## LAHORE DECLARATION

October 2008, Lahore, Pakistan

The target of the First Millennium Development Goal (MDG 1) is reducing hunger by 50 % by 2015. Notwithstanding the progress made to some extent, realisation is still lagging behind considerably. It is disheartening to observe that there are indeed depleting levels of global food stock. This has caused food scarcity resulting in a steep increase in food prices during 2008. This has brought us back to the global agenda on water for agriculture and better agricultural water management, the primary mission of the International Commission on Irrigation and Drainage (ICID).

The 20th ICID Congress in Lahore was rightly conducted on a theme quite relevant to the current needs of Food Security. The theme of Participatory Integrated Water Resources Management:' From Concept to Action' covered several sub themes. The participation of over 150 international delegates and 400 local delegates in Pakistan, which has the world's largest contiguous irrigation system could help a fair assessment of the opportunities and bottlenecks in the implementation of 'Water Management For Sustainable Agriculture Production' and identifying the issues of importance.

In due consideration to the transactions in the Congress, deliberations in the ICID specialized working groups and recommendations of various stakeholders, the following key recommendations emerged:

- (1) To achieve the required increase in Food Production in light of the rising demand, there is an urgent need to modernize and expand the irrigation and drainage systems and to improve their operation and maintenance in the broadest since as a tool to assume primary importance;
- (2) The increase in worlds' population and an enhancing standard of living for the people world over ask for more production to meet the increasing demands. The looming climate change and its likely impacts on water management for agriculture requires cooperation of cutting across boundaries especially in regard to the Himalayan River Systems
  - Sharing knowledge and information, intensification of data collection networks, research and technology to adapt to the increased needs under the impacts of climate change;
  - A review of the operation of storage systems keeping in view the dynamics of climate change: need for enhancing storage dam based reservoir systems, enhancing soil water storage with water harvesting structures, check dams, recharging groundwater, farm dams and enhancing grain banks - virtual water storage;
  - Design and operation of irrigation systems using treated or partially treated water including waste water re-use:
  - Dealing with mineral tolerant plants, saline land crops and crops to withstand waterlogging.

For the countries served by the Himalayan rivers, it will be of special importance to improve in addition the knowledge on the processes in the snow clad regions.

(3) Experiences discussed in the congress reflect that participatory water management of schemes involves that the water users' contribute positively to sustainable operation and maintenance of systems. In the emerging countries the responsibility for operation and maintenance has been generally in hands of the Governments. In such cases the transfers concern the transfer of responsibility and ownership of full or parts of the systems gradually getting handed over to the farmers, and/or irrigation or drainage agencies. In the countries with a transition economy, problems of concern differ, such as the need for looking into the layout of the systems, which had hitherto been mostly based on the large-scale agricultural production. The transfer of irrigation system management from the traditional government agencies towards water management agencies and water users associations, the funding of modernization and resulting operation and maintenance, lack of good governance, unaffordable pumping systems and environmental degradation came up as emerging issues.

- (4) Investment in the modernization of (large-scale) surface irrigation schemes will result in better service provisions. The partial transfer of such schemes for participatory irrigation management will help better governance, cost recovery in stages and efficient water use.
- (5) Assets created in the recent past for enhancing water availability, particularly dam based reservoirs are facing the challenge of loss of live storage at a pace that is becoming critical: the high rate of sedimentation in Himalayan reservoirs and other river systems in China, Iran, Turkey call for a global initiative to study this aspect; cooperation of international organizations like International Commission on Large Dams (ICOLD), International Hydropower Association (IHA), International Association of Hydraulic Research (IAHR) besides ICID and Research Institutions who are doing works in this regard can pool the knowledge and share it to address the problems of handling this issue.
- (6) In an exclusive session on Tarbela Reservoir sedimentation, the international delegates had an appreciation of the tremendous magnitude of the impending problem arising out of loss of storage; they reviewed available solutions but acknowledged that the Tarbela case as such is unique asking further research, innovative solutions applying frontier knowledge and beyond and exchange ideas. ICID shall in accordance with its By Laws, constitute a Task Force to study this aspect of reservoir sedimentation involving experts of the member countries and liaise with other international organizations like ICOLD, IHA, etc.
- (7) The international participants expressed their high appreciation for the efforts of all involved in the host country to make their stay as good as possible under the present day conditions.