

## **Irrigation Under the Palar Anicut System: A Case Study from Tamil Nadu**

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*The paper examines the pattern of agriculture and the characteristics and conditions of water supply in the Palar Anicut System (PAS) between 1906 and 1990. General features of tanks served by the system is discussed in relation to size of ayacut and the storage capacity of tanks. Major factors determining the realisation of water and its discharge from the Anicut are identified by using multiple regression analysis. The results indicate that the available water supply at the Anicut has not been diverted equitably among the four main channels of the system. Diverted Anicut supply is more favourable in the northern section channels than the southern section and this is due to defective intake point coupled with poor infrastructural facilities of the southern section channels. The paper suggests that the Palar Anicut System could be improved if the physical facilities (inlet channels, bunds, channel beds, sluices and so on) are properly maintained, if necessary to be modernised; and the officials are given proper training to effectively monitor and manage the water flows at the Anicut.*

### **I Introduction**

Water is a crucial input for raising agricultural productivity is beyond doubt, but its availability and management is more important than its use. This aspect is analysed in this paper by studying the characteristics and conditions of water supply in the Palar Anicut System (PAS) between 1906 and 1990. The Palar is one among several rivers flowing through Tamil Nadu. Though a number of irrigation channels take off from its course, direct irrigation from Palar is negligible; most of the irrigation is under tanks. As per the latest available data (GOI 1993: 10) there are 2614 tanks in the Palar basin, commanding 3,35,216 acres in Tamil Nadu. At its origin in Karnataka, the Palar feeds a couple of large tanks, namely, Bethamangala and Ramasagar, which are mainly used for irrigation purposes in that State. These are the two significant tanks in the upper reaches of the Palar and there is no reservoir across the Palar. At the turn of the century throughout the Palar basin (within Tamil Nadu) there were 211 spring channels irrigating an ayacut of 11,400 acres, but most of them have dried up gradually due to depletion of ground water table by large scale extraction of water in the second half of the present

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