

The Dilemma Facing the Choshui River

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ABSTRACT

Choshui River is the longest river with the most abundant water resources in Taiwan. In 1709, a large-scale irrigation canal, Pa Pao Chun, was built to provide water for farming in the Changhua plain, thus making this flatland a leading agricultural region in Taiwan. Nevertheless, this canal also resulted in uneven economic growth between the northern and southern banks of Choshui River. Over the years, such imbalanced development, despite often being disregarded, has profound impact on both the environment and society. Although researchers have examined the exploitation of water resources in the light of different disciplines, neither was the interconnection of the issue from different perspectives explored, nor had the dynamic development in the area been examined in longitudinal studies.

From the historical point of view, this research analyzed in depth the irrigation of Choshui River and related issues including fight for water allocation between the North and South as well as between agriculture and industry, rapid depletion of ground water, development of hydroelectricity, construction of weir, and alteration of watercourse. Choshui River, though rich in resources, has difficulty meeting the growing demands from different sectors and the various needs. Worse still, man-made constructions and infrastructure not only failed to alleviate the problem, but further deteriorated the environment.

Looking back at the past 300-year exploitation of Choshui River reveals that pursuit of economic development at the expense of the environment will incur enormous social cost and ecological loss.

Keywords: Choshui River, Alluvial Fan, Pa Pao Chun, Water Allocation Agreement, Water Right, Hydroelectricity, Groundwater, JiJi Weir, JiJi Common Diversion, Yulin Offshore Industrial Park, Guo-Guan Petrochemical Company, No. 6 Naphtha Cracking Industry Site, Water Resources, Environmental History