



**Yasuro Nakajo** is an Executive Vice President of the Japan Water Agency. After he received the degree of Faculty of Agriculture at the University of Tokyo in 1974, he entered the Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan. Since then he has made many efforts in promoting Japan's agricultural policies as an irrigation engineering bureaucracy for 35 years. When he was a young officer working for some irrigation projects in Setouchi region, where the situation of water utilization was severe, he learned the importance of effective water utilization for regional agriculture knowing the farmers thirst for water and a great number of customs and trade-off agreements for using water resources effectively.

After he was promoted as an executive officer he was involved in water allocation in river basin where he learned the importance of IWRM from an agricultural sector standpoint.

In the field of international activity, he studied Water Science at the University of California, Davis in preparation for the future developments of Japan's international collaborative program. After that, he was involved in agriculture including irrigation in the Philippines as a First Secretary of Embassy of Japan. In recent years, he worked to evaluate the long-standing custom/culture of water use and water resources management and to diffuse them throughout Japan.

Now, he is one of the co-chairs of the Steering Committee of UNESCO's IWRM Guidelines at River Basin Level together with Dr. Eugene Z. Stakhiv, and the committee is preparing for the sequel to the guidelines on 'Environment' and 'Climate change'. The Japan Water Agency is also supporting IWRM implementation in Asia region through NARBO activities as one of its secretariat. NARBO is a network of Asian river basin organizations established in 2004 and the total number of members is more than 70 now. The IWRM Guidelines at River Basin Level are one of core tools for member organizations to accelerate their activities.

## **Spiral Approach to IWRM - IWRM Guidelines at River Basin Level**

**Yasuro Nakajo**

This presentation will focus on the application of IWRM at the river basin level. It will introduce Integrated River Basin Management (IWRM) Guidelines at River Basin Level which were launched the third United Nations World Water Development Report (WWDR-3) at the Fifth World Water Forum in March 2009 in Istanbul, Turkey. The purpose of developing these Guidelines is to raise awareness on the importance of integrated approach of water resources management at the river basin level and to address the practical implementation of IWRM. These Guidelines provide the necessary information to help practitioners implement IWRM in line with their own set of own circumstances. They consist of the fundamental concepts of IWRM as well as provide insights into the perspectives of various stakeholders with regard to water issues, keys for success for overcoming problems, and good examples where such keys for success were applied. Think of it is an instruction manual that synthesizes practical methodologies for IWRM to help implement IWRM at the river basin level. IWRM is essentially a user-friendly and cooperative approach that is an alternative to the activities previously carried out by individual water sectors acting in their own interests, with very little interaction with one another. The Guidelines invite each sector to fruitfully participate and cooperate in IWRM, with a practical road map so as to contribute to achieving both private and public benefits in a sustainable manner. A river basin approach in the implementation of IWRM is being recognized as a comprehensive basis for managing water resources more sustainably and will thus lead to social, economic, and environmental benefits. However, actual progress towards implementing IWRM varies enormously and depends on the area, capacity, political will, and the understanding of IWRM concepts and their implementation. Hence, the Guidelines have been split up into separate stand-alone parts. They have been designed to enable readers to go to specific sections of the publications depending on their specific needs and circumstances without necessarily having to read the entire document

This presentation will introduce the 'Spiral model' and 'Keys for success' which are the key features of the IWRM Guidelines at the River Basin Level. The evolutionary, adaptive implementation of the IWRM process is illustrated by 'Spiral model'. And 'Keys for success' can be used for overcoming difficult situations at each step in the practical process that begins with 'Recognizing/Identifying' pressing issues or needs, then 'Conceptualizing' the problem itself and formulating possible solutions, 'Coordination and Planning' among stakeholders in order to reach an agreement, and 'Implementing/Monitoring/Evaluating' the plan and its outcomes. This paper is an introduction of the Guidelines and a report of the progressing related activities for capacity development.