

## KEYNOTE ADDRESS BY GUEST OF HONOUR:

H.E. Mr. Lu Shu Lin  
Ambassador,  
Embassy of the People's Republic of China

Dr. Ishfaq Ahmad,  
Dr. Hameed Ahmed Khan,  
Executive Director, COMSATS,  
Eminent Scientists  
Ladies and Gentlemen,

It is my honour to be invited to attend the opening ceremony of COMSATS 1<sup>st</sup> meeting on Water-Resources in the South, and it's my privilege to make a speech on the occasion of its inauguration. First of all, I'd like to express my appreciation to the Executive Director, Dr. Hameed Ahmed Khan, for making such an important key-issue that is posing grave challenges to the COMSATS member countries as the theme of the conference. I'd like to take this opportunity to share with you some Chinese experiences on sustainable development of water resources.

### **Basic Facts and Objectives On Water-Resources**

In China, total water-resources are 2.8 trillion cubic meters, freshwater resources are inadequate and unevenly distributed in both temporal and spatial scales. China's per-capita water resource is, 2400 cubic meters, only one-fourth of the world's average. Water consumption is 530 billion cubic meters; out of those, 78% is used for agricultural purposes and 22% is used for industry and human consumption. With the growth of the population and economic development, serious water-shortages have appeared not only in the arid and semi-arid areas, but also in many cities of northern China. This has become a limitation to the economic development. Moreover, some river basins of the country have been polluted to various degrees, resulting in a further decrease of water-resources utility. Therefore, it is an important strategic task for the implementation of sustainable development to rationally use and protect water-resources.

In order to solve this problem, the Chinese government put forward the general objectives for water-resources protection and sustainable utilization. The objectives are: to implement the policy of rational exploration, utilization,

and comprehensive conservation of water; to strengthen the management of river-basins and lakes; to improve the management and control of water-pollution; and to vigorously maintain and improve the natural utility of water-resources and the ecological environment of basins.

### **Actions and Achievements On The Sustainable Development Of Water-Resources In China**

*Strengthening the management and development of major rivers and lakes:*

The Chinese Government has strengthened the integrated development and management of major rivers and lakes. The key part of this work is to prevent flood disasters by heightening and reinforcing major dams, building flood-division areas, and realigning river-courses in major rivers and lakes, such as the middle and lower reaches of the Yangtze River, the lower reaches of the Yellow River, Huaihe River, Haihe River, Songhuajiang River, Liaohe River, and Taihu Lake. A group of important large-scale water-conservation projects have been developed to allow more effective control and bring comprehensive benefits. In order to solve the problem of water-shortages in northern China, the Chinese Government has vigorously organized the planning and construction of trans-basin water-transferring projects, conducted a scientific feasibility study of transferring water from the south to the north in the central, eastern, and western parts of China, and made preliminary preparations for the project.

*Controlling Increased water-pollution in major river basins:*

In order to bring water-pollution under effective control and protect the aquatic environment, beginning in 1994 the Chinese Government carried out the "Three Rivers and Three Lakes" water pollution-control project (Huaihe River, Haihe River, Liaohe River, Taihu Lake, Dianchi Lake, and Chaohu Lake). It also defined the targets for controlling the total

amount of water-pollutants discharged into river basins, as well as the maximum permissible discharge amount for major cities, towns, and discharge points. Meanwhile, a deadline was set for closure or production capacity was less than 5000 tons in the Huaihe Basin. By June 30<sup>th</sup> of 1996, 1, 111 small paper mills in four provinces along the Huaihe River had been closed, reducing COD discharge by 346,000 tons, and achieving the objective of a 15% reduction in pollutants for that year.

*Progress in agricultural water-conserving technology and demonstration-project construction:*

The Chinese Government has organized the compilation of the "China Water-Conserving Development Programme for Irrigation Agriculture", drawn up the technology-standards suitable for national conditions for various water-conserving irrigation projects, and formulated the plan for the construction of large-scale water-conserving irrigation demonstrations at the national level. At present, the total area covered by water-conserving irrigation has reached 13.33 million hectares. Some practical water-conserving technologies have been developed and these are being used in the technical preparations for the establishment of 300 demonstration counties for water-conserving irrigation projects during the Ninth Five-Year Plan.

*Promotion of drinking-water projects in poor rural areas:*

In order to solve the drinking-water problems of some poor rural areas, the Chinese Government began to carry out a drinking-water project for those areas in 1990. Since 1991, 145,000 drinking-water projects have been built, 470,000 drinking-water wells have

been dug, 199,000 water-collecting facilities have been established, and 174 million rural people have had the problem of inadequate drinking water resolved. With the cooperation of UNICEF, the government has carried out the Trinity project (water, environmental hygiene, and health education) and achieved preliminary progress. Moreover, the government has popularized low-cost water supply measures and sanitary toilets, and disseminated health-knowledge to farmers. With the implementation of the "Sweet Dew Project", more than 4 million people in Shaanxi Province and 3.8 million herdsmen in Inner Mongolia Autonomous Region have achieved adequate drinking-water supplies during the past 3 years. A series of drinking-water projects have also been carried out in Xinjiang, Gansu, and some other western provinces; all these have eased, to some degree, the difficulties of peasants in water-short areas.

*Projects for water-resource development in western China.*

The Chinese Government has greatly promoted the western water-resource development plan and carried out a number of utilization projects that focus on the central and western regions. These projects include the Xinjiang Wuluwati Reservoir project, Tibet Manla Reservoir project, Ningxia Fuyanghuang irrigation project, Gansu Changma Reservoir project, etc. These projects will play a very important role in promoting the social and economic development in central and western China, changing the poor and backward situation, improving the eco-environment, and strengthening national solidarity.

Finally, thanks again to Dr. Hameed Ahmad Khan for your kind invitation, and thank you all for listening to me.