**Evolution of Water-intensive Agriculture from 1909/10 to 2009/10 in Tamil Nadu, India: The Case of Madura District**

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Abstract:

Madura District, which is composed of current Madurai, Dindigul and Theni Districts in Tamil Nadu, was located at the east side of Western Ghats Mountains, and recognized as monsoon shadow area with annual rainfall around 1000mm. More than 750 irrigation tanks were traditionally developed in this district, but government of Madras Presidency, Madras and Tamil Nadu State also has been made efforts to improve irrigation water access, such as Periyar Project, Grow More Food Campaign and etc. Agricultural land use and cropping during the last 100 years has been transformed with such government intervention. This study aims to illustrate historical evolution of water intensive agriculture based on the statistical records and descriptions in Season and Crop Report, Madura district gazetteer or Government Economic Appraisal. Gross cultivated area recovered to pre-war level from 1950s, mainly due to the relatively stable rainfall during north-east monsoon season. Well irrigated area started to increase from mid-60s, and it enhanced cash crop cultivation such as oil crops, sugarcane, fruits and vegetables. Paddy yield increased rapidly between 1985 and 1999. However, current gross cultivated area is at the level of interwar period. It is mainly due to the rapid decline of total irrigated area, although the number of well continuously increased. It is apparent that government efforts on introduction of well irrigation resulted in the expansion of water intensive agriculture, although their positive impact is limited to the water-sufficient zones.