



Blue water transfer versus virtual water transfer in China, with a focus on the South-North Water Transfer Project

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Alongside its astonishing economic growth during the past decades, there has been increasing water stress in many areas in China. Water diversion has been one of the measures in dealing with the problem. The South-North Water Transfer Project is the largest project as such in the world, which aims to transfer water from the Yangtze River to primarily the North China Plain to alleviate the water stress in the region. Water diversion projects play an important role in supporting the continuous economic growth and safeguarding food production in the country. However, they also bring about many negative impacts concerning the environmental and ecosystem sustainability, as well as socio-economic development, both in the source and destination regions of diversions. One question arising is whether a virtual water transfer, primarily in the form of agricultural products, would be one of the tools economically and environmentally advantageous over transferring massive amounts of water to water deficit regions. This study presents an overview of China's water and land endowments and uses across regions, and the spatial distribution of food production. Based on this, the extent to which the virtual water strategy may be useful in dealing with the water stress in northern China as well as its limitations will be discussed. The focus will be on the South-North Water Transfer Project.