

This paper address issue on demands and challenges for adaptive management under changing environment, related to water spatial allocation through large water transfer project from South to North in China. Three key points are presented, i.e., (1) Water problem related to social and economic sustainable development in China, that includes space and time distribution of water resources; seriously contradiction of water supply and water demands and so on; and (2) Demand and benefits on water spatial allocation based on China water resources programme for a middle and long term, and reason why China implement large water transfer project besides emphasize water saving policy to reduce water scarcity problem in North China; (3) Opportunity and challenges for adaptive management under changing environment, related to water spatial allocation through large water transfer project from South to North in China. These involves present argument of water transfer project from South to North and facing new problem for adaptive management under changing environment, i.e., climate change and society development, and how to develop an adaptive good water governance system to reduce these risk, and maintain sustainable utilization of limited water resources in China. Some of countermeasure and suggestions are addressed in the paper.