Questions put forward by the group during discussions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

THEME 3: Topic 3.2 Ensuring adequate water resources and storage infrastructure

to meet agricultural, energy and urban needs

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

Thematic coordination lead - Secretary of World Water Forum

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

Topic 3.2 coordination lead - Organization: ICOLD Name of contact person: Prof

Luis Berga (email: <u>lluis.berga@upc.edu</u>)

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| Working group issues (based on 15 | Questions / Session title | Stakeholders |
| questions) | | |
| -Multipurpose aspects of water (1) | 1. With the situation of the water | Turkish |
| -Mitigation measures (2) | crisis, water security and water | Ministry of |
| -Stakeholder participation and decision | poverty in the world, how should be | Environment |
| making (3) | the water development and | and Forestry; |
| -Different reliabilities and priorities for | management (quantity and quality) to | GAP; Japan |
| different purposes (4) | achieve sustainable development? | Water Agency; |
| | Which are the challenges for greater | USACE. |
| | access to water and energy? | |
| | 1. Water development and | UNESCO; |
| | management (quantity and quality) | UNEP; UNDP; |
| | for sustainable development | FAO. |
| -Energy, food and water supply (5) | 2. Which are the best approaches for | |
| -IWRM (6) | water, food and energy security in | WB; AfDB; |
| -Productivity and efficiency of water uses | connection with global changes? How | ADB; EIB; |
| (7) | to implement Integrated Water | JICA; JBIC. |
| -Infrastructure resilience for adapting to | Resources Management in different | |
| climate change (8) | countries? | WEC; ICID; |
| -Incentives for the careful use of water (9) | 2. Global changes and water, food | IHA; IHGA; |
| | and energy security | ICOLD; |
| -Multipurpose aspects of water (1) | 3. How much storage do we need in | IWRA; IMII; |
| -Evaluation of scenarios of future needs | the future? What type of storage and | IFPRI. |
| (natural and human) (10) | where? | ******* |
| -Different kinds of storage / needs for | 3. Storage infrastructure needs, | WWF; IUCN; |
| storage; where? (11) | types and location | TNC. |
| -Productivity and efficiency of water uses | | IDIIA DIDO |
| (7) | | IRHA; INBO; |
| -Different reliabilities and priorities for | | IRCO; SAI. |
| different purposes (4) | | Del IDD. |
| -Reliability, productivity and investment | | DSI; IBB; |
| (12) | | ISKI; Min. of Public Works |
| -Economic aspects of infrastructure (13) | ATT | and Settlement. |
| -Positive and negative aspects of | 4. How to ensure that the projects and | and Settlement. |
| infrastructure (14) | infrastructures are applied to meet | |
| -Efficiency, rehabilitation, upgrading and | human needs and achieve sustainable | |
| maintenance of infrastructure (15) | development? | |
| -Mitigation measures (2) | 4. Ensuring infrastructure is | |
| -Stakeholder participation and decision | applied to meet both human and | |
| making (3) -Benefit sharing (16) | environmental needs | |
| | | |
| -Economic aspects of infrastructure (13) | | |