

BUILDING GROUND RESERVOIR IN ARID AREA IS THE ONLY WAY OF SUSTAINABLE DEVELOPMENT OF THE RESOURCES OF NORTH CHINA

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To the 2000, total water demand will be 958.5 billions cu.meter for agriculture irrigation in Huang Huai Hai plain of North China. Water deficiency will be attained to 334.5 billion cu.meter in this area, and sum total of water deficiency in all country will be about 778.6 billions cu.meter every year. The situation is grim to the water usage in the future of North China. Therefore, author outlines current condition and arisen problems on the development and usage of water resources in China. Those problems are including severe water pollution, quickly increased water consumption of urban population, backward agriculture irrigation methods and lower level of water saving methods and consciousness etc. Author also points out that constructing ground reservoirs is an important measure to the sustainable development of groundwater resources. So he supplied several new viewpoints, methods and principles of scientifically and rationally constructing ground reservoirs. In the paper, several new proposals are given, which especially emphasize that engineers should not just be limited by the traditional balance theory on groundwater evaluation, therewithal, engineers should consider more environmental effect and ecological balance. Finally the author proposes to formulate a detailed classification and evaluation standard of ground reservoir.