This has built a community educating one another on the link between water and energy resources, the potential opportunities and challenges associated with water-energy development, and the potential socioeconomic and environmental benefits and costs associated with water and energy development in the Americas. The community will engage in the collaborative development of sub-regional policies, guidelines and best-practices that promote sound water-energy policies and practices that recognize the interdependency between water and energy and promote the wise development and use of these resources in an environmentally responsible manner. Besides an inventory of significant water and energy technologies, management systems, and practices will be produced through Target AM5.2 and a water-energy roadmap for the Americas will be developed.

Improve the quality of water resources and ecosystems

Target	<i>AM6: Ecosystem services: green infrastructures that support Integrated Water Resource Management</i>
Coordinators	The Nature Conservancy
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=593?tx_amswwf_pi2[uid]=593
Link to Solutions	http://www.solutionsforwater.org/objectifs/am6-1-all-la-countries-implement-strategies-that-sustain-ecosystem-services-from-which-water-stewardship-directly-benefits

Ecosystems services are a critical component of Integrated Water Resource Management (IWRM). Efforts on establishing and enhancing capacity building, regulatory frameworks, and financial mechanisms help to mainstream ecosystem services within IWRM and encourage “south-south” cooperation and effective engagement of diverse stakeholders (private, public, communities, NGOs). Notably the innovative regulatory framework of Mexican Environmental Flow Standards will relate ecosystem services to IWRM. Communities can adapt and implement integrated practices such as environmental flows, or they can organize IWRM themselves to preserve the ecosystem. The value of ecosystem services should be assessed and has to take into account the knowledge of communities that have developed and implemented good water conservation practices. An increase of Latin America Water Funds partnership is also required to replicate and bring sustainable financial mechanisms that support nature conservation and assure water resource provision.

Universalisation of water and sanitation in Latin America

This special session was organized in addition to the target sessions. The main objective was to identify 4 different schemes of water and sanitation providers in the LAC region: a public company (EPM, Colombia), a mixed company (SABESP, Brazil), a private company (FOZ, Brazil), and a community organization for water and sanitation services (Bolivia) which represented nearly 80,000 organizations. The discussion also involved the participation of an international financial organization (such as IADB) and an international cooperation agency (such as AECID). It was concluded that no particular scheme is better than the other, given that each scheme develops from the settings and needs of the city or community. While it was clear that the objectives of the providers are different in terms of economic performance, all seek to improve the measurement of unaccounted water, and the greater use of technologies to improve water quality and investment for achieving 100% coverage. This is implemented with the common goal of reducing poverty and achieving a balance with the ecosystems. It was also noted that alliances are always important for these providers in order to fulfill their objectives.

2.2 Key Messages

- Develop programs to socialize the implication of the Human Right to Water and Sanitation;
- Update the national legal frameworks in order to recognize the Human Right to Water and Sanitation;
- Transfer information to journalists in a common language that is not technical;
- Gain political will for IWRM and training of parliamentarians;
- Acceptance of use of reuse water is achievable, but requires a well-articulated communication plan to assure general public acceptance;
- Understand and manage the water and energy nexus in an economically, environmentally and socially responsible manner;
- Continue and further develop the Water-Energy Nexus Group of the Americas Wiki and the Water-Energy Nexus Discussion Forum;
- Promote access to drinkable water and sanitation, adapting the mechanism to work directly with the communities, and continue working with social operators;
- Create a digital platform and a water training program for Latin American journalists;
- Create a manual oriented to water policy makers, which incorporates the major milestones related to water management at international level, as a guide for their legislative work at national level;
- Organize a water forum for journalists;
- A Water Commission in the 'Parlatino' (Latin America Parliament) will be created.

2.3 Commitments

- The Inter-American Development Bank committed to continue supporting the Americas process with finance, non-refundable technical support and promoting the dialogue for designing and implementing public policies for Human Right to Water and Sanitation.
- The winner of the Prize for Water and Adaptation Actions received 50,000 USD to upscale the winning activity, and report on progress for the 7th World Water Forum.
- The Latin American Alliance for Water Funds (formed by TNC, FEMSA Foundation, IDB and GEF) committed 27 million USD to create, implement and capitalize at least 32 Water Funds in Ecuador, Colombia, Peru, Brazil, Mexico and other countries in Latin America and the Caribbean. See details at: <http://www.solutionsforwater.org/commitments/latin-american-water-funds-partnership>
- CARICOM committed to implement a Climate Change Regional Framework to limit the effect of climate change on water resources.
- Several organisations (WWF, CONAGUA, IDB and the Gonzalo Rio Arronte Foundation) committed to create three new water reserves for the environment in Mexico.
- ANA Brazil indicated that situation rooms for extreme events warning, which have been established since 2009 at the federal level, will be established at the state level.
- CONAGUA and WWF committed to the creation of Mexican standard of environmental flows.

3. The Asia Pacific Region

Coordinator	Asia Pacific Water Forum (APWF)
Link to Synthesis Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1237

The Asia-Pacific regional process identified their priorities around the theme of water security: 1) satisfying household water and sanitation needs in all communities; 2) supporting productive economies in agriculture and industry; 3) developing vibrant, liveable cities and towns; 4) building resilient communities that can adapt to change; and 5) promoting IWRM as a tool. The Asia-Pacific process recommended developing a regional framework for actions on water and green growth that supports economic, food and water security at local, national and regional levels, including intensification of risk management strategies. Such a framework will

need to be based on national food security policies and will require regional monitoring on investment and outcomes.

3.1 Target Outcomes

Each target identified through the Asia-Pacific process is presented and summarised in a table. This includes the links to access the preparatory process reports and the Forum session outputs (session reports, session presentation, etc.).

Household Water Security in Asia-Pacific

Target	<i>AP1: Reduce by half the number of people who do not have access to safe drinking water and basic sanitation in our region by 2015 and to reduce that number to achieve universal and sustainable targets by 2025. On sanitation, this includes the adoption of new and innovative sanitation systems that are not as water reliant as current methods.</i>
Coordinators	ESCAP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=518
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap1-household-water-security

This target highlights the need for large investments to cover the poor and to achieve universal access to water and especially to sanitation in the Asia-Pacific region. Non-quantified and environmental benefits of sanitation require more research as good economic results do not guarantee thriving sanitation markets: financing mechanisms are needed. The leading organization of this target, ESCAP, committed to support the exchange of solutions and to analyse the policy elements contributing to the successful replication of these solutions. ESCAP will also focus capacity building on the far less achievable MDG target of universal access to sustainable sanitation by 2025, including consideration of wastewater treatments. A monitoring framework of access to water and sanitation will be created by taking into account reliability, affordability, convenience, and resilience to climate change. The participating NGO Energy, Environment and Development Society promised to refine and standardize the [Pan in the Van](#) approach developed by EEDS, for transfer and replication in other countries including the Pacific, and to extend technical assistance to other villages in India and abroad. SNU Rainwater Research Centre will continue research on RWH systems and SODIS improvement for application in more developing countries.

Towards a New Framework for Action on Water in Green Growth to Support Economic, Food and Water Security in Asia Pacific

Target	<i>AP2.1: By 2012, propose a framework for action on water in green growth in support of economic, food and water security that addresses local, national and regional action and could be included in the Forum's political declarations.</i>
Coordinators	FAO and ESCAP
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=523
Link to Solutions	http://www.solutionsforwater.org/objectifs/economic-food-and-water-security

The complexity of hunger and the volatility of food products call for a multi-sectoral approach to managing water in green growth. This target recommends new investments in water for food through climate-smart measures that consider both adaptation and mitigation. In addition governance of natural resources should be transparent and accountable, and the capacity of institutions needs to be enhanced. Many individuals and organizations have pledged their willingness and effort to support this target. For example, the Malaysian Water Partnership will encourage their Government to form a Government Dialogue Platform and a Public Stakeholder Dialogue platform for implementing IWRM in Malaysia. The International Network for Water and Ecosystem in Paddy Fields will promote monetary assessment on multi-functionality of paddy fields in related countries. The Centre for Training and International Cooperation (CTIC) will work towards establishing a Regional Training Centre for Water Resources Management. The Indian Oil Corporation Limited (IOCL) will work

towards sustainable development of India through Finger Millet production in rainfed areas.

Enabling Solidarity: Scaling-Up Local Financing Mechanisms in Asia-Pacific

Target	<i>Target AP2.2: By 2015, creation of a mechanism of financing for local government engaged in the realization of the target C of the objective 7 of the Millennium Development Goals: reduce by half the percentage of population having neither sustainable access to safe drinking water supply nor to basic purification services.</i>
Coordinators	UN-Habitat
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=524
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap6-financing

The “Decentralized Solidarity Mechanisms (DSM) for water and sanitation” initiated in Europe is a useful and effective way to address the challenges for achieving the water and sanitation MDGs in the Asia-Pacific region. The cases demonstrated that ‘Water Operators’ Partnerships’ (WOPs) is one of most effective ways to implement the project using the resources collected through the decentralized mechanism. These mechanisms can take different forms (e.g., legislation, platform) in different countries and the potential donor countries in Asia-Pacific are requested to think about the best ways to introduce this decentralized mechanism in the context of their countries including institutional frameworks, public awareness and opinions. Within UN-Habitat the Global Water Operators’ Partnerships Alliance will seek support of decision-makers for the establishment of decentralized water solidarity mechanisms towards the 2nd Asia-Pacific Water Summit.

Urban Water Security: Moving Towards Universal Access to Drinking Water and Sanitation by 2025

Target	<i>AP3: Reduce by half the number of people who do not have access to safe drinking water by 2015 and aim to reach universal and sustainable access to water and sanitation in the Asia-Pacific region by 2025.</i>
Coordinators	UN-Habitat
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=525
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap3-urban-water-security

Asia is a global sanitation ‘hot spot’: 72% of people lacking sanitation live in this continent, the largest numbers being in South-eastern Asia, followed by Eastern Asia. This target was identified considering the 2010 landmark Resolution of the UN General Assembly, declaring the right to safe and clean drinking water and sanitation as a human right. It proposes to base the urban water security strategy on efficient use of water through sustainable urban planning and design, and to scale the expected city growth and planning of basic water and sanitation networks. Urban water security can be improved through better understanding of service areas and coverage, improved water quality, increased operational efficiency, and better operation and monitoring of drinking water supply systems. The action plan covers the following areas: quality and NWR reduction, coverage, operational efficiencies and O&M system. For example Coca Cola-India committed to supporting [‘My School’ campaign](#), which will help create a holistic environment for children so that they remain in schools.

The Changing Perspectives on the Flood Risk Management Strategy in the Hindu Kush Himalayan Region

Target	<i>Target AP4: By 2015, to develop a strategic flood risk-management framework that engages emerging technologies and strengthens regional information systems for enhanced community resilience through appropriate policies and practices in the Himalayan region</i>
Coordinators	ICIMOD
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=526
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap4-water-risks-and-resilience

Nowadays climate change should be considered as ‘environmental change’. This calls for an ecosystem approach to disaster risk reduction and for an integrated approach to flood risk management. This target recommends a combination of structural and non-structural measures for flood risk management in the HKH region with a joint assessment method of risk through both vulnerability and impact. Disaster management plans should consider local knowledge along with scientific knowledge for flood forecasting and early warning, while information and communication technologies for early warning remain essential. The HKH region also needs a framework for cooperation on regional flood data and information. The leading organization ICIMOD committed to working with partners to develop, by 2015, a regional strategic flood risk management framework that embraces emerging technologies and strengthened regional information systems for enhanced community resilience and adaptation. This strategic framework will provide the basis for appropriate policies and practices in the region.

Water Education Centre for Sustainable Future: Meeting Challenges of Climate Change in Northeast Asia

Target	<i>AP5.1: By 2018, North-east Asia countries will have committed to establish and manage a training centre in North-east Asia responsive to water and climate change, which serves the purpose of research, education, and teacher training in North-east Asia.</i>
Coordinators	Korea Water Forum (KWF)
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=1283
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap5-iwrm-process-for-a-water-secure-world

For establishing this centre, investment and financial support with diverse related entities having balanced perception in ownership need to be discussed. A differentiated identity from existing international education centres and a long-term strategy considering the regional cooperative framework, monitoring system and water education tools is needed for the well responsive, customized regional education program. Incorporating water education into the regular school curriculum will promote practical action plans for the regional water education centre management. Teachers should also be provided with incentives such as earning certificates from the centre. The Korea Water Forum, Korean Ministry of Land, Transport, and Maritime Affairs, Project WET foundation and Green Future will foster construction of the platform for the Northeast Asian regional cooperative framework for education towards sustainable development.

Strengthen River Basin Governance in the Asia-Pacific to accelerate IWRM

Target	<i>AP5.2: Enhance capacity of River Basin Organizations to implement IWRM including adaptation to climate change.</i>
Coordinators	UNESCO
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=1284
Link to Solutions	http://www.solutionsforwater.org/objectifs/ap5-iwrm-process-for-a-water-secure-world-2

This target recommends positioning Integrated Water Resource Management (IWRM) in the context of the Green Economy. More precisely this has translated in establishing and implementing broad national IWRM plans and strategies which properly cover the following objectives: water related disaster management and environmental conservation; enhancing institutional framework for IWRM including that at the River Basin Level; facilitating dialogue between scientists and policy makers; accelerating capacity development for IWRM through international cooperation; strengthening science and research to understand the water cycle and its variability and climate change phenomena, including the creation of scientific research and institutional capacities in the poorer countries and dissemination of related data. The UN International Year for Water Cooperation in 2013 should be seized as an opportunity to promote transboundary cooperation for IWRM and to foster the inter-regional cooperation between Asia, Pacific and Africa. The target coordinators supported the creation of the Asia-Pacific Water Museum in Thailand to contribute to gathering and sharing available knowledge and information.

Input of Central Asia to the World Water Progress

Target	<i>AP6: Central Asia Sub-regional Target</i>
Coordinators	Scientific-Information Center of the Interstate Commission for Water Coordination, International Fund for the Aral Saving and GWP-CACENA
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=528
Link to Solutions	http://www.solutionsforwater.org/objectifs/cross-continent-central-asia

Central Asian countries face particular challenges due to climate change and the demographic, economic and social changes that are taking place. Notably the water resources management issues of the Amu Darya River need to be resolved, especially in light of the growing needs of Afghanistan. To address these issues, improved regional cooperation, improved data and its management, and an adaptive approach especially for climate change are needed. The Central Asia working group has committed to accelerating practical measures on the implementation of the Third Aral Sea Basin Programme (ASBP-3). The group will also prepare a strategy and an action plan to build institutional and legal frameworks on sustainability of large infrastructures in the region and joint activities on preventing and mitigating the consequences of flood, drought, avalanches and other extreme weather events. Lastly they will work towards introducing a regional collaborative plan of improved water productivity, with the goal of water saving in all economic sectors by 20-25%.

3.2 Key Messages

- Work together to develop leadership, build commitment, and encourage behavioural change among all stakeholders in order to achieve effective solutions to the region's current and future water challenges.
- Commit to increasing government investment alongside developing and implementing strategies to address risks associated with sustainability, financing, and climate change.
- Pay careful attention to the role of water governance, including leadership and commitment, the policy environment, legal and regulatory frameworks, based on the principles of accountability, participation, equity and transparency of financial information.
- Adopt innovative financial mechanisms in order to attract and retain potential investors in key water-related sectors.
- Sustain efforts in achieving the Millennium Development Goal (MDG) of halving the number of people who do not have access to safe drinking water by 2015 and to couple this with a greater focus on the poorest quintile of households.
- Hasten our progress in reducing by half the number of people who do not have access to basic sanitation by recognizing the importance of governance and adopting differential and locally appropriate solutions within an integrated water resource management framework.
- Commit to the Right to Water and Sanitation and give the highest priority to achieving universal and sustainable access to sanitation and drinking water by 2025.
- Take the necessary steps to improve economic, food and water security through water-based perspective review of broad social, economic, and environment objectives, intensifying appropriate risk management strategies based on national food security policies, and supporting the implementation of a regional system for monitoring investment and outcomes.
- Support green growth strategies while ensuring economic growth to alleviate poverty and achieve food and nutrition security. This requires improving understanding on the water, energy, and food nexus.
- Take measures to maintain the health of mountain areas which are the Earth's natural freshwater reservoirs and that more than half of humanity relies on for water to grow food, domestic uses, produce electricity, and sustain biological diversity. Ensure mountain areas receive special attention in the water-food-energy nexus discussions.

- Share experiences and lessons learnt regarding environmental flows and environmental water security among Asia-Pacific member countries in order to improve the health of ecosystems and support biodiversity, agriculture, energy, industry, and human development.
- Recognize the need and the ability of the region to support the development of communities and societies which are risk-resilient and adaptive to global changes and future water-related shocks such as floods, droughts, and water contamination.
- Recognise the important role of women and raise their profile in all water-related issues.
- Improve holistic water governance for sustainable development by implementing an effective IWRM process through effective coordination at regional, national, and river basin levels.
- Commit to improve water quality in the natural system by ensuring the release of fully treated wastewater.

3.3 Commitments

The target working groups endorsed the targets, solutions and messages that have been put forward under the 6th World Water Forum Asia-Pacific Regional Process. This will form the basis of the Message for the Second Asia-Pacific Water Summit to be held in 2013. The Asian Development Bank will release the 'Asia Water Development Outlook' report later this year to provide key messages for decision-makers.

4. The Europe Region

Coordinator	International Office for Water (IOWater)
Link to Synthesis Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1078

The Europe regional process selected 12 targets from a wide range of water related issues including economic activities (agriculture, inland navigation and energy), the environment (ecosystems health and climate change), international cooperation, improving financing and access to water and sanitation services, science policy interface and knowledge sharing. Among these targets, the Water Framework Directive (WFD) was often emphasised as an overriding factor for water quality improvements within the European Community. The European Union Water Initiative (EUWI) and the UNECE Water Convention were highlighted for their 10th and 20th anniversary as well as for their leading role in, respectively, strengthening European transboundary cooperation and enhancing worldwide development assistance.

4.1 Target Outcomes

Each target identified through the Europe process is presented and summarised in a table. This includes the links to access the preparatory process reports and the Forum session outputs (session reports, session presentation, etc.).

Transboundary water cooperation: towards a borderless improvement of water management

Target	<i>EU1: By 2015, in the UNECE region, (1) new agreements on transboundary basins in the UNECE region are signed and implemented, and new joint bodies are created, and (2) the implementation and compliance with the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention) have improved, with new Parties to the Conventions.</i>
Coordinators	United Nations Economic Commission for Europe (UNECE) Swiss Federal Office for the Environment
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=529
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu1-good-practices-for-transboundary-water-cooperation-in-europe

For 20 years, the UNECE Water Convention has proved to play a crucial role in the pan-European region in supporting the establishment and strengthening of cooperation. The amendments expected in 2012 will transform the Water Convention into a global legal framework for transboundary water cooperation. The 6th World Water Forum has promoted good practices and sharing of experiences aiming at gathering commitments on transboundary water cooperation in Europe. Examples are provided through the links above.

Achieving good status of Europe water resources

Target	<i>EU2: By 2027, In the European Union and beyond, achieve a good ecological status of water bodies.</i>
Coordinators	European Commission Environment Directorate-General - DG Environment International Office for Water - IOWater
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=530
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu2-achieving-good-status-of-europes-water-resources

The Water Framework Directive (WFD, 2000) has set a priority to the EU Member States: the achievement of the good status of European water bodies by 2027. Despite progress in the improvement of biological and chemical water quality, implementation is generally weak and Member States have expressed concerns on challenges such as the cost of the measures, the lack of integration with other directives and sectoral policies, and the lack of funding. Throughout the 6th World Water Forum process, major commitments focused on: ensuring effective application of consumption-based water pricing; improving consistency of agriculture, energy, chemicals and transport policies with water policy and consistency between priorities for regional and agricultural funding and water policy objectives; integrating quantitative management of water resources and guaranteeing water to maintain water related ecosystems; and better exploiting results from research and innovation for water management.

Adapting to climate change in Europe

Target	<i>EU3: By 2020, in the Pan-European region, most governments and transboundary basins have developed (transboundary) climate change adaptation strategies and are implementing them.</i>
Coordinators	United Nations Economic Commission for Europe (UNECE) European Commission Climate Action Directorate-General - DG Climate Action International Commission of the Scheldt
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1158
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu3-adapting-to-climate-change-in-europe

While climate change vulnerabilities vary greatly across Europe, the impacts are expected to increase in magnitude and frequency throughout the continent. Successful adaptation requires mainstreaming climate change into related policies such as agriculture, energy and transport policies. In addition adaptation requires cross-sectoral and transboundary cooperation as well as further strengthening of vertical cooperation between different institutional levels that is, UNECE, EU, national and sub-national levels. Many good and successful adaptation strategies and solutions exist, but they need to be widely available. The major commitments include: the launch (23 March 2012) and further development of “CLIMATE-ADAPT” formerly known as the “EU Clearing house Mechanism” by the EU; further supporting countries in jointly developing and implementing adaptation strategies in transboundary basins by UNECE; and increasing the proportion of climate-related expenditure to at least 20% of the total future EU budget (2014-2020) proposed by the EC.

Developing a water friendly agriculture

Target	<i>EU4: By 2030, enable farmers to adopt best practices and achieve a water-friendly agriculture, particularly through research and innovation, in order to adapt to</i>
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	<i>climate changes and to meet the food needs of a growing population.</i>
Coordinators	French Agriculture Council
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=531
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu4-develop-a-water-friendly-european-agriculture

Solutions for reducing pollution or saving renewable water resources can be consistent with energy savings. The major commitments on this target include: developing innovative partnerships with the private sector for sustainable agriculture and improved technologies leading to better water quality and enhanced efficiency; promoting treated waste water reuse for agriculture as a reliable means to decrease pressure on limited or threatened water resources; strengthening research and innovation related to drought resistance and adaptation to climate change; improving the agriculture water footprint especially in water scarce regions; upgrading water savings and developing new water resources (water storage, non-conventional water, etc.).

Inland waterways, a multi-usage network

Target	<i>EU5: Promote better coordination between transport and water policies in relation with inland navigation in Europe.</i>
Coordinators	Voies Navigables de France - VNF
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=535
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu5-inland-waterways-a-multi-usage-network

Given the growing attention to carbon and supply chain footprint, inland navigation is seen as the alternative to road transport as it is capable of meeting the massification challenge in an environmentally, credible and economically viable manner. Waterways are undergoing a major mutation to guarantee the coordinated development of every waterway uses. The NAIADES Programme (Navigation and Inland Waterway Action and Development in Europe) (2006-2013) focused on five different aspects of inland navigation: market, fleet, jobs and skills, image and infrastructure. It is planned to end in 2013 in spite of the tremendous remaining challenges such as removing bottlenecks, establishing intermodal connections from sea and inland ports to the hinterland, modernizing the fleet, and further developing the River Information Services. Intensified cooperation between stakeholders (European Commission, Member States, River Commissions, UNECE and navigation sector) is essential to overcome the identified shortcomings.

Sustainable hydropower

Target	<i>EU6: Better coordinate water and renewable energy policies.</i>
Coordinators	EURELECTRIC
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[luid]=540
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu6-sustainable-hydropower

Hydropower production may be the most striking example of strong interdependences between the water and energy sectors. While hydropower is a climate efficient renewable energy source, its production is in competition with other water uses (fishing, navigation, agriculture, recreation) and the most significant challenge is probably environmental. While the quality and quantity of water resources and water-associated ecosystems are affected by hydropower infrastructures, both up and downstream, incentives need to be provided to electricity operators to mitigate environmental impacts and improve implementation of the WFD. Environmental, economic and energy targets also need to be balanced across scales in order to address water management issues at the local, regional and river basin level whereas electricity is generally sold at national and European level. Further work is needed on the role of hydropower in adaptation to climate change. Many solutions to improve hydropower sustainability exist but most are site-specific and difficult to transfer from a region to another.

The importance of access to water and sanitation for the European underprivileged population

Target	<i>EU7: Improve the European services and equitable access to water and sanitation for the underprivileged populations.</i>
Coordinators	Solidarity Water Europe
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=542
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu7-the-importance-of-access-to-drinking-water-and-sanitation-for-european-vulnerable-populations

Access to improved services in the water and sanitation sector in Europe has worsened for the last 20 years since the gap between Western and Eastern Europe has widened. Left behind in the pan-European region are 12% of population, i.e. nearly 100 million people who do not have access to safe drinking water. The best practices have been reported in the UNECE/Ministry of Labour, Employment and Health of France's publication 'No one left behind' that promotes public policies and special measures to ensure affordability of water and sanitation for all. The fulfilment of the right to water and sanitation requires a holistic approach in order to address other related issues (e.g., adequate housing). Empowerment is also required, through public participation, enhancement of community-based organisation and increasing access to information. It is recommended to have in mind that efficient use of water is the primary way to solve many problems of access to water and sanitation. In any case there is no single solution and existing solutions must be adapted to other regions.

Promoting sustainable financing of water and sanitation: Applying the "3Ts" framework (Tariffs, Taxes and Transfers) in Europe

Target	<i>EU8: Better manage drinking water supply and sanitation utilities in Europe and promote "public-public and public-private" partnerships, socially acceptable water pricing, industrial and commercial management.</i>
Coordinators	EUREAU
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=544
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu7-promoting-sustainable-financing-of-water-and-sanitation-applying-the-3tsframework-tariffs-taxes-and-transfers

Relying on public funds or donors aids on a permanent basis is not consistent with the principle of sustainability of water services, and price policies and tariff structures have to incorporate a return on capital, consistent with the principle of 'full cost recovery'. The 3Ts framework represents a powerful tool in unlocking our understanding of the sources of funds which underpin a sustainable future. Sustainable cost recovery (SCR) looks beyond full recovery from tariffs and requires understanding of multiple policy objectives taking account of diverse environmental, social and economic situations. An appropriate mix of Tariffs, Taxes and Transfers is therefore essential to finance capital and recurrent costs in the long run, and leverage other forms of finance (equity, loans, and bonds).

Protecting and restoring river ecosystems

Target	<i>EU9: Inspiring solutions for delivering commitments for restoring healthy river and wetland ecosystem functions and services by examining European best practices. How these might be delivered and supported through strategic land use planning, sustainable tourism, stakeholder involvement and public education.</i>
Coordinators	European Centre for River Restoration
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1130
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu8-protection-and-restoration-of-river-ecosystems

This target group emphasised that improvement of rivers health and restoration of wetland ecosystems functions can be delivered or supported through strategic land use planning, sustainable tourism, and public and youth education with the application of best practice approaches and experiences of ecological, hydro-morphological and socio-economic river restoration. Various organisations committed to: best practices of river restoration (ECRR/RESTORE), strategic land use planning (GWP, Dutch Government Service for Land and Water Management DLG), public education and awareness raising (ICPDR), land use best practices (DLG and Ukrainian Institute of Water Problems and Land Reclamation), and communication and information (EWA, INBO and ECRR). Furthermore the Arpa basin in Armenia and the Rhône Basin in France confirmed to take part with other basins to follow up the process of implementing river restoration plans in their integrated river basin management. Wetlands International pledged to support achievement of the target through maintaining an active network, supporting exchange of technical information and communication, and influencing the EU policies and implementation of Directives for enhanced river restoration.

Promoting technology innovation, Science-Policy interface and dialogue between researchers and water managers

Target	<i>Target EU10 (merged with Target CS3): To develop a leadership in science-policy interface and dialogue between researchers and water managers, technology innovation, dissemination and exploitation of research results for European growth and competitiveness by 2020.</i>
Coordinators	European Commission Research Directorate-General - DG Research International Office for Water - IOWater
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=545
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu10-science-and-water-policy-interface-when-science-and-innovation-meet-water-policy

It is recommended to widen public involvement, mix of communities (researchers, decisions makers). Research dissemination and transfer should be improved. Knowledge brokering platforms and specialists should be established. In terms of commitments, the WFD implementation strategy of science-policy interface will continue with the support of the European Commission DG-RTD to the common implementation strategy (CIS) science-policy interface activity. DG-RTD will include social sciences and involvement of citizens in research projects and reinforce dissemination and exploitation of results. UNU-INWEH will develop the “K Star” platform on knowledge brokerage. The recommendations of the thematic target 3.3.2 (led by UNESCO-IHP & French Water Academy) will be implemented by a taskforce (in coordination with WMO in particular on Global Framework of Climate Services - GFCS efforts) and linked to those of CS3.1/EU10. UNEP, WHO and FAO, will pursue dissemination of research results and support training for developing countries. ONEMA will develop Science-Policy interface with UNESCO, DG RTD and scientists and policy-makers respectively at global, regional and national levels.

Getting Specific: Adapting Water Policy and Legislation to the Specificities of European Outermost Regions

Target	<i>EU11: Adapt water management to the specificities of European Outermost Regions (OMRs)</i>
Coordinators	Martinique Water Agency
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=549
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu11-adapting-water-management-to-the-specificities-of-european-outermost-regions

Implementation of the WFD in the European Outermost Regions (OMRs) revealed the significant deficit in resources and knowledge on OMRs specific environments. Resources shall be mobilised amongst international, European and national funding organisations while creating the conditions for a fair contribution of local authorities. Involvement and assertiveness at the highest political level of regional authorities will be fostered in order to not only sustain the ‘basins islands’ networks, but also to take into account specificities of OMRs and other basins islands with R&D efforts on aquatic environments monitoring in such territories and ahead of the adoption of legal and budgetary frameworks. Development of research was agreed by the Water Office of

Martinique and its OMRs counterparts together with ONEMA, Irstea and IRD as pioneer partners. The creation of a network of basin islands dedicated to share and pool expertise, good practices and innovations was promoted, as well as financial supports for infrastructure development and implementation of directives. The six French water agencies formally committed, jointly with ONEMA, to additional funding in French overseas through inter-basin solidarity, up to € 20 million per year.

EU cooperation with third countries in the water field

Target	<i>EU12: Develop European cooperation with Third Countries in the water field.</i>
Coordinators	European Commission Development and Cooperation Directorate-General - DG Development and Cooperation
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1158
Link to Solutions	http://www.solutionsforwater.org/objectifs/eu12-develop-european-cooperation-with-third-world-countries-in-the-water-field

There is a clear agreement that the EU Water Initiative has been a successful political platform for the European Union to collectively cooperate with the non-EU countries. This target proposed that the renewed European Water Initiative (EUWI) implements good practices to build a coherent framework. The new partnership with Caribbean regions and Asia is proposed besides continuation of its existing collaboration with the regions of Africa, EECA, Latin America, and Mediterranean. On another end the EU-China Water Platform is being intensely developed. Suggestions for strengthened cooperation included: a third replenishment of ACP-EU Water Facility under the 11th European Development Fund in order to facilitate actions in the countries where water is not prioritized in National Indicative Programs; the grant/loan blending opportunities such as the cooperation with the African Development Fund; emphasis of the nexus approach when engaging with EU development support to energy and agriculture priorities; adoption of the Human Rights-Based Approach to WASH.

4.2 Key Messages

- Management of European water bodies at basin level: ensure cooperation and peace, promote economic development, prevent risks, achieve good status of water bodies and adapt to climate change;
- Multiple water uses for economic development and health of Europeans: urban and rural water, agricultural water, industrial water, hydropower, inland navigation, fisheries and fish farming, domestic tourism;
- Towards green and blue growth: increasing knowledge, fostering innovation and building capacity to protect and restore aquatic ecosystems and develop natural infrastructure;
- Cooperation: strengthening European cooperation for better water management on a pan-European scale and with all countries worldwide.

In particular, the following actions are required:

- Improved implementation of the EU water policy and in particular the Water Framework Directive in particular;
- A stronger legal basis for tackling problems of water scarcity and droughts;
- Addressing ecosystem services more systematically within the water policy;
- Increasing coherence with the European Common Agriculture Policy as well as regional renewable energy and transport policies,
- Enhancing coherence with chemical, pesticides, and pharmaceuticals policies on issues such as risk assessment methods,
- Strengthening analysis of the costs and benefits of water protection measures.

4.3 Commitments

The major commitments expressed by various organisation representatives are summarised as follows:

- UNECE, OECD and several European countries (Czech Republic, Finland, Georgia, Germany, Hungary, Republic of Moldova, Switzerland): implementation of the 'Astana Water Action' (AWA), a collection

of possible actions for improving the status of water and water-related ecosystems in relation to climate change and extreme weather events. See details at:

<http://www.solutionsforwater.org/commitments/astana-water-action>

- UNECE: implementation of recent transboundary water management agreements, including the MoU 'Towards the implementation of the integrated Tisza River Basin Management Plan' (Ukraine) and the 'Shared Strategic Vision of the Drin Basin' (Albania);
- South Caucasus riparian countries: signature of the MoU between Armenia, Georgia and Azerbaijan with REC Caucasus for water management transboundary cooperation in the Kura-Aras River Basin;
- UNECE: new ratification of the UNECE Water Convention and its amendment opening it to countries outside the UNECE region;
- EU: integration of policy options and recommendations of the Fitness check for the Blueprint exercise, for implementation throughout the second cycle of RBMPs and completion by 2021;
- Eastern Europe, Caucasus and Central Asia: National policy dialogues on IWRM and water supply and sanitation (WSS) under the European Union Water Initiative Component;
- ONEMA (Office National de l'Eau et des Milieux Aquatiques): investment of € 10 million per year to support research and development on water resources and management;
- EU-China River Basin Management Programme: launch and implementation of the 'EU-China water platform'. The platform will provide an institutional framework for dialogue, exchange of best practices and collaboration between professionals of the EU and China water sectors;
- Martinique Water Agency of the Europe Outermost Regions (OMRs): creation of the 'Island-Basins Network'. This network will provide an institutional basis for developing exchange of knowledge and good practices and for strengthened cooperation between island-basins;
- French water agencies: by way of response to the request issued by the UN General Assembly (Resolution of 26 July 2010), water agencies undertake to allocate 1% of their perennial annual financial resources to cooperation actions in the fields of water and sanitation by 2015 (or € 20 millions per year). See details at:
<http://www.solutionsforwater.org/commitments/the-water-agencies-undertake-to-pursue-the-implementation-of-the-right-to-water-and-sanitation-at-national-and-international-levels>
- French water agencies and pS-Eau: implementation of a strategy to extend the 1% practice in European countries by 2015.
- Initiated by the International Network of Basin Organisations (RIOB), the World Pact for better basin management has been signed by more than a hundred organisations. See details at:
<http://www.solutionsforwater.org/commitments/world-pact-for-better-basin-management>

5. The Arab Cross-continental Process

Coordinator	Arab Coordination Committee for the 6th World Water Forum
Link to Synthesis Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1160

While facing acute water scarcity issues the Arab countries are proactively seeking solutions to address this daunting water resource problem. The establishment of the Arab Ministerial Water Council (AMWC) by the League of Arab States in 2009 reflects a regional political will to carry out technical debates on water to a political scale. This allows a better recognition of water issues as playing a crucial role in sustainable development. The resolution of the first Arab Economic and Social Development Summit (Kuwait, 19-20 January 2009) mandated the AMWC to prepare a regional Strategy for Water Security in the Arab Region, that the Arab Summit adopted in 2012. The Strategy includes a wide range of water-related issues covering most of the components and principles of integrated water resources management. Five priority projects were proposed to be funded and implemented within the Strategy framework. They formed the basis of the five targets of the Arab cross-continental process for the 6th World Water Forum.

5.1 Target outcomes

Each target identified through the Arab countries process is presented and summarised in a table. This includes the links to access the preparatory process reports and the Forum session outputs (session reports, session presentation, etc.).

Increasing Water Use Efficiency to Cope With Mounting Challenges in the Arab Countries

Target	<i>AR1: By 2020, raising water use efficiency by 20 to 40 % for meeting increased water demand and ensuring water and food security for facing the future challenges in accordance with the available water resources and the principals of sustainable development.</i>
Coordinators	Arab Water Council
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=568?tx_amswwf_pi2[uid]=568
Link to Solutions	http://www.solutionsforwater.org/objectifs/1-in-the-medium-term-by-2020-raising-water-use-efficiency-by-15-to-25-for-meeting-increased-water-demand-and-ensuring-water-and-food-security-for-facing-the-future-challenges-in-accordance-with

Recognising that investment in increasing water use efficiency is the no-regret option, national and regional water saving strategies as well as technologies, management and awareness measures have been adopted by the Arab countries. This target working group argues that water pricing contributes to enhancing water use efficiency, and agricultural subsidies should be incentives for farmers to improve water use efficiency while increasing production. In addition many technologies increasing such efficiency exist but they call for technology transfer, incentives to farmers and proper extension. The session announced the plan to establish a Regional Steering Committee charged to oversee the implementation of the water saving agreement. This Committee will include members from governments, user associations, development agencies, and other experts. It will establish a monitoring mechanism taking into account quantifiable indicators for annual reporting on actual water savings, and it will create a network for knowledge sharing and dissemination.

Integrated Policies to Secure Water for All Sectors, with Special Emphasis on Achieving the Water and Sanitation MDG in the Arab countries – ESCWA

Target	<i>AR2: Adoption, in the short term (by 2015), of integrated water policies which secure water for all sectors to achieve a maximum socioeconomic benefits and insure the implementation of the millennium development goals.</i>
Coordinators	UNESCWA
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=574?tx_amswwf_pi2[uid]=574
Link to Solutions	http://www.solutionsforwater.org/objectifs/2-adoption-in-the-short-term-by-2015-of-integrated-water-policies-which-secure-water-for-all-sectors-to-achieve-a-maximum-socioeconomic-benefits-and-insure-the-implementation-of-the-millennium

To secure water for all sectors, the role of technological progress was highlighted, especially water desalination. The development of decision-support systems for IWRM, stakeholder participation, water legislation and institutional reform of the water sector were planned in the target action plan. Concerning the achievement of the water and sanitation MDG, the UN-ESCWA committed to implement the MDG+ initiative of the Arab Ministerial Water Council, with the financial support of SIDA. From another perspective the effectiveness of traditional water management systems attracted much attention, not only the ingenuity of the technical aspects but also the administrative and managerial aspects. Traditional water structures and management systems have high level of adaptability to water scarcity and need to be reconsidered as viable contributions to water management. In this regard traditional systems should be linked with technological advances, research and development.

Bridging the Water Gap in the Arab Region: the Promise of Desalination, Water Reuse and Renewable Energy

Target	<i>AR3: By 2020, develop alternative and practical solutions for using non-conventional water resources with focus on the use of renewable energy in water desalination and water treatment for meeting the increasing water demand in the Arab Region.</i>
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Coordinators	Arab Water Academy
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=575?tx_amswwf_pi2[uid]=575
Link to Solutions	http://www.solutionsforwater.org/objectifs/3-develop-in-the-medium-term-by-2020-alternative-and-practical-solutions-for-using-non-conventional-water-with-focusing-on-the-use-of-renewable-energy-in-water-desalination-and-water-treatment-f

Although the Arab region is the world's leader in desalination capacity, it is mainly relying on imported technology. Desalination is generally expensive, energy-consuming and has environmental impacts. A shift to membrane technologies is thus needed as well as research progress on impacts of desalination plants on marine life. This target also calls for the development of local desalination technology and manufacturing industry notably by investing in Research and Development, in particular in the water-energy nexus. The capacity of Arab executives and professionals in the areas of non-conventional water resources management and renewable energy should also be enhanced. Regarding water reuse, the target session first intended to provide the scientific and legislative basis encouraging the Arab countries to expand the reuse of treated wastewater and agricultural drainage. Secondly it planned to raise awareness of the local population with regard to the reuse of treated wastewater and agricultural drainage. Most Arab countries have developed regulation frameworks for wastewater reuse, but they are still lagging behind for implementing these regulations and enforcing their application.

Shared Water Resources within the Arab region and with neighbouring countries

Target	<i>AR4.1 - By 2020 the signing of permanent agreements on shared water resources in the Arab region according to the "Arab Convention on shared Water Resources in the Arab region" and International Water Law. AR4.2 - By 2025 reinforcing the establishment of permanent agreements between riparian Arab countries and neighbouring countries on ground and surface water resources on reasonable and equitable basis and according to the International Water Law and historic agreements.</i>
Coordinators	Center for Arab Water Security - League of Arab States
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=576?tx_amswwf_pi2[uid]=576
Link to Solutions	http://www.solutionsforwater.org/objectifs/ar4-2-by-2025-reinforcing-the-establishment-of-new-agreements-between-riparian-arab-countries-and-neighbouring-countries-on-ground-and-surface-water-resources-on-reasonable-and-equitable-basis-and-acc

To deal with transboundary water issues, efforts based on international norms look sustainable. The Arab Ministerial Water Council should play an important role to enhance water cooperation between Arab countries by the adoption of the 'Convention on shared water resources in the Arab region' in June 2013, with ratification by the Arab countries by 2015. Furthermore all good cooperation examples exhibited good information sharing, especially between upstream and downstream countries on dam building, capacity and irrigated areas. That is why the creation of a regional database on shared water resources is a priority. Water cooperation will also improve through building political and economic relationships between riparian countries, and through the establishment of agreements on reasonable and equitable basis, and according to the international law and historic agreements.

Increasing understanding of and capacity to examine climate change impacts on water resources in the region and to increase the capacities of regional and national water sector institutions to develop and implement strategies for adaptation to Climate Change

Target	<i>AR5: In the medium term (by 2020), each Arab countries has defined a national policy for including climate change adaptation policy into national water policy.</i>
Coordinators	ACSAD
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=579?tx_amswwf_pi2[uid]=579

Link to Solutions	No solution submitted to this target
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The establishment of a regional knowledge hub on climate change and water is planned by 2014. It will significantly add value to enhance the prediction and projection capacity of climate change on water within the region. Decision-support systems to translate the outputs of the technical modelling exercise into meaningful, simple and useful basis for decisions are also needed. Besides, identifying indicators for the integrated assessment of climate change impacts on water resources will be helpful, especially on socio economic vulnerability. The integrated assessment approach, combining climate change impact assessment with vulnerability assessment is an effective analytical tool that leads to the identification of feasible and appropriate adaptation measures. That is why the Arab Ministerial Water Council politically committed to implement the regional initiative for the assessment of climate change on water resources and socio-economic vulnerability in the Arab region, with financial commitments of SIDA and GIZ, and with other institutional commitments.

5.2 Key Messages

The most highlighted message of the Arab cross-continental process was the necessity and the will to enhance cooperation on water in the region. This was emphasised through three main aspects: sharing data and knowledge, establishing a regional common water framework, and building peace. In addition:

- Investment in increasing water use efficiency is the no-regret option, given the growing water scarcity in the Arab region.
- The priority actions for ensuring water security across the Arab region focused on the IWRM concept, by identifying the requirements and basis for this application.
- The Arab countries have to use and take into account non-conventional water resources in management planning, especially desalination, to face water scarcity and to meet increasing water demand.
- The integration of the Water-Food-Energy nexus is imperative in the Arab countries.
- Building trust and confidence between riparian countries is the one way to a better cooperation on water in the region. Conflicts create instability in the region and present major constraints in finding sustainable solutions. Peace is imperative for water development.
- A regional database on shared water resources will be established.
- The integrated assessment approach, combining climate change impact assessment with vulnerability assessment is an effective analytical tool that leads to the identification of feasible and appropriate adaptation measures.

5.3 Commitments

- The Arab Ministerial Water Council committed to implement the Strategy for Water Security in the Arab Region.
- The Arab Ministerial Water Council committed to adopt the 'Convention on Shared water Resources in the Arab Region' in June 2013, with ratification by the Arab States by 2015.
- The Arab Ministerial Water Council politically committed on the approval of the regional initiative for the assessment of climate change on water resources and socio-economic vulnerability in the Arab region, with the institutional commitment of ESCWA, ACSAD, GIZ, WMO, SMHI, ISDR, and the financial commitment for implementation of SIDA and GIZ.
- The UN-ESCWA committed, with other partner organisations, to implement the MDG+ initiative of the Arab Ministerial Water Council (with financial resources of SIDA).
- The Arab Water Council committed to facilitate dialogues and sessions during the Arab Water Forums to reach consensus on sensitive issues regarding the 1997 UN Convention, and to work towards the refinement of the Transboundary Aquifer management articles.

6. The Mediterranean Cross-continental Process

Coordinator	Mediterranean Water Institute
Link to Synthesis	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=937

Documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=924
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The scarcity and irregularity of water resources and adaptation to climate change are among the greatest challenges currently faced by the Mediterranean countries. Indeed the region is characterized by a dry and semi-arid zone that considerably influences the water priorities set at local, national and regional levels. Through its inclusive and multi-stakeholders approach, the cross-continental Mediterranean process identified numerous solutions adapted to its geographical, environmental, political and socio-cultural specificities around four priorities: water demand management, non-conventional water resources, governance, and urban and industrial sanitation.

6.1 Target Outcomes

Each target identified through the Mediterranean process is presented and summarised in a table. This includes the links to access the preparatory process reports and the Forum session outputs (session reports, session presentation, etc.).

Water Demand Management in the Mediterranean

Targets	<p><i>MED1.1: By 2015, each Mediterranean country has set its own national objectives for water use efficiency in the various using sectors and for water allocation between the different uses (productive and environmental) and defined/implemented "efficiency plans" for achieving their short-, medium- and long-term objectives.</i></p> <p><i>MED1.2: By 2015/2020, Mediterranean country has set its own national objectives for improving the water productivity of rainfed and irrigated agriculture, in the framework of integrated water and food-security strategy, and defined/implemented measures for achieving their objectives in the short, medium and long term</i></p>
Coordinators	Plan Bleu et AFD
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=527?tx_amswwf_pi2[uid]=527
Link to Solutions	<p>MED1.1: http://www.solutionsforwater.org/objectifs/med-1-11-1by-2015-each-mediterranean-country-has-set-its-own-national-objectives-for-water-use-efficiency-in-the-various-using-sectors-and-for-water-allocation-between-the-different-uses-productive</p> <p>MED1.2: http://www.solutionsforwater.org/objectifs/med-1-2-1-2by-20152020-mediterranean-country-has-set-its-own-national-objectives-for-improving-the-water-productivity-of-rainfed-and-irrigated-agriculture-in-the-framework-of-an-integrated-water-a</p>

This target focused the management of water demand in the Mediterranean countries on a set of instruments that encourage better use of existing water tenders, when applicable at different scales and across sectors. The objectives targeted water use efficiency for different uses and water productivity of rainfed and irrigated agriculture. Several solutions were promoted such as: controlling the preponderant agricultural demand through pricing, optimizing the efficiency of water and instruments for quantitative limitation, mastering the overexploitation of aquifers by strengthening the police samples and a sophisticated dialogue between users, water rights markets or developing wastewater use in agriculture and industry, and reallocating clean water (surface or underground) towards domestic consumption.

Fostering the inclusion of non-conventional water resources in the water planning in the Mediterranean: towards making the term "non-conventional" obsolete

Target	<i>MED2.1: "By 2015, to ensure that national water resources planning in all Mediterranean countries includes the contribution of non-conventional resources within the global water resources systems models and analysis. This planning should</i>
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	<i>take into account the related possible effects on the environment, economy, health and energy.”</i>
Coordinators	ATTA et F-IEA
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=532?tx_amswwf_pi2[uid]=532
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-2-1-2-1water-resources-planning-in-all-the-countries-of-the-mediterranean-region-should-include-the-assessment-and-contribution-of-non-conventional-resources-considering-possible-impacts-on-the

The session mainly focused on desalination and treated wastewater reuse as promising solutions and resources in terms of capability to generate higher volumes of water. During this session, it was commonly agreed that non-conventional water resources must be included in water resources planning and implemented on a rational basis under the umbrella of National Water Planning processes. To achieve this objective, sharing of experience and good practices to all Mediterranean countries is needed. Such achievement will contribute to restoring the balance between supply and demand, and to addressing environmental issues caused by inappropriate or non-existing sewage treatments.

Non-conventional water resources in the Mediterranean: the necessity of a Common Regulatory Framework Approach

Target	<i>MED2.2: By 2015 to develop a common regulatory framework for the Mediterranean area that considers the specific hydroclimatic features of the region, with its singular problems of scarcity and droughts in semiarid environments. This framework must integrate the contribution of non-conventional resources with the rest of supply and demand, structural and non-structural alternatives.</i>
Coordinators	IMIDA et F-IEA
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=538?tx_amswwf_pi2[uid]=538
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-2-2-a-regulatory-framework-must-be-developed-considering-the-singular-geo-climatic-features-of-the-region-their-specific-problems-of-droughts-and-scarcity-and-the-need-to-include-non-convention

This target aims to develop a common regulatory framework integrating non-conventional water resources issues in the Mediterranean. Such framework considers the specific hydroclimatic features of the region such as regular scarcity and droughts in semiarid environments. During the Forum session a consensus was reached on the necessity to enforce synergies between the non-conventional water resources (NCWR) in the region and the existing initiatives like the Union for the Mediterranean activities and the Regional Technical Assistance Program on Sustainable Water Integrated Management (SWIM) launched by the European Commission for the Southern Mediterranean region. Within the scope of the Mediterranean Water Forum the launch of a Mediterranean Convention for the Use and development of Non-Conventional Water Resources was also proposed. The establishment of a Code of Good Practices for Water Reuse and Desalination was strongly recommended.

Deciphering Water Governance: IWRM Plans and water efficiency strategies in Mediterranean Countries - Addressing complexities and promoting replicable solutions

Target	<i>MED3.1: In the medium term (by 2020), every Mediterranean country - supported by multi-stakeholder national dialogues and in view of achieving cross-sectoral water resources management - has in place operational and applicable national IWRM Plans and Water Efficiency Strategies and has developed and/or substantially advanced river basin management plans, all of which are linked/align with National Development Strategies, National and/or Sectoral Financing Strategies, National Adaptation Plans and, where applicable, National Integrated Coastal Zone Management Plans and International Agreements regarding the protection of transboundary water bodies.</i>
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Coordinators	GWP-MED
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=543?tx_amswwf_pi2[uid]=543
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-3-1-3-1in-the-medium-term-by-2020-every-mediterranean-country-supported-by-multi-stakeholder-national-dialogues-and-in-view-of-achieving-cross-sectoral-water-resources-management-has-in-pl

Sustainable approaches at different levels (local, national, transboundary) are essential to implement Integrated Water Resources Management principles and practices. Despite significant efforts by most Mediterranean countries to reform the water sector, many still suffer from the lack of planning and technical capabilities, effective operational strategies, fragmentation of responsibilities among authorities – including decentralisation concerns, weak policy implementation and limited law enforcement. To face these complex situations, several solutions have been proposed by stakeholders, such as strengthening the coordination and the development of National Water Information Systems harmonized at the Mediterranean level (EMWIS/SEMIDE), launching studies for the Tunisian National Water Sector Strategy 2050 (Tunisian Ministry of Agriculture), and changing the way water is managed in south and east Mediterranean (e.g., considering wetlands as natural infrastructure, Wetlands International).

Involving all water stakeholders to adapt its governance to the climate, political, socio-economic and environmental changes in the Mediterranean

Target	<i>MED3.2: In the medium term (by 2020), every Mediterranean country has activated and operationally implemented mechanisms for effective stakeholder participation throughout the different components of integrated water resources management and has in place a functioning articulation between central and decentralised levels.</i>
Coordinators	IME
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=1187?tx_amswwf_pi2[uid]=1187
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-3-2-3-2in-the-medium-term-by-2020-every-mediterranean-country-has-activated-and-operationally-implemented-mechanisms-for-effective-stakeholder-participation-throughout-the-different-components

A multi-stakeholder and multi-sectoral involvement is crucial to face challenges in the construction of water governance adapted to climate, political, socio-economic and environmental changes in the Mediterranean region. While the need to increase involvement of organisations and stakeholders in water governance is generally recognised, practical implementation is not always straightforward. This therefore requires the application of some fundamental principles such as subsidiarity, citizen’s participation, responsibility sharing, setting up of local autonomy and reinforcement of decentralization in particular after the Arab Spring. Existing cooperation and sharing experiences need to be strengthened on the setting up of diagnosis tools, the establishment of operational mechanisms, decentralisation, delegation of authorities, and public consultation. This would allow countries to define the conditions of water governance adapted to the complexity and the scope of future challenges. The following examples were highlighted: participatory water management in Tunisia based on an adaptive legal framework; asset transfer of Canal de Provence built on decentralization process or system governance; and IWRM for the Murcia region (Spain) based on coordination between the regional, national and supranational levels.

Industrial Wastewater Management in the Mediterranean

Target	<i>MED4.1: By 2020, every Mediterranean country has put into force a rule supervising the discharge of industrial waste in the collective sanitation systems, and by specifying the technical, financial and monitoring modalities.</i>
Coordinators	AFD
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwf_pi2[uid]=546?tx_amswwf_pi2[uid]=546
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-4-1-4-1by-2020-every-

	mediterranean-country-has-put-into-force-a-rule-supervising-the-discharge-of-industrial-waste-in-the-collective-sanitation-systems-and-by-specifying-the-technical-financia
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Industrial wastewater management in the Mediterranean countries remains one of the greatest challenges not only because the existing treatment mechanisms need improvement at institutional, technical and financial levels, but also because of the multiplicity of contracting authorities involved. Management of water discharge requires a strong implication of public authorities and operators of sanitation in water decision-making and in the technical and financial support provided by industries. A dual and simultaneous approach of control and enforcement is required, along with financial incentives and technical support. Referring to regional programs, MED Pol and Horizon 2020, an inventory was compiled drawing from experiences and solutions of countries from the southern shore (Morocco, Tunisia) and northern shore (France, Spain). Among a range of recommendations and solutions proposed, a commitment was particularly noted: "In addition to implementing the objectives of the regional initiative 'Horizon 2020' for the management of industrial wastewater, relevant stakeholders are committed to treat 55% of the potential of industrial discharges in the Mediterranean".

Financing the collection and treatment of industrial and urban wastewater in the Mediterranean

Target	<i>MED4.2: "By 2018, each Mediterranean country has defined a strategy of sustainable cost recovery (SCR) for sanitation services through the use of tariffs and fees, public subsidies and international financial assistance to ensure economical sustainability, equitable access for all and pollution control."</i>
Coordinators	EMWIS et ONAS
Link to Target documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfd_pi2[uid]=1044?tx_amswwf_pi2[uid]=1044
Link to Solutions	http://www.solutionsforwater.org/objectifs/med-4-2-4-2by-2015-each-mediterranean-country-has-defined-a-strategy-of-sustainable-cost-recovery-scr-for-sanitation-services-through-the-use-of-tariffs-and-fees-public-subsidies-and-international

This target explored the existing solutions and complexities in financing the collection and treatment of urban wastewater in the Mediterranean countries. The necessity to distinguish basic revenues and repayable funding sources has been emphasised. Indeed, the revenues ensure cash flow which can be used to attract funding and will be repaid from these future revenues. In other words adapted and adequate revenues condition the realization of loans, bonds and equity which will contribute to basic efficiency. Several solutions were proposed notably to define multi-annual plans for sanitation at national or local level with social and environmental objectives, setting up a fair and transparent tariff strategy, providing incentives to reduce pollutant discharges or generating new revenues (reuse waste water and sludge, energy production).

6.2 Key Messages

- Recognition of the significant lack of information and sharing: positive as well as negative experiences should be increasingly shared;
- Agreement on placing greater emphasis on participatory governance, and particularly on the role of civil society and the facilitation of input provision in the different policy processes;
- Make better use of the existing political framework of the Union for the Mediterranean and utilise the draft Strategy for Water in the Mediterranean as a good basis for planned actions and activities.
- Develop a common-shared Mediterranean legal framework;
- Promote information and capacity building;
- Improve knowledge on the use of the 3T in the Mediterranean countries.
- Governments have planned to promote and implement IWRM plans in cooperation with the wider community of stakeholders. This was demonstrated by their active involvement in the ad-hoc Governance task Force and the Mediterranean Process Steering Committee.
- Launch of a water and sanitation services cost recovery observatory at the Mediterranean level.

6.3 Commitments

- Representatives of FIEA et IME committed to follow-up the target action plan and Forum' sessions outcomes by creating a permanent group of experts on non-conventional water resources which will contribute to the production of a 'Code of Good Practices for Water Reuse and Desalination' and a common draft Mediterranean water regulatory framework;
- Métropole Nice Côte d'Azur committed to minimise tariffs increases thanks to better efficiency and inter-sector financing in Nice Metropolitan area;
- GWP-MED and IME committed to follow-up on the continuation and potential enlargement of the ad-hoc Governance Task Force, with possibility of extension beyond the target timeline (also complementing the Target MED3.2).

IV. Grassroots and Citizenship Process

1. Youth

An inclusive process open to all young people engaged during the 6th World Water Forum identified three complementary pillars - education, crossing boundaries and innovation - as being relevant to all young people around the world and, importantly, as areas in which the youth have direct, observable, and lasting impact. The Youth committed to translating these pillars into concrete action, through the creation of an inclusive network of young people: the Water Youth Network. During the 6th Forum, it has received formal backing by UNESCO IHE and Korea Water Forum, who will work with it to organize the youth process of the 7th World Water Forum.

The Water Youth Network aims at building a platform connecting initiatives worldwide, enhancing information exchange and coordination. It will also advocate for a greater consideration of the youth's contribution to international water related event and coordinate the youth presence in some of them. The Forum participants were unanimous to recognize the importance and quality of the youth participation, both in dedicated session and through interventions in technical sessions. Many initiatives contributed to building this success and the foundations of the network mentioned above:

- The Youth Vision on Water is a single document wrapping up all of the youth contributions to the Forum. Elaborated under the leadership of the Water Youth Network in a participatory process, it put the emphasis on empowering the youth and called for a greater continuity between forums in order to facilitate the implementation of concrete commitments.

<http://wateryouthmovement.org/water-youth-movement-the-6th-world-water-forum-presentation-of-the-vision-of-all-youth-on-march-14-2012/>

- The Emerging Academic Programme was put up together at the occasion of this forum. Through a solution based selection process, it gathered more than fifty young academics who shared. Their solutions were developed during four sessions around water related problems for food, technical issues, governance and economics and ranged from the use of a cellular telephone as a financial incentive to support water resource management plans to the organisation of competitions for the title of 'sustainable city' / 'sustainable region'.

<http://wateryouthmovement.org/the-emerging-academic-program-solutions-for-the-6th-world-water-forum/>

- The World Youth Parliament on Water started its preparation process six months before the Forum. It gathered 85 young people ensuring a balanced representation of the world's large regions. They came up with a charter organising the works of the parliament and a final declaration that was presented during the Forum's Parliamentarian Conference.

<http://www.pmje.org/en/node/56>

- The Visioconference: on February, 15, 2012 a visioconference was organised as a kick off for the youth process. It gathered 13 universities from all over the world to exchange solutions around the theme « contribute to cooperation and peace through water ». The Mediterranean NGO Ambassade de l'Eau and its young water ambassadors strongly contributed to the Forum sessions with their STRATEAU solution and a declaration, launching a "Mediterranean passport" symbolizing the union of Mediterranean people on water issues.

Access to session documents:

<http://www.solutionsforwater.org/solutions/strateau-a-decision-support-tool-for-a-better-water-governance>

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=442?tx_amswwf_pi2\[uid\]=442](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=442?tx_amswwf_pi2[uid]=442)

<http://www.ambassade-eau.com/carte-identite-mediterranenne>

- The Projection Network successfully mobilized more than 100 young water professionals who participated to dedicated sessions and contributed to the general success of the Forum. A highlight of their participation was the "slum" space, integrated in the village of solutions, which promoted solutions coming from the field where young professionals are particularly active

<http://www.reseauprojection.org/>

- Local high schools also strongly contributed to the Forum. Many classes visited the Forum and some youngsters committed to setting up a watchdog programme in order to reduce water consumption and raise awareness, both for fellow high school students and adults [link]. The Youth Regional Council mobilized students from the wider area to share their concerns and solutions on water. Together with young representatives from other regions in the world, they shared concrete solutions and commitments that they shared during dedicated sessions.

Access to session documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=448?tx_amswwf_pi2\[id\]=448](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=448?tx_amswwf_pi2[id]=448)

- Children also actively participated to the forum. A delegation of Japanese teenagers shared their solutions for water while a cultural mediation on water brought together Japanese and French teenagers. Over 600 pupils from Marseille elementary schools visited the Forum on the children's day, participating to workshops where experts and stakeholders engaged them into constructive dialogues around water issues (water scarcity, water in slums, technical solutions...).

Access to session documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=457?tx_amswwf_pi2\[id\]=457](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=457?tx_amswwf_pi2[id]=457)

2. Women

UN Agenda 21 recognizes women as a major group for stakeholders' involvement. The Women Initiative at the Forum means to raise public awareness on the connections between women and water; to emphasise and articulate the specific niche and critical role of women and their organizations in provision, management and safeguarding of water ; to provide expertise and experience on incorporation of gender approaches, including equity mainstreaming, into policies and practices for different stakeholders such as development practitioners , community leaders, and local authorities; as well as to ensure women's presences, involvements, and contributions as a major group along the Forum process.

At this Forum, the Women Initiative involves the following main activities: 2-days' preparatory conference, one high level session, one special event tailored to Lusophones Countries, the exhibition stand, and two photo exhibitions about women and water. In addition, the participation of women's organizations in a range of Forum events was facilitated.

At the pre-conference and the high level session, ground solutions were presented and discussed over the following three themes:

- **Water and food security**

With growing world population, increased competition for natural resources and advanced attention given to environmental issues, water for food (to produce better quality food while using less water) has become a major issue to be tackled. Women are responsible for more than half of the world's food production hence their leadership role in providing water and food security is crucial.

▪ **Community water supply**

For critical social, economic and health reasons, it is important to provide communities with adequate access to water and sanitation. In rural and sub-urban settings of the developing world, decentralized water & sanitation provisions are more effective and cost efficient. Women have a proven success in organizing bottom-up community involvement making the supply systems demand driven, tailor made and community owned.

▪ **Water, peace and security from women's perspective**

The rapid escalation of acts of violence over water resources makes water cooperation an important security issue in the current global context. Involving local water users in sustainable use and management of resources, priority setting and discussions on water sharing are part of the solution to prevent conflict and solve existing problems. Women are known for their conflict resolution ability. In addition, water and food security are a basis of stability and a driving force for the social and economic empowerment of women.

2.1 Solutions

The participants of the women's preconference included the 24 member organizations of Women for Water Partnershi, partner women's organizations such as the All China Women's Federation, 1000 Peace Women, WECF and the Gender & Water Alliance, and representatives from governments, local authorities and water NGOs such as the Global Water Partnership, and Green Cross.

For an overview on WfWP members see: <http://www.womenforwater.org/openbaar/index.php>

Concrete solutions around the world were developed within the women process and shared in other processes such as thematic and regional.

The 12 reality cases from Africa, Asia, Eastern Europe and Latin America & the Caribbean demonstrate that while there is a large variety of potential solutions, the process that ensures a specific solution is effectively implemented and maintained, nevertheless shows considerable similarities all over the world and across water related themes. Development is a process in which different stakeholders have to come to an agreement on priorities and approach, and in which different Major Groups play a distinct and complementary role.

The positive result of building functional partnership at local level was demonstrated by Katosi Women Development Trust from Uganda, the process participating organization who won the *3rd Kyoto World Water Grand Prize* with their practice in improving water self-supply with the method of rain water harvest among fishing communities in Mukono district. Through their initiative, local women were also provided with engineer and management skills and therefore economically empowered.

Similar solutions can be found on:

<http://www.solutionsforwater.org/solutions/increasing-access-to-rural-community-members-by-strengthening-the-capacity-of-civil-society-organisations-local-private-enterprises-and-community-members-in-domestic-roof-water-harvesting-and-management>

2.2 Commitments

Nine agreed messages came out of the women major group in the end of the Forum, which advocate on promotion of need-based approach, social focus, women's capacity development in provision, management and safeguarding of water, women leadership development, gender sensitive education among young water professionals and management at the local and community level. Together with the process's leading organization *WfWP* and representatives of civil society and other stakeholders, the high level speakers who represented the UNWater, Ministries of Environment and Water of Uganda, France and South Africa, USAID, Korea Women Development Forum, Green Cross, etc. committed themselves to be partners in achieving water and food security for all and to implement the concrete solutions out of the Forum. To that effect, they will:

- Empower women as "agents of change";
- Strengthen women's civil society organisations and their role in community development;
- Develop and strengthen gender sensitization for governments and water professionals;

- Strengthen intergenerational equity;
- Work towards the establishment of an International Women and Water Day;
- Monitor progress and report to global fora.

<http://www.worldwaterforum6.org/en/commissions/grassroots-citizenship/women-initiative/>

Access to session documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=737?tx_amswwf_pi2\[uid\]=737](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=737?tx_amswwf_pi2[uid]=737)

3. Culture and ethics for water

Water is a crucial resource for the humankind and with an important symbolic for all cultures as well as for all the spiritualities and religions. Water generates social link but at the same time can be a source of conflict. The explicit values of cohesion for water in different cultures, religions, wisdom would put them into the national legal framework at regional and international levels. It could be a tool aiming at developing a new concept of water use in a world where the resource is fragile. The first stage of this working group has been to list common values to all cultures and spiritualities helping to constitute a draft referential (“Marseille Water Ethics”) as a working basis for the next steps, that is to say seeking ethical concrete mechanisms to implement these ethical values. This objective will be developed by the Task Force and will present its recommendations for the next World Water Forum to be held in Daegu, Korea, in 2015.

3.1 Key messages and questioning

- Objective to reach a “new water culture” meaning a new alliance between human kind and water which takes into account the usages and sacred vision of indigenous cultures;
- Anthropological and cultural dimensions need to be taken into account within challenges related to water issues;
- Ethics is based on water decisions, and every decision has an ethical value;
- Ethics related to water management: how ethics play a practical role?
- Environmental flow levels cannot be defined purely in a scientific ecological way but in terms of the priorities of the society for those values: how much priority can we give to water quality?
- What kind of governance arrangement do we want to support?
- How religious and spiritual communities can endorse a concrete role in seeking sustainable solutions for water?

Access to Ethics and Culture session documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=875?tx_amswwf_pi2\[uid\]=875](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=875?tx_amswwf_pi2[uid]=875)

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=162?tx_amswwf_pi2\[uid\]=162](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=162?tx_amswwf_pi2[uid]=162)

Access to Indigenous sessions documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=876?tx_amswwf_pi2\[uid\]=876](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=876?tx_amswwf_pi2[uid]=876)

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1519?tx_amswwf_pi2\[uid\]=1519](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1519?tx_amswwf_pi2[uid]=1519)

Access to the video of the conference on “Water, the Human and the Sacred”:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=162](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=162)

3.2 Commitments

The Task Force committed to:

- Develop the Marseille Water Ethics followed by an action plan. The document will then be revisited at the World Water Forum in Korea in 2015. The draft documents will be made available online for comment at the Water Ethics Network: “waterethics.org”;
- Implement the concrete application of the principles of this living document below;
- To promote justice, equity, rights of nature, care and compassion in decision-making;

- To learn from and engage all disciplines and schools of thought, including science, law, philosophy, and religion, as well as from the traditional knowledge of indigenous cultures;
- To learn from and engage the private and the public, at the local, regional and global levels;
- Create a Water Ethics Advisory Council, also available through the Water Ethics Network, “waterethics.org”.

4. NGO’s/CSO’s

4.1 Butterfly Effect

The objectives of the Butterfly Effect coalition, made up of over 90 NGOs and international networks working in the water supply and sanitation sector, supported by the French association “Eau Vive”, were to:

- Build an international civil society movement for the 6th World Water Forum enabling civil society to rally together to exert greater influence over the sector’s actors and decision-makers;
- Promote an inclusive Forum that accords a prominent role to civil society actors, both throughout the preparatory processes and during the Forum;
- Establish the reputation and legitimacy of this international coalition by offering messages and alternative solutions to all other actors working in the sector.

4.1.1 Key messages and innovative solutions

These messages and solutions were based on human rights principles and communities’ experiences.

- 9 key messages were developed and presented by various contributors (members or non-members of the coalition) during 2 dedicated sessions held during the Forum (on the 13th and 15th March), entitled “Solutions from Civil Society: Inspiring change through a human rights based approach” & “Occupy the 6thWorld Water Forum: Building Inclusive Human rights-based Governance of Water Resources and Water and Sanitation services from the bottom-up!):

- governance,
- water and food security,
- water, sanitation, hygiene and health,
- water and climate change,
- the human right to water and sanitation,
- capacity development,
- peace and trans-boundary cooperation,
- finance,
- water and emergencies.

Access to sessions documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=611?tx_amswwf_pi2\[uid\]=611](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=611?tx_amswwf_pi2[uid]=611)
[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=613?tx_amswwf_pi2\[uid\]=613](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=613?tx_amswwf_pi2[uid]=613)

For further information:

http://www.coalition-eau.org/IMG/pdf/120307-factsheet-EP_UK-web.pdf;

- Over 150 solutions from all over the world were uploaded on to the platform for solutions website too. These solutions are essentially local, sustainable, innovative, adaptable, equitable, accountable and people-orientated.

4.1.2 Commitments

This coalition has committed to working on these issues by using evidence-based models and innovation, integrating both traditional knowledge and demonstration of best practices. See more details at:

<http://www.solutionsforwater.org/commitments/butterfly-effect-network-of-ngos-commitments>

4.2 CARI

Water was also the focus point of the issues of natural resources for sustainable development of drylands.

The Forum's strategic directions -ensure the well-being of all, contribute to economic development, maintain the blue planet- were in phase with the working axes of the CARI NGO and its partners (pS-Eau, RADD0, ReSaD, Drynet, GTD, ...) for the sustainable development of drylands.

4.2.1 Main objectives

Their goals were:

- To inform decision makers and the public at large on the problems of drylands and oases;
- To present meaningful contributions like those of the working group composed by the French Ministry for Foreign Affairs, the French Development Agency (AFD) and the Scientific Committee on Desertification on "sustainable agriculture in drylands, proposals for development cooperation" and the folder "agroecology of drylands, opportunities and constraints" by the CARI's NGO and the Committee of Desertification;
- To propose several multi-stakeholder discussions on the development of drylands and oases in relation with the debates on climate change and the outcomes of the summit of Durban (UNFCCC) and those of the strategic plan over ten years of the UNCCD (United Nations Convention to Combat Desertification);
- To promote positive actions and good practices undertaken in the drylands and oases for their sustainable development;
- To develop new partnerships.

More than 10 panels, 5 debates and many activities oriented to the youth were organised by CARI.

Access to their program's documents and other information:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=177](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=177)

4.2.2 Commitments

In the framework of the Drylands Area and Oases, it was decided to set up a steering committee which assigns the following aims to its members:

- Having a consultative role for the implementation of the project space "Drylands and Oases";
- Providing a reflection on both the content and in form and animation of space;
- Implementing specific actions within the project;
- Providing support to fundraising for the establishment of the area.

4.3 The lawyers of water

The Council Bar of Marseille hosted a session involving professionals, researchers and some NGOs representatives in water, sustainable development and law.

Three themes were debated: the right to water, the preservation and the sharing of the resource and the economic cycle of water.

4.3.1 Key messages

- Faced with the diversity of legal, economic and human issues associated to water, we are all advocates to water.
- They emphasized on the necessary evolution of the international law, the international governance of water which must be considered as the essential good between all the natural resources and administrated in priority.

They resolved to sign quickly a manifest to advocate these issues to be presented in Rio +20.

Access to session documents:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=217](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=217)

5. Other activities

Civil Society has generated a set of artistic, cultural, educational, institutional and scientific activities in the months leading up to the Forum.

A hundred of them were held in parallel to the 6th World Water Forum.

These projects have been compiled in the tables below:

Technical Days

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
EDF Production Méditerranée	Water Currents, an Artistic Journey to the Heart of EDF's Saint Chamas Hydroelectric Power Plant	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=511
Marseille Provence Métropole Urban Community and SERAM (Société d'Exploitation du Réseau d'Assainissement de Marseille)	GEOLIDE : the Innovative Complex of Waste Water Treatment in Marseille	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=513
Société du Canal de Provence (SCP), conventional hydraulic management structures in Provence (WUA) and Provence-Alpes-Côte d'Azur Regional Chamber of Agriculture	Aigo 2012: Men, Territories and Water Sharing. Governance of Irrigation Systems in the Mediterranean Area	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=515
G.P.M.M. "Port of Marseille-Fos"	Technical Visit of the Port of Marseille	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=516
Rhône Méditerranée et Corse Water Agency, Hérault Department and Syndicat Mixte du Bassin de Thau	The Thau Lagoon: an Exemplary Integrated Management in the Mediterranean	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=552
IRSTEA (Research Institute for Agricultural Engineering and the Environment)	Irrigation in Search of new Sources of Economy	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=201
Provence-Alpes-Côte d'Azur Regional Council	Alpine Lakes. Protecting and Sharing Water Ressource	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=521
City of la Ciotat and Marseille Provence Métropole Urban Community	Visit of the Shipyard and the Nauticales of La Ciotat	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=552

Grassroots Side-Events

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
Les Puits du désert NGO and KSB sas	200 New Ideas for 200 New Wells in the Desert	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1798
UNESCO and International Hydrological Program (IHP)	Ground Water and Climate Change with a Focus on Mediterranean Coastal Aquifers	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=633
NGO Feminine Conference on Water	Make Tellurian Water Renaissance	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=108
Ea éco-entreprises	Global Network of Water SMEs	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=154
CCIMP (Chamber of Commerce & Industry Marseille Provence)	Get Involved In Eco Construction!	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1786 http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=97

Conferences, Meetings and Debates

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
Instituto Ipanema	Gender and Water: Solutions for Water Decision-Making in Lusophones Countries	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1438
The County Council of the Gers	Gers' Departmental Water Day	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=286

Technical College Ampère	Water Convention: Water as an Energy Source	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=288
Daumier High School	Practical Work: Water, a Public Issue	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=289
CFH-AIH (French Committee of Hydrogeology of the International Association of Hydrogeologists)	Managing Coastal Aquifers in the Mediterranean	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=301
City of Grenoble	Governance and Citizenship	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=304
SIE-ISW (International Secretariat for Water)	Sails of Solidarity: Sharing our Solutions	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=315
Environment Office of Corsica	Water in Corsica, Joint Management of a Valuable Resource for the Island	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=350
Ying Eco Partners	Phyto-purification - An Innovative, Eco-Friendly Technique for Sustainable Water Management	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=352
Chartres Métropole	Water, from Sky to Tap	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1651
City of Marseille	Natural Water Areas	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1645
Université virtuelle, environnement et développement durable (UVED)	FReDD-2012 "Film, Research and Sustainable Development" – Water, Life and Other People, the Festival	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1675
Réseau des établissements publics d'enseignement agricole (Agricultural High School)	Involvement of Technical Agricultural Education Public in International Exchanges on the Sustainable Management of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=224
Les Petits Débrouillards Association	Water Carriers and participation by European youth	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=354
Suez Environnement	International Student Competition: CityZen Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=265
OXYO Water	New Perspectives for the Management of Water Projects - Models and Applications from 8 Transboundary Projects	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=505

Village of Solutions

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
IRSTEA (Research Institute for Agricultural Engineering and the Environment)	WAT A GAME: Managing and Sharing Water in your own Basin	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1868
Projection Network	The Challenge of Slums - Opening Speeches	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1862

Indoor Shows

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
Marseille Rêve	"Porte l'Eau" the show that marks the opening of the 6th World Water Forum	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=156
Ballet d'Europe	Ballet H2O Memories of the Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=157
La Nature Racontée Association	Educational Show "Baladine, the Water Droplet"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=218
Le Théâtre en Flammes Company	Aquamusical Show "Ô MAMA Ô"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=220
Le Kaméléon Theater Company	"Odaló" Show	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1392
ECUME (Mediterranean Cultural Exchanges Association)	Sacred Music Concert "Les Ménestriers"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=163
Société des Eaux de Marseille and Caisse d'épargne Provence-Alpes-Corse	Concert for Solidarity	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1638

Exhibitions

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
IRD (French Institute for Research and Development)	Water for all, research is mobilized	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1576
Michel EISENLOHR and Natural History Museum of Marseille	Marseille, Longchamps and Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=214
Camille MOIRENC and Marseille Provence Métropole Urban Community	Aigo*, Water in Marseille (*Aigo = 'water' in Provençal dialect)	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1677
Marie-Paule NEGRE and General Council of Bouches-du-Rhône	"A fleur de l'eau"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1713
General Council of Bouches-du-Rhône	Precious Water, Wild Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1737
Muriel DESPIAU	Nature in its Privacy	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=407
Patrick DESGRAUPES	Time and Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=413
Hervé BERNARD	Earth Foam	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=419
Yves CHOURAQUI	The Soul of the Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=467
Claude DELMAS	The Seven Wonders of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=473
Anne HEURTEMATTE	Portraits of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=480
ARPEC Association and Jean PHILIPPE	Eau, Treasure of Himalaya	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=486
Thierry STEFANOPOULOS	Without Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1620
Stéphane LECAILLE	The Banks of the Mekong	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1440
Henri KARTMANN	Water from the North, Water from the South?	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1454
Alain GUALINA	Praise of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1469
Jean-François MUTZIG	Fishing	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1483
Gwenaél PRIE and Lionel GOUJON	Travelers of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1487
Musée du terroir marseillais	The arrival of the canal, a revolution in the Marseille region	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1421
Regards de Provence Foundation	Joseph Garibaldi, the tranquil South	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1653
Maison de l'Artisanat et des Métiers de l'Art	Blue Gold, Natural Resource to Protect	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=271
Tapestry Museum	Take me to the River	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=273
Regional Representation of the European Commission in Marseille	Water and Europe	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=278
IRD (French Institute for Research and Development) and Gaston Defferre Departmental Library of Bouches du Rhône	The Territories of Water: Irrigation and Water-Sharing in the Mediterranean	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=283
City of Marseille	Selected works of artists: "The Run of River"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=216
Philapostel PACA	Philatelic Exhibition	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=395
Emmanuelle NOT	Ceramic Exhibition	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=2088
Céline HERVE-BAZIN	The Blue Link around the World - set of 3 books	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=259
Goethe Institut	Interactive and photographic Exhibition: "Mettez-vous en résEAU"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=235
URCPIE - PACA (Regional Union of Permanent Center of Environment)	From Glaciers to the Mediterranean: Water, one Resource - Multiple Uses	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=229
Solidarités international NGO	"La minute"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1563
SIE-ISW (International Secretariat for Water)	The Citizen and Water House	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=174

AME (Atelier Méditerranéen de l'Environnement)	CONS'EAUMMATION	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=238
Women For Water Partnership	Stand Women and Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=207
Eau Vive Association	Stand Butterfly Effect	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=195
BRGM- DPSM (Mines Prevention and Security Department)	Mine Water Management	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=311

Film Screenings

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
HOPE Production	"A Thirsty World" Film directed by Yann Arthus Bertrand	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=160
Ligne de Front	"Water, Time for Solutions" Film	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=161
SIE-ISW (International Secretariat for Water)	International "Water and Film" Events	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=170
Messages pour la Terre Association	3rd Festival of Film shorts 'Water and the Environment' in Montpellier	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1796
Rapsode Production	Drinking Water for All	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=226
Atlantic Télévision	"European Lakes... Lakes for the Future" Film	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=2090

Public and Local Animations and Events

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
City of Marseille	District Carnival - Town Hall of the 6th and 8th Arrondissements	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=165
City of Marseille	Carnival of Marseille	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=166
Radio Star Méditerranée and City of Marseille	Star Music Live Concert	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=167
Wash United Association	Football Match with Olympic of Marseille (OM)	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1322
Actions Planète Propre	Apér'Eau corsaire	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=284
Le Naturoscope	Little Water Engineers	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=285
Vauvenargues High School	H2 Oh Life!	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=291
Marseillevreyre High School	Water, an Infinite Resource?	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=290
Jacques Prévert College	Trip to Waterland	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=2102
Honoré de Balzac High School	Educational website: "Water, from Abundance to Scarcity"	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=2060
CAIRN Association	Water for All	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=325
Association pour la promotion des Classes de Mer Marseille Méditerranée (APC3M)	"Fresh Water, Clean Water, Heave Ho!" Concert	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=346 , http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=345
CCFD Terre solidaire, ASOC (Association de sauvegarde de l'oasis de Chénini), CARI, PNR du Luberon	Water Here and There	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=355
Station Alexandre	Splash! A drop of Humanity	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=371
Familles de France National Federation	Odyssée des Familles: a voyage to discover the 6th continent	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=359
Réseau Ferré de France	Promoting among the General Public the Process to Limit the Use of Pesticides in the Maintenance of the French Railway	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=362

Unis-Terre Association	Luminy Festival of Water	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=383
General Council of Bouches-du-Rhône and Archives	The Fountain of Venus	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1404
General Council of Bouches-du-Rhône and Archives	Theatre Production "Le lavoir" (The Washhouse)	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1669
NGAARI LAAW "Culture et Développement"	Words and Music from the Senegal River	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=222
Water you acting for Association	"Water You Acting For?" Participatory theater in several countries	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=221

Volunteers Process

Promoter	Project Title	Access to Grassroots & Citizenship Project Documents
MTF Prod	Recruitment, Management and Animation of Volunteers	http://www.worldwaterforum6.org/en/sous-pages/become-a-volunteer/

V. High Level Opening Day Events

1. Opening ceremony and inspiring speeches

The table below lists the high-level opening speeches and provides access to the full text through the respective links.

	Time	SPEAKER	ORGANISATION	LINK
OPENING SPEECHES	11 :00	12/03/2012		
		Mr. Jean-Claude GAUDIN	Mayor of the city of Marseille	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/1203discoursJCGanglais.pdf FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/Discours_Maire_Ouverture_PC.pdf
		Mr. Benito BRAGA	President of the International Forum Committee	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/EN_BEN_BRAGA_SPEECH_DISCOURS_6EME_FORUM_ouverture_mars_2012.pdf FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/FR_BEN_BRAGA_SPEECH_DISCOURS_6EME_FORUM_ouverture_mars_2012.pdf
		Mr. Loïc FAUCHON	President of the World Water Council	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/ENGL_FAUCHON_SPEECH_DISCOURS_6EME_FORUM_ouverture_mars_2012.pdf FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/FR_Discours_LF_Ouverture_Forum_Version_FINALE.pdf ----- ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/MALI_PREZ_ENGL_Version_courte-1.pdf FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/OUVERTURE_Mali_FR.pdf
		Mr. François FILLON	Prime Minister of the French Republic	FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/03.12_Discours_du_Premier_ministre_à_Marseille_Bouches-du-Rhône_.pdf No version in English.
INSPIRING SPEECHES	12 :00	12/0/3/2012		
		HSH Le Prince Albert II de Monaco	Prince of Monaco	ENGLISH : FRENCH:
		Mr. Mahamadou ISSOUFOU	President of the Republic of Niger	ENGLISH : FRENCH:
		Mr. Hwang-Sik KIM	Prime Minister of the Republic of Korea	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/speech_kim_whang_sik.pdf No version in French.
		Mr. Angel GURRIA	Secretary-General of the OECD	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/speech_gurria_angel.pdf No version in French :

		Mr. Michel JARRAUD	Secretary-General of the World Meteorological Organization (WMO)	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/speech_jarraud.pdf No version in French.
		Mr. Michail GORBACHEV	President of Green Cross International	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/12-03-2012/World_Water_Forum-Mikhail-Gorbachev-speech-EN-120312.pdf No version in French.
	14:30	12/03/2012		
KICK-OFF SPEECHES FOR HIGH-LEVEL EVENTS		HRH The Prince of Orange	Chair of the United Nations Secretary-General's Advisor Board on Water and Sanitation	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/opening_ceremony_speech_hrh_prince_of_orange_unsgab_en.pdf No version in French.
		Mr. Peter BRABECK-LETMATHE	Chairman of the Nestlé Group	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/opening_ceremony_speech_brabeck_letmathe_nestle_en.pdf No version in French.
		Mr. Julia MARTON-LEFEVRE	Director General of the International Union for Conservation of Nature (IUCN)	ENGLISH : FRENCH :
		Mr. Peter Voser	Chief Executive Officer of Royal Dutch Shell	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/opening_ceremony_speech_voser_shell_en.pdf No version in French.

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Links to video

Opening ceremony	http://www.worldwaterforum6.org/?id=304
Inspiring speeches	http://www.worldwaterforum6.org/?id=304
Kick-off speeches	http://www.worldwaterforum6.org/?id=304

2. Launch of the 4th World Water Development Report

The United Nations World Water Assessment Programme (WWAP), a flagship programme of UN-Water hosted by UNESCO, launched the 4th edition of the triennial World Water Development Report (WWDR4). Bringing together the work of 28 UN-Water members and partners, the WWDR is a comprehensive review of the state, management and use of the world's freshwater resources. This edition introduces a thematic approach '*Managing Water under Uncertainty and Risk*' in the context of a world which is changing faster than ever in often unforeseeable ways. The WWDR4 seeks to demonstrate that water has a central role in all aspects of economic development and social welfare, and that concerted action via a collective approach of the water-using sectors is needed to ensure water's many benefits are maximized and shared equitably and that water-related development goals are achieved.

See more details at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1157](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1157)

See video:

<http://www.worldwaterforum6.org/?id=304>

3. 2012, European Year of Water

Water is on the political agenda. This is all the more true in the old continent, where 2012 has been declared the European Year for water. It will see the unveiling of the European Union's Fitness check & Blueprint to Safeguard Europe's Water. Through these exercises, Europe will assess existing water legislation and policy, suggest further improvements, recognize the global aspects of EU water policy and reinforce the Union's commitment to the water-related Millennium Development Goals. First and foremost, it is the first time since the Hague edition in 2000 that a European Union country hosts the World Water Forum. Hence, the World Water Forum's session "2012, European Year of Water" was a unique occasion to present what has been achieved since then and what remains to be done. This introduction session intended to lay the foundation for comprehensive discussions and answers to those questions throughout the Forum week.

The session mainly focused on the two following issues:

- Adapting to long term water challenges linked to Climate Change and prevent extreme phenomena (EU3), that are likely to increase both in number and magnitude, through the promotion of relevant existing solutions and strategies and the launch of new initiatives;
- Enhancing European cooperation with Third Countries in the water field (EU12) through a renewed, geographically extended development policy.

See more details at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1158](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1158)

4. The Way Towards Rio + 20

The United Nations Conference on Sustainable Development (Rio +20) will be held in Rio de Janeiro, Brazil, from 20 to 22 June 2012. Although the outcomes of that Conference are still under negotiation, water issues in the context of sustainable development have a crucial importance and will be debated in the context of that major event and its preparatory process. This session intended to contribute to the discussions that will be held during the UN Conference on Sustainable Development. It aimed at highlighting the importance of water issues in the context of the discussions to be held during the Rio+20 Conference on green economy, in the context of poverty eradication and sustainable development and on the institutional framework for sustainable development.

This event highlighted the role of water in securing food and health as an essential human need; securing economic growth with social inclusion and securing the conservation of our natural resources. In order to achieve the envisaged water security linked with energy security it is imperative to have an appropriate legal, institutional, financing and participatory mechanism through good governance at the local and national levels. This event has provided an opportunity to foster the discussion on the concrete solutions and recommendations that will arise from the 6th World Water Forum to the Rio+20 Conference.

See more details at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1162](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1162)

5. Innovative financing for the sustainable rehabilitation of Lake Chad

See session agenda at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1161](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1161)

6. Solidarity for water in the Niger Basin: Practical commitments for real solutions

On 17-18 October 17 and 18, 2011 in Bamako, the Forum "Solidarity for Water in Niger Basin Countries" was organized by the Foundation Chirac and the Republic of Mali, alongside the Niger Basin Authority. The Forum appealed for stronger mobilisation in favour of the right to water and sanitation in the region of the Niger River and encouraged the joint management of river resources. Representatives from the nine riparian countries, Benin, Burkina Faso, Cameroon, the Ivory Coast, Guinea, Mali, Niger, Nigeria, and Chad were in attendance. Commitments at both the national and the regional levels were made to implement concrete solutions for the

financing, management, and governance of resources to address climate threats, demographic and urban growth, and energy and agricultural needs.

See more details at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1163](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1163)

See video at:

<http://www.worldwaterforum6.org/?id=304>

7. Desalination facility for the Gaza strip: The key solution for an intensifying water crisis

A globally recognized water crisis exists in the Gaza Strip where the only available water source is from the deteriorating coastal aquifer. Due to a lack of alternatives, the population is compelled to abstract annually almost three times the aquifer's sustainable yield severely damaging the resource. The World Bank characterized the situation as so dire that "only 5-10% of the aquifer is now yielding drinking quality water". A consensus has emerged that the only long-term solution to this water crisis must include the development of a major desalination facility and water conveyance system. The session has focused on the Palestinian Authority promoted solution which the Senior Officials of the 43 Members to the Union for the Mediterranean have endorsed as the first UfM project with the important objectives of promoting peace, regional stability and prosperity. In particular, the participants have welcome commitments of the international community to implement the solution.

See more details at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1159](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1159)

VI. Major Sessions

1. High Level Panels

1.1 Nexus “Water, Food and Energy

The Panel brought together people with the highest level of experience in the three sectors, from government, private sector, international organisations and non-governmental organisations. Discussion on the water, food and energy nexus, where despite significant progress, security of water, energy and food supplies remain far from being achieved globally, the challenges of meeting future demands and maintaining the services provided by the environment was central to the High Level Panel. At its heart was recognition that resource scarcity is not the limiting factor, but rather it is the institutional commitment and willing. To be successful, a new ‘nexus’ oriented approach is needed; one that better understands the inter-dependencies across water, energy and food in an ecosystem services context, as well as the influence of trade, investment and climate policies. It is an approach that identifies mutually beneficial responses and provides an informed and transparent framework for determining benefits and risks in order to sustainably meet demand.

The Panel discussions cut across two aspects:

- Balanced development that increases the productivity of water, food and energy while recognizing the contribution of ecosystems services and the urgency to sustain them.
- The importance of collaborative 123 behaviour to support the sharing of benefits and risks

The High Level Panel has been concluded with the commitment of EDF and CGIAR-CPWF to pursue the work initiated, with Wetlands International and IHA among other partners who will join the group.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=670
Link to session video	http://www.worldwaterforum6.org/?id=308

1.2 Water and Food Security

If done right, agriculture, forestry and fisheries can provide nutritious food for all and generate decent incomes, while supporting people-centered rural development and protecting the environment. French minister of Agriculture stresses the need to use funds from the international community to invest in developing infrastructure in water-poor countries. This would include precision irrigation, reservoirs for storing winter water for summer use, and treatment of urban water for agricultural irrigation. Furthermore, he claimed innovation is key for developing irrigation and a more drought-resistant agriculture, which requires heavy investments. This high level panel also was the opportunity to reiterate the support small and family farming should be provided so as to combat poverty, increase productivity, and manage water sources more effectively. From this perspective, the set-up of regional water governance for agriculture and taking into account vulnerability of the environment are key conditions for success.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=905
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1.3 Making the Right to Water a reality for all

Further to the recognition in 2010 of the right to safe drinking water and sanitation by the United Nations General Assembly and the Human Rights Council, the high level panel on the right to water and sanitation has reminded that the right to water is not charity but a legal obligation for all States. States should commit themselves and enshrine it in their legal system as well as develop appropriate policies, tools and mechanisms to make it a reality for all. Several good practices following the principles of the right to water and sanitation, including affordability, accessibility, availability, non-discrimination, accountability, participation and access to information were discussed. Solutions from Cambodia, Bangladesh and Latin America were particularly convincing and provided guidance to different stakeholders on how the right can be achieved in different contexts. Political commitments were also examined, including the Blue Group Declaration presented by Spain and Germany.

Three main priorities for the future were highlighted:

- **Affordability:** actors should develop technologies that make services affordable for all. Inter-sectoral subsidies are an option, notably between telecommunications and water and sanitation.
- **Inclusion and equity:** priority should be given to the most vulnerable, especially in urban areas.
- **The post-2015 indicators:** new indicators using the right to water and sanitation criterion should be used to elaborate the future of the MDGs and the post 2015 agenda. Only ambitious goals will make a difference.”

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=598
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1.4 Water and disasters

The success of Disaster Risk Reduction lies in four main challenges. First of all, how can we shift the focus from the disaster reduction to the resilience building? Whereas disasters call for humanitarian and emergency response, building resilience is a daily action that needs to become a key in development through hard and soft measures and the adequate combination of both by government policies. Secondly, it is essential to actually engage all actors together, a team-based effort to achieve an integrated approach, avoiding competition between international agencies, ministries, governments or even NGOs. This concrete integrated approach that has to be based on local experiences should bring greater participation, larger accountability and ethical perspectives. Obviously, none of this can be done without leadership which is not spontaneous and require maturation. 2015 7th World Water Forum will be the occasion to make disaster issues being part of the MDGs and The Hyogo Framework for Action to be revised with stronger leader mandates.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=404
Link to session video	http://www.worldwaterforum6.org/?id=307

1.5 Global water governance

It has been often stated that the water crisis is not a crisis of water quantity, but a crisis of governance. There is enough water for everyone, but governing that water is where the problem lays. This especially becomes the case when the world as we know it has become more interlinked through trade, climate change and other global phenomena. This begs the question whether a more formal global water governance regime is necessary in order to address global water issues. The panelists agreed on several issues, including the need to strengthen existing global water governance as well as pay particular attention to multi-level governance as many actions, which are needed must take place at different levels of government, all the way down to the local. Water data to confront the current problems is also lacking and this alone merits more coordination and organization at the global level. The panelists agreed that a strong statement was needed at Rio + 20 in order to bring water to the level of importance on the political agenda that is required to bring action for the good of the world.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=406
Link to session video	http://www.worldwaterforum6.org/?id=305

1.6 Raising additional “grant” funding for water and sanitation

Whereas MDG targets related to water access seem to be on track, objectives on sanitation remain clearly below expectations. Therefore, it is time to focus financing on sanitation given that, in the last years, Official Development Assistance for water has significantly increased. The articulation between political potency and markets has to be done in a conscientious way in order for public power to palliate market failures and ensure fair price mechanisms. Naturally, grants entail risks: dependency of beneficiary countries and uncertain financing sustainability. In addition, resource allocation efficiency is very dependent upon countries’ absorptive capacity and ability to create enabling environment to benefit from international aid. Hence, grants should be invested in a very creative way and become catalytic by using innovative ideas such as soft measures instead of focusing on financing infrastructures. Grants have to be used as levers to encourage the private sector to invest

and take on the risks associated with the water and sanitation sector. They should also be geared towards raising countries absorptive capacities which remain very unequal from one country to another.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=747
Link to session video	http://www.worldwaterforum6.org/?id=307

1.7 Water and Green Growth

The Panel has brought together for the first time key influential high level international actors to examine the role that water plays in greening growth and to support and promote the development of a policy framework for water in green growth. Green growth is about fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies, and also about fostering investment and innovation to underpin sustained growth and give rise to new economic opportunities. In effect, maintaining and managing nature as a part of green growth and sustainable development needs to be fully integrated into policy frameworks. Innovation is needed in technical and financial terms but also in the ways stakeholders interact. This meeting at the 6th World Water Forum launched this Panel which will be set-up for an initial period of 1 year, and will meet again in 2012 on 2 or 3 other occasions throughout the year at other international events to build upon the outputs of previous meetings.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=998
Link to session video	http://www.worldwaterforum6.org/?id=307

1.8 Future of World's Water Beyond 2025

By 2025, water management will be a very different because of the rapid changes in traditional drivers like population, urbanization and industrialization but also due to factors that the water profession has never considered before, issues like globalization, free trade, information and communication revolution, immigration within and between countries, and advances in science and technology in non-water sectors which would have profound impacts on the water sector and on which the water sector would have very little control. Within this decade, many of the paradigms will become obsolete or have to be modified significantly. Within this uncertain and unpredictable world, water management have to develop a new planning framework which should be to think ahead, think across water and all water-related activities and then think again. This will not be an easy task but one that is absolutely essential.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1534
Link to session video	http://www.worldwaterforum6.org/?id=306

1.9 Water Infrastructure for Development in Large Countries

A constructive discussion associating government representatives, multilateral organisations, water operators, private sector and NGOs was held around the extent to which large water infrastructures (dams, reservoirs, aqueducts) can provide a platform for growth and their limits. The panel recommends that comprehensive cost-benefit analysis, including environmental and social impacts, are to be led before investing in water infrastructures and that some projects should be dropped if their cost outweighs their benefit. This task is complicated by the fact that the costs are often local and the benefits scattered over a wider territory. Yet, the cost of not investing in those infrastructures, in terms of developing alternative sources of energy for instance, should also be taken into account. The panel also agreed on the crucial role that water infrastructure can play in mitigating the increased variability of water flow due to climate change.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=462
Link to session video	http://www.worldwaterforum6.org/?id=306

1.10 Water Scarcity in Arid Areas

The objective of this High Level Panel was to discuss priority actions needed to improve management of water in arid areas and how to reduce drylands, but it was also the opportunity to clarify the definition of desertification for the public. All stakeholders agreed that water management cannot be done without local governance and that combining new technologies with existing know-how is essential. Besides, some stakeholders raised the solution of Education, demonstrating that progresses were observed by educating children to basic gestures of saving water, and the importance of educating children but also parents. Another important issue was whether the satellite resources can help solve the problems of desertification. On this subject, stakeholders were unanimous: the satellite is a very welcome reinforcement. The problem is that these solutions are still largely untapped, particularly due to difficult access and to a lack of accompaniment. Nevertheless, satellite images could allow: monitoring of crop water consumption to more efficient water irrigation and measuring the rate of land covered by vegetation, which is an indicator adopted by the UNCCD. The overall conclusion was that any solution is complex and requires a comprehensive, multidisciplinary approach to reconcile science and society.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=707
Link to session video	http://www.worldwaterforum6.org/?id=307

2. Water Debates

The water debates offered thought-provoking grounds to build bridges between polarised viewpoints.

2.1 Private/public involvement in the provision of water and sanitation services

This debate addressed the topic of private versus public provision of water and sanitation services and opened up an informed and responsible dialogue, moving away from caricature and simplification. The debate over public versus private water and sanitation service provision has been ongoing for many decades. It has been dominated by the ideological differences between the supporters and critics of privatization of these services. With the drive towards the Millennium Development Goals (MDGs), and other such initiatives to reduce the amount of people who lack access to safe drinking water and basic sanitation, this issue has come to the forefront as solutions become critical to ensure these goals are met. This debate used the different perspectives from the panel, in an informed and constructive manner, to look to the future for potential fair and equitable solutions within the provision of water and sanitation services.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=661
Link to session video	http://www.worldwaterforum6.org/?id=304

2.2 Increasing resilience to climate change: what is the role of water storage?

Climate change is leading to unprecedented shifts in hydrology, with wide-ranging consequences for economies, societies and ecosystems. Increasing water storage capacity by building dams is often viewed by water managers as a strategy to cope with "too much" or "too little" water associated with more erratic rainfall and escalating extremes. At the same time, others argue that the environmental and social costs of such large infrastructural developments outweigh the benefits and call for more climate-smart and robust alternative responses from the water community. This debate explored the diverse perspectives regarding the

role of man-made storage for building resilience to climate change. One conclusion is that, in the context of adaptation to climate change water storage can be a solution coping with severe droughts and intense floods.

Link to session documents	http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1523
Link to session video	http://www.worldwaterforum6.org/?id=308

3. Special Focus Sessions

3.1 Water Storage for Sustainable Development

Stakeholders agreed on the innovative idea of a Minimize to compensate approach. In other words, all stakeholders will try to reduce the negative effects of building dams and if it's not possible they will compensate people for all damages caused. Besides, the inclusion of Natural Infrastructure was put in the center of the attention. Discussions led to several recommendations as follows:

- Foster community involvement, information and education in the process.
- Promote investment on Natural Infrastructure.
- Use innovative methods for building dams, such as the Trapezoidal CSG design practices invented by Japanese engineers.
- Encourage the re-design and reconstruction of existing dams wherever it is necessary
- Secure source water protection for having access to clean water and conserving this precious natural resource.
- Support regional Planning.
- Encourage water stewardship.

The main messages from the session were that community involvement in the management of natural resources and for the maintenance of infrastructure are essential for a sustainable success. Moreover, investment on Natural Infrastructure appears to be a solution to slow down and gradually restore environmental degradation. Last but not least, innovation and cooperation are crucial needs for the success of all operations and initiatives.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=252](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=252)

3.2 Water and the future of humankind

This session unfolded as a Panel of six members of the 'Gulbenkian Think Tank on Water and the Future of Humankind created by the Calouste Gulbenkian Foundation (Lisbon, Portugal). The Panel explored opportunities for society to prevent future water crises under pressures of demographic growth, social and economic development and climate change. The benefits of water for humankind can be maximized through cross-sector management of water, energy, food, and the environment, recognizing both the trade-offs and synergies among these different sectors. Pursuing a business-as-usual approach in water use will surely lead to unacceptable outcomes, including conflict. Water management paradigms that improve efficiency and equity in water use and changes in human behaviour are needed at local, regional and global levels. If achieved they could make water a factor of social cohesion and prosperity. Further developments in science and technology will not be enough. Involvement of stakeholders and society at all levels and exceptional creativity will be essential to deal with future water management challenges. The members of the Gulbenkian Think Tank on Water and the Future of Humankind are committed to publishing a book suggesting new paradigms for world water security.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=733](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=733)

3.1 Water in the U.S. American West: 150 Years of Adaptive Strategies

This session traced the history and consequences of water development, highlighted a menu of adaptive strategies that continue to evolve, and concluded with a summary of key trends in policy and governance. In just a few generations, an ambitious campaign to harness the rivers of the American West transformed the region, attracting tens of millions of new residents and encouraging a major growth-oriented economy. The multiple-purpose water projects constructed through the early to middle 20th century flattened the great

variations in water availability, making possible extraordinary expansion of economic activity and quality of life for the new settlers. The session conveners prepared a policy report through consultation with over 100 political and water leaders. The key issues and solutions featured in this report include:

- Managing a scarce and variable resource
- Protecting river ecosystem values
- Honouring indigenous water rights
- Engaging diverse stakeholders
- Managing water across boundaries
- Innovative tools for financing infrastructure.

See more details at: [http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=463](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=463)

VII. Commitments Session

In giving focus to the notion of “commitments” the Forum both maintained the central emphasis on “solutions” (at all levels, in relation to all themes, regions and stakeholders) and extended it, insisting on appropriate and accountable concrete commitments. This evolution proved to be of value through its very process, particularly during the Forum week but also through the preparatory processes in the months preceding the Forum. It was seen to be a key motivating force and managed to establish, despite the large numbers and wide diversity of stakeholders, a “Forum Community” with a momentum that will ensure the sustainability of the Forum results.

The Commitments Session assembled the Forum Community: a large plenary designed to be interactive and dynamic and aiming to create collective ownership of the commitments made through the Forum as well as a sense of collective accountability. It gave voice and image to the full range of commitments organized to reflect both the themes and regions highlighted in the Forum. In defining and articulating this wide range of commitments (from the very local to international, from the individual to global networks, from State to Private Sector, from inclusive civil society to specialized scientific perspective) local, national, regional and global conversations ensuring sustainable development and social equity where water is placed centre stage have been guaranteed.

See details of the session agenda at:

[http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2\[uid\]=1270](http://www.worldwaterforum6.org/en/library/detail/?tx_amswwfbd_pi2[uid]=1270)

See video at:

<http://www.worldwaterforum6.org/en/gallery/videos/the-commitments/>

Over 100 commitments have been rigorously selected and documented. They are accessible on the Platform of Solutions website: <http://www.solutionsforwater.org/commitments>

Notably, they include the commitments of the Forum organisers as follows:

- The French Government:
<http://www.solutionsforwater.org/commitments/commitments-by-the-french-gouvernement>
- The City of Marseille:
<http://www.solutionsforwater.org/commitments/les-engagements-de-la-ville-de-marseille>
- The World Water Council:
<http://www.solutionsforwater.org/commitments/commitments-by-the-world-water-council>

VIII. Side Events

ORGANISATION COUNTRY	CATEGORY	EVENT TITLE	LINKS	Contact	INTRODUCTION GIVEN BY THE ORGANIZER	DATE	TIME
Compagnie Intercommunale Liégeoise des Eaux BELGIQUE	water services providers	"Présentation de procédures d'urgence et eau de substitution"	WWW.Cile.be	Anita ALEOTTI	<p>The “Compagnie Intercommunale Liégeoise des Eaux (CILE), a Belgian public company, now one hundred-years-old, produces and distributes drinking water to more than half a million inhabitants. It has an emergency plan incorporating various procedures in the event of interruption and/or contamination of the supplies. The CILE is also equipped with a spring water bottling plant, with a production capacity of 1,000 10-litre bottles per hour. In addition to the anaerobic filling process, a characteristic of these bottles is that they retract while the water is poured out. This technique prevents any contamination by the ambient air, which ensures the water’s quality and safety, in all circumstances. These bottles, put at the disposal of the service managers, civil protection officials and public authorities concerned, are called upon to meet all emergency or crisis situations, at national and international level alike, including humanitarian aid interventions. Many local organisations have already shown an interest in incorporating this product into their general emergency and intervention plans.</p> <p><i>For the French version click on the link</i></p>	Mardi 13/03/12	19:15 20:15
Portuguese Water Partnership PORTUGAL	Netwok/association	"Sharing water solutions in the Portuguese-speaking world"	<p>INTRODUCTION: http://www.ppa.pt/eventos/6-%c2%ba-forum-mundial-da-agua/</p> <p>WEBSITE : www.ppa.pt</p>	Alexandra Serra	<p>At the 6th World Water Forum, the Portuguese Water Partnership (PWP) promoted a side-event dedicated to “Sharing Solutions for Water within the Portuguese Speaking World”.</p> <p>This event was chaired by the Environment Ministers of Portugal, Assunção Cristas, Cape Verde, Sara Lopes, and the President of the PWP, Francisco Nunes Correia.</p> <p>Presentation topics included:</p> <ul style="list-style-type: none"> • “Accessing financial resources for the water sector”, European Investment Bank & the World Bank • “Water for all in Maputo: managing water services in peri-urban areas”, Mozambique • “The reform of the water and sanitation services in Cape Verde”, Cape Verde • “Building institutional capacity: challenges in a continental-sized country”, Brazil • “The role of the regulator in providing support for capacity building of water operators in Portugal”, Portugal • “Integrated water resources management in São Tomé and Príncipe as a support for food, energy and environmental security”, São Tomé and Príncipe • “The Portuguese plan for adaptation to climate change in the water sector”, Portugal <p>Given the nature and geographical scope of the event, all the above presentations were delivered in Portuguese.</p>	Mardi 13/03/12	15:30 18:30

<p>National Association of Water and Sanitation Utilities in Mexico (ANEAS)</p> <p>MEXICO</p>	<p>Network/association</p>	<p>1. "Water and Sanitation Utilities Solutions as Contribution to Social Welfare"</p> <p>2. "Water: Harmony, Balance and Development"</p>	<p>http://www.aneas.com.mx/6for014_en.htm</p> <p>http://www.aneas.com.mx/6for06_en.htm</p>	<p>Roberto Olivares</p>	<p>. ANEAS and the Latin American Association of Water and Sanitation Utilities (ALOAS) organized the session <i>Water and Sanitation Utilities Solutions as Contribution to Social Welfare</i>, on March 15, 2012, aiming to create the opportunity for Latin-American water and sanitation utilities to share their experiences and solutions on water supply, sewerage and sanitation services with the world water community.</p> <p>The session started with an overview of ALOAS activities, followed by five presentations of solutions in the Latin American region: "Water Near Everybody" from Queretaro, Mexico (CEAQ); "Project Monterrey 6th" from Monterrey, Mexico (SADM); "Matanzas River Project" from Argentina (AySA); "Business Management Model" from Quito, Ecuador (EPMAPS); and "Reuse Water Project" from Sao Paulo, Brazil (SABESP).</p> <p>. On March 13, 2012, the National Water and Sanitation Utilities of Mexico (ANEAS), presented the book <i>Water: Harmony, Balance and Development</i>, written by its President, Dr. David Korenfeld Federman, who was Mayor in Huixquilican, in the State of Mexico, former Secretary of Water and Public Works of the State of Mexico.</p> <p>The book presents a different and modern view of water, sewerage and sanitation sector in Mexico, while providing valuable insight and an important reflection message to the reader. This occasion, the book was commented by prominent personalities such as Ándras Szöllösi-Nagy, Rector of the UNESCO-IHE Institute for Water Education; Paulo López Varela Neto, Director of the National Water Agency of Brazil (ANA); Newton Lima Azevedo, Vice President of the Brazilian Association of Infrastructure and Basic Industries (ABDIB); Oscar Lara Arechiga, President of the Water Resources Commission of the Mexican Congress; and Eduardo Mestre, World Bank Consultant.</p>	<p>Mardi 13/03/12</p>	<p>19:15 20:15</p>
<p>World Meteorological Organization</p> <p>SWITZERLANDS</p>	<p>Intergovernmental and international organisation</p>	<p>"Improving water resources management through the Global Framework for Climate Services (GFCS)"</p>	<p>http://www.wmo.int/pages/gfcs/office/event_WWF6.php</p>	<p>Filipe Lúcio</p> <p>Cecilia Talara Avellan</p>	<p>Water is the essential for life. Floods and droughts are the leading death agents of hydro-meteorological events. Improved knowledge and prediction on climate extremes, their occurrence in space and time as well as their effects on a regionally differentiated basis is necessary to provide the much needed tools for decision makers to adopt appropriate policies and strategies in the water resources management. The Global Framework for Climate Services (GFCS) will provide a global mechanism to enable producers, researchers and user organizations of climate services to join forces to lift the quality and volume of climate services worldwide, and particularly in developing countries. The Framework will address existing gaps provider and user interaction, in data gathering, collation, analysis and transfer as well as in understanding and communicating climate information to meet user needs.</p>	<p>Mardi 13/03/12</p>	<p>19:15 20:15</p>


<p>Commission Centrale pour la Navigation du Rhin</p> <p>FRANCE</p>	<p>Intergovernmental and international organisation</p>	<p>"Première rencontre mondiale des autorités chargées de la navigation intérieure.</p> <p>INTRODUCTION TITLE " INLAND WATERWAY TRANSPORT IN TIMES OF GLOBALISATION"</p>	<p>http://ccr-zkr.org/13020131-en.html (anglais).</p> <p>http://ccr-zkr.org/13020131-fr.html (français)</p>	<p>Jean-Marie Woehrling</p>	<p>On the occasion of the 6th World Water Forum being held in Marseille, the Central Commission for the Navigation of the Rhine (CCNR) took the initiative of bringing together the world's major stakeholders in inland navigation at a side event held on 13rd March 2012. The purpose of the meeting was to establish links among the authorities that manage the major navigable waterways, and to embark on an exchange of information and experience. Many vital river basins around the world were present for the occasion and a joint declaration has been adopted, to recall the growing importance of river navigation, which constitutes a sustainable mode of transport in global terms and to emphasize the need to work together on his promotion. Other inland navigation authorities are encouraged to join the initiative and an Internet platform for information and discussion aimed at promoting this mode of transport should be set up in the near future. A second event could be organised, to tie in with the SMART Rivers workshop organised by PIANC in September 2013.</p> <p>For the French version, click on the link</p>	<p>Mardi 13/03/12</p>	<p>13:15 14:15</p>
<p>Global Alliance Against Cholera&Fondation Veolia Environnement</p> <p>FRANCE</p>	<p>Social entrepreneurship</p>	<p>Lutte contre le choléra: une solution alliant Eau et Santé Introduction title « Water and Health » -fight against cholera”</p>	<p>http://www.choleraalliance.org/about-us/the-alliance</p>	<p>Dr. Thierry VANDELVEDE</p>	<p>The Global Alliance Against Cholera (GAAC) represents an integrated effort that combines the provision of potable water, availability of sanitation facilities, and dedicated health education services based on applied epidemiological research, for a sustainable fight against cholera and other untreated water-related diseases. This approach is being implemented at this time in the Democratic Republic of Congo by the national authorities, with the support of the Veolia Environnement Foundation and international Non Governmental Organisations. The Alliance is designed to strengthen the strategies adopted by cholera-affected countries in their ongoing fight against the disease, by ensuring efficient epidemiological surveillance, reinforcing access at the community level to potable water, effective sanitation and improved hygiene, and efficient medical care of cholera cases when and where they may occur. At the 6th World Water Forum “Time for Solutions” the Global Alliance Against Cholera held a side event “Water and Health: an integrated approach for the fight against cholera” on March 13th 2012, in Marseille, France.</p>	<p>Mardi 13/03/12</p>	<p>13:15 14:15</p>
<p>EMWIS/SEMIDE France</p>	<p>Network/association</p>	<p>« Shared water Information systems for a better governance in the Mediterranean”</p> <p>Des systemes d’information partagée pour une meilleure gouvernance de l’eau en Méditerranée”</p>	<p>http://www.semide.net/documents/meetings/events/wwf6/emwis-wwf6/side-event</p>	<p>Eric MINO</p>	<p>“In the water sector, access to reliable information is a major challenge for a transparent and efficient governance. A national water data collection and monitoring system is an essential element in order to provide reliable background for defining, implementing and evaluating each country's water policies and investments linked to clear and shared objectives. Improving institutional cooperation and implementing jointly agreed standards are the main challenges. EMWIS have been working with all Mediterranean countries since 2005 on sharing knowledge on data management. A new momentum has been reached thanks to the Union for the Mediterranean Ministerial recommendations for data, information and statistics on water, based on internationally agreed definitions and methods, structured within information systems. One of the main commitment expressed is the launch of a regional project covering the Mediterranean area with some 5 countries developing their National Shared Water Information System, receiving support from the international community and exchanging experiences in water data management.”</p>	<p>Mardi 13/03/12</p>	<p>13 :15 14 :15</p>

					<p>« L'accès à une information de qualité dans le domaine de l'eau est un enjeu majeur pour une gouvernance transparente et efficace des ressources naturelles. Un système national de collecte, traitement et suivi des données sur l'eau est essentiel pour assurer l'accès à une information de qualité et aux connaissances nécessaires à la définition, la mise en œuvre et l'évaluation des politiques et des investissements de chaque pays. L'enjeu majeur réside dans une bonne coopération interinstitutionnelle et dans l'usage de standards communs. Le SEMIDE travaille avec les pays méditerranéens sur le partage de savoir-faire dans ce domaine depuis 2005. L'Union pour la Méditerranée a fait de ce thème une de ses priorités dans la déclaration ministérielle sur l'eau de fin 2008. Les engagements relatifs à ces systèmes auront un impact direct sur les objectifs cibles du processus intercontinental méditerranéen et le processus thématique « coopération et paix ».</p> <p>L'un des principaux engagements exprimés pendant cette session est le lancement d'une initiative régionale couvrant l'ensemble de la Méditerranée avec 5 pays pilotes développant leur système national d'information partagée sur l'eau, supportés par la communauté internationale et partageant leurs expériences avec l'ensemble des pays. »</p>		
Institut de recherche pour le développement (IRD) FRANCE	Govt & admin National	"Changements globaux et ressources en eau sur le fleuve Niger"	No link	Eric SERVAT	<p>Ce WS a rappelé la complexité et l'importance des enjeux qui concernent un fleuve comme le Niger, artère incontournable pour plusieurs pays soumis, pour certains, à des contraintes hydriques extrêmement fortes. L'incertitude qui prévaut face aux changements globaux qui s'annoncent peut avoir pour conséquence de renforcer les oppositions qui se font parfois jour entre gestionnaires/utilisateurs de la ressource, soucieux du développement économique et de l'accès immédiat à une ressource vitale pour les populations, et tenants d'approches à plus long terme nécessitant le temps de l'observation et du suivi des modifications tant environnementales que sociétales.</p> <p>A cet égard, le WS, qui a rassemblé scientifiques, gestionnaires et décideurs, a permis de rappeler que les solutions indispensables pour le bien-être des populations et la préservation de l'environnement et de la biodiversité ne sortiraient que d'une concertation la plus large possible. Il a été souligné que les scientifiques avaient le devoir d'observer les changements et d'en comprendre et modéliser les conséquences afin que ces informations cruciales soient mises à disposition des gestionnaires/décideurs. Dans cette optique, et sur cette base de concertation avec les scientifiques, le rôle de l'Autorité du Bassin du Niger (ABN) a été mis en avant. L'ABN, structure inter-états, porte à ce titre la responsabilité de l'avenir du Fleuve Niger et de la bonne gestion de la ressource primordiale qu'il représente. Dans la lignée de ce qu'elle a déjà entrepris, avec de remarquables succès, elle est encouragée à poursuivre son travail de concertation avec l'ensemble des communautés en intégrant les résultats des scientifiques dans sa réflexion et dans sa stratégie.</p>	Mardi 13/03/2012	19h15 20h15

<p>EPSU BELGIUM</p>	<p>workers and Trade Unions</p>	<p>"Implementation of the Human Right to water and sanitation"</p>	<p>www.right2water.eu</p>		<p>At World Water Forum 6 in Marseille the European Federation of Public Service Unions (EPSU) announced the first European Citizens' Initiative (ECI) that has been submitted to the European Commission (EC) on 1 April 2012. EPSU has started this citizen campaign to achieve the implementation of Water as a Human Right. The ECI also urges European policy makers to keep water out of internal market rules and not treat it as a commodity. For this, one million signatures will be collected in EU Member states.</p> <p>EPSU has been building alliances across Europe with other organizations such as the European Environmental Bureau (EEB), Women in Europe for a Common Future (WECF), public water companies and many other actors. "We have tried to apply word-for-word the UN Declaration in our public water operation in Paris. Today we are facing an economic crisis which is a real threat to our water and sanitation services across Europe," declared Anne Le Strat, President of Eau de Paris and Aqua Publica Europea. "I fully support this initiative," she added.</p> <p>EPSU General Secretary Carola Fischbach-Pyttel said, "We hope that this initiative will help to ensure that water remains a public good and becomes a human right fully respected and applied in Europe." The campaign to collect one million signatures will last until May 2013.</p>	<p>Mercredi 14/03/12</p>	<p>13h15 14h15</p>
<p>INBO (OIEAU) FRANCE</p>	<p>Network/association</p>	<p>"Launching of Handbook II on transboundary basin management"</p> <p>INTRODUCTION TITLE "LE MANUEL DE LA GESTION INTEGREE DES RESSOURCES EN EAU DANS LES BASSINS DES FLEUVES, DES LACS ET DES AQUIFERES TRANSFRONTALIERS"</p>	<p>http://www.riob.org/</p>	<p>Jean François DONZIER, technical secretary of INBO</p> <p>Daniel Valensuela</p>	<p>Le Réseau International des Organismes de Bassin (RIOB), le Partenariat Mondial de l'Eau (GWP), la CEE-ONU, l'UNESCO, le GEF, EVREN et l'AFD ont conjugué leurs efforts pour produire « le Manuel sur la Gestion Intégrée des Ressources en Eau dans les Bassins des Fleuves, des Lacs et des Aquifères Transfrontaliers ».</p> <p>Cet ouvrage fournit des conseils pratiques pour améliorer la gestion des ressources en eau dans les bassins transfrontaliers, à partir d'exemples concrets d'actions d'ores et déjà engagées dans différents bassins. Il balaye tous les sujets qui s'y rattachent comme la gouvernance des organismes de bassin, les systèmes d'information et de suivi, la spécificité de la gestion des aquifères transfrontaliers, la participation des acteurs, la planification, le financement et le renforcement des capacités des organismes de bassin transfrontaliers. Ce manuel, lancé lors du Forum de Marseille et qui vient compléter le « Manuel de gestion intégrée des ressources en eau par bassin » paru en mars 2009, s'adresse aux représentants des gouvernements des pays riverains de bassins transfrontaliers et aux gestionnaires qui doivent prendre des décisions liées au partage et à la gestion de la ressource, ainsi que plus généralement à l'ensemble des usagers de l'eau.</p>	<p>Mercredi 14/03/12</p>	<p>13:15 14:15</p>

(RE)SOURCES FRANCE	Network/association	"Et si la ville prenait l'eau?"	http://www.re-sources-network.com/ressources/contribution/1/457/Actes-conference-RE-SOURCES_Marseill.pdf	Nathalie de Lataillade	A l'issue de la table-ronde organisée par (RE)SOURCES à Marseille sur les enjeux et le rôle de la sécurisation foncière au service de l'accès à l'eau dans les quartiers informels, le think tank propose que soient prises des mesures concrètes et pragmatiques pour améliorer et renforcer l'accès aux services essentiels dans les quartiers informels. Dans les zones urbaines précaires, illégales, il y est fait généralement défense aux services publics d'installer des réseaux et de desservir les habitations édifiées sans permis de construire. « La conséquence directe est le développement d'une économie informelle, où les plus pauvres paient l'eau jusqu'à 10 fois plus cher que les riches qui sont raccordés au réseau », a rappelé Patrice Fonlladosa, Président de (RE)SOURCES.	Mercredi 14/03/12	12:00 15:00
Japan Water Forum JAPAN	Intergovernmental and international organisation	Business-based Pro-poor Approach on Water and Sanitation for Better Sustainability TITLE INTRODUCTION "Business-based Pro-poor Approach on Water and Sanitation for Better Sustainability"	http://www.waterforum.jp/twj/eng/news/bopbusiness-report.html	Sombo Yamamura	The BOP business on water will include some key components: (i) to mobilize private resources not for their profit, (ii) to use simple and sustainable technology that is cheap, easy to construct and easy to operate and maintain, (iii) to create job opportunities for local people by involving them in the business, (iv) to provide training for local people, (v) to work together with government and NGOs for campaign, (vi) to improve the living conditions by grass route efforts but ultimately influence large populations behind development. At the side event, key note speeches followed by panel discussion were held to promote business-based pro-poor approach on water, inviting representatives of donor agencies and on-going JICA projects. It is intended to create win-win-win relationships among countries providing support, countries receiving support, and those peoples benefiting from the support. BOP water business will help attaining the United Nation's Millennium Goal 2015 and continued efforts beyond.	Mercredi 14/03/12	19:15 20:45
Fondation Prince Albert II de Monaco PRINCIPAUTE DE MONACO	donors, finance & investments	"Gouvernance territoriale de l'eau en Méditerranée"	http://www.fpa2.com/fondation.asp?page=wt	Chloé PETRUCELLI	Click on the link	Mercredi 14/03/2012	13 :15 14 :15
AquaFed - The International Federation of Private Water Operators BELGIUM	Network/association	"Showing Diversity & Performance of Private Water Operators"	<i>Brochure :</i> http://www.aquafed.org/pdf/AquaFed_Performance_PrivateWaterOperators_2012-03-14.pdf <i>AquaFed Core Messages at the 6th World Water Forum :</i> english version : http://www.aquafed.org/pdf/2012-03-14_AquaFed_PressFile_Pc.pdf French version : http://www.aquafed.org/pdf/2012-03-14_AquaFed_PressFile_FR_Pc.pdf <i>Summary :</i> http://www.aquafed.org/press.html	Mr. Gérard PAYEN	Click on the link	Mercredi 14/03/2012	13:15 14:15

<p>NGO Feminine Conference on Water</p> <p>JAPAN</p>	<p>civil society/ONG</p>	<p>"Make Tellurian Water Renaissance"</p>	<p>English page http://mizujosei28.org/Eng/wwf6.html Fench page http://mizujosei28.org/Eng/wwf6_fr.html</p>	<p>Tae Nampoh</p>	<p>Comment: Dear Friends all over the world! I appreciate having precious time of sharing the most important information. See what is happening in Polar regions water environments which should be the remaining purest area; Presentation by Mr. Keizo Funatsu, one of the most experienced worldwide Pole adventurers shared his rare experiences and the latest environments of North and South Poles in Marseille; Mr. Yasushi Aikawa, associate prof. of Tottori Univ. shares current lead contamination problems in Asian countries; Here are some solution skills and productions for clearing lead contamination; We suggest PONEL concept as "Piece-ful Organic Nature and Ecological League" for every being; Make Tellurian Water Renaissance for more harmonized lives for every soul in the telluric field of the solar system. See and listen to the fact of mother Gaia and Father Terra in our heart. NGO Feminine Conference on Water Mrs Tae Nampoh</p>	<p>Jeudi 15/03/12</p>	<p>19:15 20:15</p>
<p>Inter-American Development Bank</p> <p>USA</p>	<p>donors, finance & investments</p>	<p>AquaRating: A rating system for Water and Sanitation Provider</p>	<p>http://www.iadb.org/en/topics/water-sanitation/aquarating_3809.html</p>	<p>Matthias Krause, PhD</p>	<p>AquaRating is a new rating system that is being developed by the Inter-American Development Bank (IDB) in cooperation with the International Water Association (IWA). It assesses the performance and the management practices of water and sanitation service providers in a comprehensive way. Apart from an overall rating of the service provision, the system will offer detailed assessments of the various rating areas (quality of services, operational efficiency, planning & investment efficiency, management efficiency, financial sustainability, environmental sustainability, corporate governance & accountability, access to services), an assessment of the reliability of the information provided, as well as recommendations to improve management practices. AquaRating will be administered by an independent entity to which utilities can apply for a rating on a voluntary basis, and that trains and certifies the auditors who review the information provided to determine the rating.</p>	<p>Jeudi 15/03/12</p>	<p>13:15 14:15</p>
<p>Food and Water Watch</p> <p>USA</p>	<p>Intergovernmental and international organisation</p>	<p>"Hydrolic Fracturing: The Case for a Global Ban"</p>	<p>http://www.foodandwaterwatch.org/europe/</p>	<p>Darcey O'Callaghan</p>	<p>While the oil and gas industry promotes fracking as a stepping-stone towards renewable energy, local communities have found their water contaminated, their health compromised, and their property without value. In some communities, tap water is now flammable. Given the current global economic crisis and calls for both job creation and energy independence, governments face increasing pressure to allow fracking. Despite this heavy pressure, France and Bulgaria have banned fracking and regions in South Africa, Germany and the United States have passed temporary moratoria. In the U.S., pro-fracking industry advocates have grossly overestimated job creation. What's more, foreign companies are buying large shares of fracking projects to gain both profit and technical expertise, negating the idea of domestic energy independence. As new exploratory permits are being issued in many countries, including Poland and Uruguay, local communities are learning from those who've experienced irreparable damage. Every dollar spent on fracking is a dollar not spent on the development of truly renewable energy. Hydrologic fracturing is a dangerous and polluting technique that must be banned globally.</p>	<p>Jeudi 15/03/12</p>	<p>13:15 14:15</p>

WISE-RTD Association CYPRIOUS BELGIUM	Network/association	"WISE-RTD Water Knowledge Portal - Linking Policies, Research Results and Tools"	All the links in the text.	Xenia THEODOTOU SCHNEIDER	WISE-RTD Water Knowledge Portal from the EU-funded project STEP-WISE  <p>Today all water resources are under pressure, so sustainable water management is crucial. However, there is a weak link between water research and policies, and their application regional, national, European and international level. Through the WISE-RTD Water Knowledge Portal, the EU water policies and the US Clean Water Act are linked intelligently with scientific results, tools and experiences. WISE-RTD provides intuitive guided searches for water policies and scientific results. WISE-RTD is available freely at www.wise-rtd.info. WISE-RTD links today over 700 European-funded water research projects, 300 guidance documents, 600 experiences and 200 tools. WISE-RTD provides a highly interactive and easy to access free of charge eLearning for an effective linking science to policy at http://www.wise-rtd.info/en/bleu-page/elearning-programme</p> <p>For more information about STEP-WISE: www.spi-water.eu/step-wise</p>	Jeudi 15/03/12	13 :15 14 :15
EU Water Initiative Africa Working Group/AMCOW SWEDEN	Network/association Intergovernmental and international organisation	EU-Africa dialogue on development cooperation in Water for Growth -Convened by the EUWI Africa Working Group and AMCOW Secrétariat introduction	1° INTRODUCTION : http://www.euwi.net/files/Summary_report_AWG_AMCOW_side_event_EU-Africa_Dialogue_15_March_2012.pdf 2° WEBSITE : www.siji.org	Johanna Sjödin	See the link	Jeudi 15/03/12	13:15 14:15
Ea éco-entreprises FRANCE	Network/association	Lancement du "Réseau Mondial des PME de l'Eau"	Contact Link referring the text : Christelle.maffre@ea-ecoentreprises.com	Martine DIDIER	Lancement du nouveau réseau mondial des pme de l'eau : I-NOWS (International Network of Water SMEs) en présence de 11 pays qui ont signés la charte d'engagement: France, Maroc, Colombie, Chili, Israël, Portugal, Espagne, Grèce, côté d'ivoire, Tchad, Egypte et des nombreux partenaires : IWA, ONUDI, Chambre de commerce et d'industrie de Marseille, UBI France, projet Européen TEMA	Vendredi 16/03/12	13:15 14:15
Water Integrity Network (WIN) GERMANY	Network/association	Water professional curbing corruption: the role of private sector	http://www.waterintegritynetwork.net/win-news/involving-the-private-sector-to-curb-water-corruption-at-the-6th-world-water-forum	Janek Hermann Friede Fiona Meyer	Click on the link	Vendredi 16/03/12	8:30 11:30

IX. Closing ceremony speeches

The table below lists the high-level closing speeches and provides access to the full text through the respective links.

	11:30	12/03/2012		
CLOSING SPEECHES		Mr. Jean-Claude GAUDIN	Mayor of the city of Marseille	ENGLISH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/jean-claude_gaudin_speech_closing_ceremony.pdf FRENCH : http://www.worldwaterforum6.org/fileadmin/user_upload/pdf/closing_speech_jean-claude_gaudin.pdf
		Mr. Loïc FAUCHON	President of the World Water Council	ENGLISH : FRENCH :

See video at: <http://www.worldwaterforum6.org/?id=304>

Conclusion

The outputs of the 6th World Water Forum held from 12 to 17 March 2012 in Marseille are now collected in a comprehensive Forum Library and this report provides access to all of these.

The 7th World Water Forum in 2015 is to be held in Daegu, Korea and it will soon begin its preparatory work. We hope that this document will be a tool to the world water community to ensure capitalisation of progress during the 6th World Water Forum and the continuity of action and commitments in the perspective of Daegu.

We are happy to give it over with a pride of accomplished duty. Yet the pages of this document should not be definitely closed. They are only a chapter of a long story that needs to be tenaciously pursued across the world, keeping focus on the fundamental objectives that water and sanitation issues impose to the global community.

Welcome to the next chapters of this water story.

Glossary of Key Terms

Commitment: Commitments primarily stand as pledges of action generating impacts in the benefit of water. They should directly stem from the 6th Forum preparatory activities, and be attached either to Priorities for Action/Conditions for Success/Regions in general, or more specifically to Targets, Action Plans and/or solutions. Commitments should be brand new pledges. They can also build on existing pledges/on-going water-related actions with a view to upscaling them both in terms of scope and impacts (i.e. increase amount of funds allocated, number of signatories, political support, etc.). The actions associated with commitments should also include monitoring options.

Conditions for Success: three Conditions for Success complement the Priorities for Action. They show that there are strong cross-cutting prerequisites to the achievement of all the Priorities for Action.

Forum's Library (<http://www.worldwaterforum6.org/en/library>): The Forum's library features an advanced search option which enables users both to browse the Marseille sessions and events programme as a documents library and to access all sessions' documents and pre and post Forum reports easily.

Grassroots and Citizenship Process: develop and facilitate the implementation of targets through citizen's actions and local experiences.

Platform of Solutions (<http://www.solutionsforwater.org>): is a platform to exchange on hands-on solutions for water. It presents all the solutions and commitments gathered at the 6th World Water Forum and also hosts an active community of different stakeholders. The social network of professionals linked to the website numbers close to 2000 registered members.

Preparatory Processes of the Forum: in charge of preparing and facilitating the implementation of solutions to the identified priorities for action, the four preparatory processes are:

Political Process: governments, parliamentarians, local authorities developed political targets and solutions e.g. cities commit to reduce the energy footprint of their water services under the Istanbul Water Consensus process.

Priority for Action: 12 Priorities for Action reflect the major contributions of water to the challenges the world is facing and can be considered as the objectives of the Forum. They are clustered around the three pillars of sustainable development and a series of targets translates them into concrete and achievable objectives at all levels. Example: "Harmonize Energy and Water".

Regional Processes: in the Americas, Asia-Pacific, Europe, Africa and in sub-regions develop and facilitate the implementation of targets referring to regional priorities, as identified in previous Fora

Regional Targets: the concept of "regional target" refer either to region-specific target or to regionalised global targets, which could be considered as decentralised implementation of the thematic priorities.

SMART: Specific, Measurable, Achievable, Realistic, Time-bound

Solutions: solutions are the concrete existing or innovative actions required to achieve the targets. They can be institutional (governance structures, plans, policies...), legal (a law, a decree, a treaty...), technical (an appropriate device, a plant, a tool, software...), financial (levy, transfers, tariffs...) or communication-related (advocacy campaigns, videos, leaflets...).

Strategic Directions: the 3 strategic directions set the global path for the definition of actions required to achieve concrete results. They are in line with the three pillars of sustainable development. Example: "Contribute to economic development".

Targets: under each Priority for Action, a series of targets translates the identified issues into concrete and achievable objectives at all levels. The Forum's ambition is to initiate the process which makes the targets

become a reality through multi-stakeholders processes. The targets need to be made SMART, WISE and have to identify a relevant action plan in order to meet the associated objectives. Example: "By 2015, target driven policies effectively implemented by XX cities so as to achieve a reduction of XX% in energy consumption of their water services".

Thematic Framework: the International Forum Committee has adopted a Thematic Framework to guide and structure the preparatory processes of the Forum. It is organised along 3 strategic directions, 12 Priorities for Action and 3 Conditions for Success. The Thematic framework addresses both water-related actions needed to face today's development challenges, in addition to the means necessary to ensure those actions, which are cross cutting. The scope of this framework aims beyond simply solving water issues, it invites to think bigger and outside the water box.

Thematic Process: all stakeholders develop and facilitate the implementation of targets mobilising a variety of organisations to reach the goals associated with each priority for action

Village of solutions: Created for the 6th World Water Forum, the Village of Solutions showcased a range of solutions in several dedicated pavilions open to the public (City Hall, Factory, Bank, School, etc.). Solutions holder presented their solutions through various animations throughout the week, giving opportunities to the audience to ask questions and learn first-hand about successful ideas on the ground.

WISE: Wide Involvement in Stakeholder Exchanges

Working Groups: the working groups are small consortiums of organisations in charge of identifying solutions that will help reach the target, generating commitments and preparing their respective reports and related Forum sessions. Working groups are made of two types: the Core Groups (CG), who are in charge of coordinating action at the Priority for Action level and the Target and Solutions Groups (TSG) which focus on their respective targets and related action plans, solutions and commitments.

ANNEX: Table of other Side-Events

Nom de l'Organisation	Catégorie	Titre de l'événement			
12 MARS 2012					
UNESCO Division for Gender Equality Office of the Director-General + UN- World Water Assessment Programme – UNESCO ITALIE	Intergouvernemental and international organisation	"Water Resources and Gender Equality: is there a link?"	Ministry of Water Supply & Drainage SRI LANKA	Govt & admin National	"Community & Water Services- Challenges for Sustainability"
			European Space Agency ITALY	Network/association	"Satellite Observations Supporting Integrated Water Resources Management in Africa"
OIE et MWR CHINA	Network/ association	"French-Chinese cooperation on IWRM, Hai he river"	Palestinian Water Authority (PWA) PALESTINIA	Govt & admin National	"Water: A Critical Element towards Palestinian Statehood"
Union for the Mediterranean Secretariat	Intergouvernemental and international organisation	"Desalination Facility For the Gaza Strip - a Union for the Mediterranean Solution"	Organisation of Economic Co-operation and Development (OECD) FRANCE	Intergouvernemental and international organisation	"OECD launches flagship reports on meeting the water reform challenge"
UNESCO-IHP FRANCE	Intergouvernemental and international organisation	Presentation of the UN International Year on Water Cooperation and the World Water Day in 2013	UNEP-DHI CENTRE DENMARK	Intergouvernemental and international organisation	"UN-Water Report on Water Resources Management for Rio+20 Summit"
UNESCO-IHP FRANCE	Intergouvernemental and international organisation	Groundwater and climate change with a focus on Mediterranean coastal aquifers	UNESCO-WWAP ITALY	Intergouvernemental and international organisation	"The World Water Development Report 4 : Emerging trends and key challenges in the world's water resources and in their use and management; Managing water under uncertainty and risk"
ASTEE FRANCE	education, research & technical institutions	Présentation du Forum Mondial de l'Eau : Quels enjeux ? Quelles avancées ?	Pulitzer Center on Crisis Reporting	media	"Accountability Journalism: Reports on Water from West Africa"
13 MARS 2012					
International Institut for Water and Environmental Ingeniering (2iE), Hokkaido University, Ministry of Agriculture and Water Ressources of Burkina Faso and Japan International Cooperation Agency BURKINA FASO	Govt & admin National	"Sustainable sanitation for rural and urban areas in sahelian countries"	Itaipu Binacional BRAZIL	water services providers	"Water Good Practices in Brazilian Hydropower Projects"
European Water Partnership BELGIUM	Civil society /ONG	"Reducing water consumption through innovation – bringing together politics, business and research"	Freshwater Action Network (FAN Global) UNITED KINGDOM	water user associations	"Why human rights is the approach to ensuring equitable sustainable development"
Entreprises pour l'Environnement (EpE) FRANCE	Social entrepreneurship	"Intégration des enjeux de gestion et d'utilisation responsable de l'Eau dans l'ISR et l'analyse financière - Risques et acceptabilité"	IGRAC (International Groundwater Resource Assessment Centre) THE NETHERLANDS	water services providers	"IGRAC: UNESCO's Global Groundwater Centre "
OCEMO / CMI FRANCE	Intergouvernemental and international organisation	"Towards Green Economy in the Mediterranean Region ?"	Water Civilization International Centre - CENTRO INTERNAZIONALE CIVILTA' DELL'ACQUA	Civil society /ONG	"A Water Museum for Venice": how can we support the world's water cultures?"



SUIITE : 13 MARS 2012			SUIITE 1 : 14 MARS 2012		
			EU-China River Basin Management Programme CHINA	Network/ association	"China Europe Water Platform"
Conservation International USA	Network/ association	An Alternative For Bogota's Water: The Chingaza-Sumapaz Corridor			
The Nature Conservancy USA	Civil society / ONG	"Launch of the Water Funds Manual"	WISE-RTD Association CYPRIUS BELGIUM	Network/ association	"WISE-RTD Water Knowledge Portal - Linking Policies, Research Results and Tools"
BlueEnergy FRANCE	Network/ association	"Innovation, formation et coopération Nord-Sud, synergie ONG-Populations-Entreprises"			
Mairie de Bordeaux ET Communauté Urbaine de Bordeaux FRANCE	Govt & admin National	Coopération internationale des collectivités : les partenariats du futur	UNDP on behalf of the "International Platform for the promotion of decentralised solidarity mechanisms " SWITZERLANDS	Intergovernmental and international organisation	"Mécanismes Décentralisés de Solidarité: prise d'engagement et solutions pour l'accès universel à l'eau et à l'assainissement. "
International Organization for Standardization SWITZERLANDS	Intergovernmental and international organisation	"How Could ISO Standards Address Global Water Challenges?"	UNDP SWEDEN	Intergovernmental and international organisation	"Access to Water&Sanitation. Is it only governments' responsibility?"
			WATER OBSERVATORY BOTIN FOUNDATION SPAIN	donors, finance & investments	"WATER, FOOD AND ENERGY SECURITY AND CARE OF NATURE IN LATIN AMERICA AND SPAIN IWRM in WATER, FOOD SECURITY AND CARE OF NATURE IN LATINAMERICA AND SPAIN"
14 MARS 2012					
Japan Water Forum JAPAN	Intergovernmental and international organisation	Business-based Pro-poor Approach on Water and Sanitation for Better Sustainability	Water Commons USA	Intergovernmental and international organisation	"Governing and Managing Rural Water as a Commons: Presentation of Case Study Findings"
Project WET Foundation USA	social entrepreneurship	Celebrating Solutions Through Water Education!	World Economic Forum SWITZERLANDS	business & industry	"Water Resources Group"
EWASH/OPT ISRAEL	Network/ association	"Impacts of military destruction and demolition of water, sanitation and hygiene infrastructure in the Occupied Palestinian Territory (OPT)"			

SUITE 2 : 14 MARS 2012			SUITE 3 : 14 MARS 2012		
Green Cross International SWITZERLANDS	Civil society /ONG	"Smart Water for Green Schools: Model for access"	United Nations University - Institute for Environment and Human Security (UNU-EHS) FRANCE	education, research & technical institutions	"Addressing the links between groundwater resources and human security"
ARAB WATER COUNCIL EGYPT	Intergovernmental and international organisation	"Living with Water Scarcity "	NGO Coalition International Union for the Conservation of Nature, World Wildlife Fund (WWF), Green Cross International and IHP-HELP Center for Water Law, Policy & Science (University of Dundee) GERMANY	Civil society /ONG; intergouv/international/regional organisation; civil society /ONG; Education, research & technical institutions	"Strengthening Dialogues and Cooperation in Transboundary Basins"
U.S. Geological Survey		"Improving Water Security and Safety - A case scenario in Pakistan"	London School of Hygiene and Tropical Medicine UNITED KINGDOM	education, research & technical institutions	"Breaking the silence about Menstrual Hygiene Management"
CIHEAM Mediterranean Agronomic Institute of Bari ITALY	education, research & technical institutions	"Mediterranean strategic water sectors and climate change"	Institute for Global Environmental Strategies JAPAN	education, research & technical institutions	"Water Environment Partnership for Sustainable Future"
AECID (SPANISH AGENCY FOR INTERNATIONAL DEVELOPMENT COOPERATION)/FIAPP SPAIN	Govt & admin National	The Spanish Cooperation Fund for water and sanitation: a tool for the Human Right	European Environment Agency DENMARK	Intergovernmental and international organisation	"Launch of the EEA report Efficient Use of Water Resources"
Community of Practice on Sanitation and Hygiene (CoP) / Water Supply and Sanitation Collaborative Council (WSSCC) SWITZERLANDS	Intergovernmental and international organisation	"You thought quitting smoking was hard? Try using a toilet."	The Middle East Desalination Research Center OMAN	education, research & technical institutions	Platform for Regional Cooperation in Desalination and Water Reuse
United Nations Development Programme SWEDEN	Intergovernmental and international organisation	"GEF Small Grants Programme: Community-based Approach to International Waters Management"	Global Water Operators' Partnerships Alliance (GWOPA)/UN-HABITAT KENYA	Intergovernmental and international organisation	GWOPA Development Partners Meeting
United Nations Development Programme SWEDEN	Intergovernmental and international organisation	"UNDP-Luxembourg Partnership: Adaptive Community Water Initiative"	PIANC - The World Association for Waterborne Transport Infrastructure BELGIUM	Network/association	Inland Waterways as a sustainable transport solution
ITC - University of Twente THE NETHERLANDS	education, research & technical institutions	"Water management in Africa with Earth Observation based information systems "	The World Bank / la Banque Mondiale MOROCCO	donors, finance & investments	Expérience Marocaine en matière d'Aide basée sur les résultats pour améliorer l'accès aux services d'Eau et d'Assainissement - Moroccan experience on Output-Based Aid to improve access to water and sanitation services
IUCN SWITZERLANDS	Intergovernmental and international organisation	"GEF Communities of Practices on surface and groundwater: ready to exchange your knowledge?"	15 MARS 2012		
			YADAVA COLLEGE	education, research & technical institutions	CLIMATE CHANGE ON GROUND WATER

SUITE 1: 15 MARS 2012			SUITE 2 : 15 MARS 2012		
KSB SAS FRANCE	business & industry	Tables rondes KSB des métiers du cycle de l'eau	WATER OBSERVATORY BOTIN FOUNDATION SPAIN	donors, finance & investments	"Relevance on the "intangible" values in IWRM"
International Center on Qanats and Historic Hydraulic Structures (UNESCO Category II Center) IRAN	Intergovernmental and international organisation	"Cultivation in desert with minimum irrigation"	EU Twinning project on river basin management planning TURKEY	Intergovernmental and international organisation	EU Turkish cooperation on water quality monitoring
Provincie Noord-Brabant THE NETHERLANDS	LRA & administration	"The WATERCORE marketplace of good practices"	Tecniberia-AEA-ATTA SPAIN	Govt & admin National-water services providers	Non conventional water resources and extreme events management. New technologies Ressources non conventionnelles et gestion des phénomènes extrêmes. Nouvelles Technologies
Regional Water Data Banks Executive Action Team (EXACT) USA	Network/ association	"EXACT: Opportunities for cooperation on data collection on water resources for Israelis, Palestinians, and Jordanians"	Institut de recherche pour le développement (IRD) FRANCE	Govt & admin National	"Launching a call for research proposal on managing water scarcity in african dry lands "
Institute for Agriculture and Trade Policy USA	civil society / ONG	"Towards Rio+20: Water in the Green Economy"	Water Cycle CANADA	business & industry	"WaterCycle: exploring water through adventure and education"
Office International de l'Eau FRANCE	Network/ association	"Transferring european water research outcomes in practice"	Latin-American Association of water and Sanitation Utilities\ Asociacion Latinoamericana de Organismos de Agua y Saneamiento (ALOAS in spanish) ARGENTINA	water services providers	"Water and Sanitation Utilities Solutions as Contribution to Social Welfare"
Institut de Prospective Economique du Monde Méditerranéen –IPEMED FRANCE	education, research & technical institutions	« Mieux organiser les outils de gouvernance et la mutualisation de l'expertise de l'eau en Méditerranée »	IRSTEA - Cemagref, Hydrology-Hydraulics Research Unit & EDF FRANCE	Govt & admin National -education, research & technical institutions, - business & industry	"The R ² D ² -2050 project: Risk, water Resources and sustainable Development within the Durance river basin in 2050"
Project WET Foundation and ICCR: International Chair on Cardiometabolic Risk USA	social entrepreneurship	Children's Health and Hydration Symposium: Raising Awareness and Finding Solutions	Institute of Development Studies UNITED KINGDOM	civil society/ ONG	"Some for All -- What have we learnt since New Delhi, 1990?"
ONEMA/ASTEE FRANCE	Govt & admin National - networks /association	"L'observatoire : un outil pour la performance des services d'eau et d'assainissement"	Ministry of Health of Brazil BRAZIL	Govt & admin National	"Water Safety Plan: the implementation process in Brazil"
Ministry of Infrastructure and the Environment of the Netherlands and Province of South Holland		"The Sand Motor; Building with Nature"	Excellent Development UNITED KINGDOM	civil society/ ONG	"Sand Dams: A Solution for Dryland Communities"
International Water Association UNITED KINGDOM	Intergovernmental and international organisation	"Sanitation Safety Planning - experiences from Maputo, Mozambique"	UN World Water Assessment Programme ITALY	Intergovernmental and international organisation	"The Fourth Edition of the United Nations World Water Development Report-Challenge Area Reports"

SUITE 3 : 15 MARS 2012			SUITE : 16 MARS 2012		
UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP) KENYA	Intergovernmental and international organisation	"Developing water quality guidelines for ecosystems"	Wetlands International THE NETHERLANDS	Intergovernmental and international organisation	"Watergrab: are developing countries facing a fight for fresh water?"
Jordanian Ministry of Water and Irrigation JORDANIA	Govt & admin National	"Overview of the water resources management in Jordan"	ONE DROP CANADA	civil society/ONG	"L'art social - élément complémentaire des projets d'accès à l'eau"
			End Water Poverty UNITED KINGDOM	Network/ association	End Water Poverty – should water and sanitation be in the new MDGs ?
ACRODI 1760 Rotary International FRANCE	Network/ association	"Eau source de Paix"	Pakistan Water Partnership (PWP) PAKISTAN	Intergovernmental and international organisation	"Implementing IWRM in South Asia through Area Water Partnerships"
UNESCO-IHP FRANCE	Intergovernmental and international organisation	Groundwater Governance: From National and Regional Needs to Global Solutions!	Tour du Valat Research Centre for the Conservation of Mediterranean Wetlands FRANCE	education, research & technical institutions	"Le marché de l'eau vu depuis les zones humides."
FEMSA Foundation CONAGUA MEXICO	donors, finance & investments	Prize for Water and Adaptation Actions (PrizeWAA) in the Americas	France Tibet - Fondation pour la Recherche Stratégique FRANCE	donors, finance & investments	"La coopération régionale dans le domaine de l'eau en Asie du Sud"
MAEE, Direction générale de la mondialisation FRANCE	Govt & admin National	"Confronting Scarcity: Managing water, energy and land for inclusive and sustainable growth"	UN World Water Assessment Programme ITALY	Intergovernmental and international organisation	Local perspective from the World Water Development Report 4
1. Municipality of Jerusalem 2. Dead Sea Drainage Authority. 3. Jerusalem Waste Water and Purification Enterprises ISRAEL	Govt & admin National	"The Kidron Basin's Future: Sewage or Water? Poverty or Prosperity?"	West Asia – North Africa (WANA) Forum JORDANIA	Intergovernmental and international organisation	Regional Solution for Water Scarcity in West Asia-North Africa
French Competitiveness Cluster for water industry / Pôle de Compétitivité EAU FRANCE	Network/ association	Creation of integrated green businesses gathering Research - SME and International Companies / creation filière verte intégrée regroupant Recherche - PME - Grandes Entreprises	Réseau International des Organismes de Bassin et Agences de l'Eau FRANCE	Network/ association	Signature du Pacte Mondial des Organismes de Bassin
Veolia FRANCE	business & industry	The Water Impact Index : a new environmental decision making tool for sustainability	Région Provence-Alpes-Côte d'Azur FRANCE	LRA & administration	Des Régions françaises agissent pour la qualité de l'eau par la réduction des pesticides
16 MARS 2012					
Government Service for Land and Water Management TURKEY	Government Service for Land and Water Management TURKEY	Government Service for Land and Water Management TURKEY	Conseil Supérieur du Notariat FRANCE	Network & association	Sécurisation foncière et accès à l'eau potable et à l'assainissement
Chambre de Commerce et d'Industrie Marseille Provence, Service Pole Innovation et accompagnement de projets innovants FRANCE	LRA & administration	"INSMED : GET INVOLVED IN ECO CONSTRUCTION "	Ministry of Agriculture, Food and Environment	Govt & admin National	Non conventional water resources and management of extreme events
Municipal Services Project (MSP) CANADA	water services providers	"Alternatives to Privatization: Public Options for Essential Services in the Global South"			
GERES FRANCE	Network/ association	"SHARE, Sustainable Hydropower in Alpine Rivers Ecosystems"			



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France, represented par the Ministry of Environment and the Ministry of European and Foreign Affairs



City of Marseille



World Water Council



Office national de l'eau et des milieux aquatiques



Fédération professionnelle des entreprises de l'eau



Agence française de développement



Conseil régional Provence-Alpes-Côte d'Azur



Conseil général des Bouches-du-Rhône



Communauté urbaine Marseille-Provence-Métropole



Chambre de commerce et d'industrie Marseille Provence



Eau Vive association – Coalition Eau

27th June 2012
Draft Version

For an eco-friendly meeting, the Forum secretariat favored web and digital tools. The reports, presentations and documents related to the forum sessions and events are on line. www.worldwaterforum6.org/outcomes