1- **Why is it important to address the cultural aspect of water when facing water challenges?**

Water is life and it is respected for many additional reasons in different cultures and religions. Water is necessary for survival and that makes it a key part of culture. All major civilizations developed around large sources of water; and most often sources of freshwater.

Water challenges in many regions of the world are mainly about scarcity of supplies, efficiency of distribution of available supplies and deterioration of its quality. Water provision is a technical matter where engineering solutions are implemented in the form of building dams and water conveyance systems, sea or brackish water desalination, drilling and fitting wells, rain harvesting, collecting and treating wastewater and related management interventions. On the other hand we, as humans, use and consume all types of water resources. We could then generally say that there is a supply side and a demand side for water. Because fresh water is a finite resource and its supply has a limit, the users of water are the controlling factor in managing the demand side of water.

Water managers try different types of technical solutions and approaches to increase supply of water to a point that in many regions of the world, especially in arid and semi arid regions, a situation is reached when supply could not be increased indefinitely. Some countries are now at the stage of managing demand for water in order to be able to meet growing needs (sometimes mainly basic needs) of the increasing population, the need for more food, more energy, better hygiene, leisure and the environment needs for clean water. Conservation and efficiency of water use are two main factors that curb the demand for water. Conservation can save huge amounts of fresh water, especially in irrigation practices. Irrigation efficiency is generally low and some researchers say that increasing 10% of irrigation efficiency could result in 50% more water available for domestic uses.

While scientific and technological researches need to be further promoted, we know that they alone do not provide the solution to many water-related challenges. It is necessary to explore the interaction between culture and water especially where local tradition and customs regulate access and use. The local knowledge, know how and spirituality often deals with the code of conduct for sustainable consumption and equitable sharing of natural resources amongst the community. Their wisdom tells that the water
management is inseparable from culture namely moral and ethic values. Seeing water issues from cultural point of view is a way to understand this diversity of interface, both positive and negative, between men and nature.

To create sustainable solutions for water-related problems and account for the needs of peoples and nature, we must better understand cultural – emotional, intellectual, moral, social and spiritual – interactions with water and their evolution over time. The cultural diversity of human interaction with water provides the very basis for resolving water related problems and offers an enormous potential for creativity.

Water is valued and managed differently from culture to culture, but we are all driven by the same need and demand for accessible and safe water. Conservation of water on the fields and in the homes is linked so much to practices or habits and culture values of water users. Therefor, water conservation efforts and plans have to deal with the cultural values of people. It is here where cultural aspects of water are of prime importance in facing water (scarcity and quality) challenges.

2- What role can religious communities play in seeking sustainable solutions for the environment and for water?

Religion has a prominent role in culture of communities. Religion guides and encourages its believers and followers to set of roles of conduct but this impact differs from person to another. Some communities are more religious than others. Rural communities in general tend to be more strict followers of certain principles of the their faith. Monolithic religions; Judaism, Christianity and Islam are well-structured and complex religions in the sense that the layman needs guidance to be able to make correct interpretations of the religious matters. This is the role of the religious leader such as Imams for Muslims.

Attentions for the environment well being and care and protection of water and other natural resources is somehow a new development when contrasted with the thousands of years ago when God sent his messengers to teach man to follow the straight path on life on earth. This is why as a Muslim; I believe that Muslim communities are well prepared to catch up with these new developments because Islam already preaches for sustainable solutions for the environment and for water.

The role of some religious leaders, whom I think are now busier with political issues, is to give more attention to educate followers to collectively work to protect the nature and its finite resources. The Quran, the Holy book of Islam, and the sunnah, the way of the Prophet Mohammad (Peace Be Upon Him)
said, did and encouraged to do have not yet sufficiently been researched to enlighten their followers that global warming is a fact, fresh water is scarce. Each individual in the community is responsible for saving water, reducing wastage of resources.

The Middle East is going through a dramatic change. Turkey has a conservative Islamic government. Similar change is taking place in some Arab countries and resulted recently in conservative governments taking power in Morocco, Libya and Egypt while Yemen and Syria are possible to follow suit later. This could mean that religion will be in the forefront of the agenda and I think there is a better chance to get more attention to promotion of sustainable solutions for the environment and for water based on Islamic believes.
What are the missions of the Inter-Islamic Network on Water Resources Development and Management (INWRDAM)? Can you give some examples of concrete actions / solutions or commitments for water?

The Organization of Islamic Cooperation (OIC) established the Inter-Islamic Network on Water Resources Development and Management (INWRDAM), Amman, Jordan in 1989 as an inter-governmental, non political and non-profit organization. INWRDAM has now 19 countries as members out of the total of 57 countries of the OIC. The mission of INWRDAM is to foster closer cooperation among the Islamic countries in the field of development and management of water resources. In pursuit of this mission, it seeks to generate ideas and policy directions through intensive dialogue, studies and research on a continuing basis. The primary objectives of INWRDAM are as follows:

a. to collaborate and cooperate in the areas of common interest with a view to help each other in building up the national capability of its Member States in the field of integrated water resources development and management for overall economic development;

b. to exchange knowledge and information, share experiences and maintain continuing dialogue related to water resources development and management in the Islamic countries;

c. to initiate demand driven and need based joint projects of research and development (R&D) and help its Member States in the training of quality manpower and render consultancy and advisory services for water resources development and management;

d. to maintain liaison and develop partnership with other similar organizations of the world.

Over the past two decades INWRDAM was able to continually increase its member countries from eight founding members in 1989 to nineteen active members now. We have members with plenty of water resources as well as others considered as most water stressed countries.

The following are examples of some programs that INWRDAM implemented over the past ten years that dealt with improving access to water, better hygiene and improved governance in the water sector.

Access to sufficient water is a problem that face peri urban areas in water scarce and developing countries. Studies indicated that collection; on-site treatment and reuse of household greywater could increase water availability. Technical and cost effective solutions were found but communities had some reservations about reuse of treated greywater. Some families were concerned and not sure whether Islam permitted reuse of treated wastewater to irrigate homegrown crops. INWRDAM conducted community awareness campaigns that explained a fatwa (an Islamic legal ruling) that permits reuse of properly...
treated wastewater for irrigation of crops and other purposes such as industrial cooling and cleaning. This opened the practice of greywater reuse to hundreds of poor families in Jordan, Lebanon, Palestine and Yemen to use techniques developed by INWRDAM engineers to capture, treat and reuse of greywater for irrigation of home garden crops.

Another program is the OIC Water Vision prepared by INWRDAM that will improve integrated water resources management and better water governance. This program started as an OIC Ministerial Meeting on Water at the sidelines of 5th World Water Forum held in Istanbul, Turkey on 20th of March 2009. The meeting was attended by delegations from 25 OIC Member States and six OIC institutions and approved the initiation of the OIC Water Vision. Two expert group meetings were held since the Istanbul meeting and it is expected that the next OIC Summit will approve the OIC Water Vision.

Other example of INWRDAM programs aimed at increasing collaboration among its Member States is a program for preparedness and adaptation measures to minimize climate change impacts on water and agriculture production. Experts identified specific measures that different countries in regions of the OIC has to take to improve their capacity to monitor and evaluate climates change trends and to minimize green house emissions and conversion to renewable energy sources.

Five of INWRDAM Member States are now working together since 2000 and in collaboration with European countries such as Germany and The Netherlands in increasing awareness of water managers to good water governance.

3- What can this cycle of conferences on “Water and Spiritualties” bring to the political and technical discussions of the 6th World Water Forum?

The 6th World Water Forum is another unique opportunity to continue to emphasis, as it was done in Kyoto, Japan in 2003, of the importance of spiritualties in guiding the community to a more peaceful way of life. I wonder if this meeting could propose the formulation an alliance of inter religious leaders concerned with the promoting water spiritualties. This then could be part of the already existing structures of Inter Faith dialogue. Water is a resource that is shared by communities of different faiths in many parts of the world and religion could be another positive aspect to encourage cooperation and prevent conflict.