Innovative Water Saving Technologies in China

Prof. Li Daixin

It is well known that China is among the countries having large irrigated areas and also is a water short country. In 2003, irrigation water withdrawals for agriculture purposes accounted for 64.5% of total water consumption. On one hand, traditional irrigation wastes a lot of water, and on the other hand, about 60% of farmlands have no access to irrigation. Therefore it is no doubt that water-saving irrigation is a main strategy for China to protect and achieve sustainable use of its limited water resources.

When Mr. Li Daixin worked in Water Resources Bureau of Sinkiang Autonomous Region, one of the most draught-prone areas in China, he realized the significance of utilizing water-saving irrigation. Sinkiang Autonomous Region is located in north-west China. Agriculture is a mainstay of the economy in Sinkiang Autonomous Region. Mr. Li Daixin organized and carried out many investigations and research works on how to use the limited water resources to make bigger benefits. Mr. Li Daixin carried out large number of works on extending water-saving technology and rehabilitating irrigation districts with the main purpose of saving water. Now, water-saving irrigation practice in Sinkiang Autonomous Region is advanced in China. From 1998 to 2002, when he worked in the Department of Planning and Programming, Ministry of Water Resources, he charged the programming and implementation of water-saving irrigation programme in China. Since 2002, when he worked in the Dept. of Irrigation, Drainage and Rural Water Supply, Ministry of Water Resources and Chinese National Committee on Irrigation and Drainage, he has charged the stipulation and implementation of laws, policies and planning on water-saving irrigation and rural water supply at the national level. He has done his best to promote the ideas of water-saving irrigation and has worked together with those who are also concerning water shortage problem in China. As one of the pioneers in the field of water-saving irrigation in China, Mr. Li Daixin has been working in this field for about 6 years and gained rich experiences.

He has good understanding about the overall national strategies and policies both on water resources and economy. He has strong academic background as well as rich theoretical knowledge and practical experiences. With his contribution in leadership, coordination and resources mobilization, water-saving practice in China has made remarkable achievement and won high attentions from the State Council and relevant sectors. His efforts have pushed government at all levels by giving high priority to the fields of water-saving irrigation and improvement of irrigation districts. Since 1998, government has significantly increased the investment on water-saving irrigation, which promoted farmers to construct more water-saving irrigation projects and to make water-saving irrigation technology more popular. By 2004, the water-saving irrigation areas have reached to 20 million ha, achieving a saving of 15 billion m$^3$ water annually. The irrigation efficiency has been increased by 3 percent, and reached 45%. With the same total water consumption, irrigation areas have been increased from 53.3 million ha in 2000 to 55.9 million ha in 2003, and it guarantees China’s food security. It should be mentioned that all these achievements reflect Mr. Li Daixin’s contributions. In 2003, for his outstanding contributions on promoting the Water Saving Irrigation in 300 Counties in China, Mr. Li Daixin received the Science and Technology Progress Prize from China State Council. From 2002 to 2005,