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## Participatory Irrigation Management through Moral Suasion: A Case Study Comparing the Formal and Informal Organisational Structures

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## Abstract

The decreasing trend observed in the area irrigated by traditional water harvesting structures, mainly irrigation tanks in the last four decades is quite opposite to the trend shown by the area under bore well irrigation, which is expanding radically and is comparable with area covered under major and medium irrigation projects. This shift in usage pattern of irrigation water is mainly attributed to the state interference in operation and maintenance of traditional irrigation structures and the biased provision of the share of the state irrigation budget to major and medium projects. The development of new technologies for groundwater pumping added woes to it. Recently some state governments of India are implementing the policy of free electricity for agricultural purposes to retain their vote bank in rural areas where majority of voters are farmers. This in turn causes an decrease in stabilisation value leading to over exploitation of groundwater resource. In such situations managing the common property resources like irrigation tanks is a difficult task exacerbated with the present political oriented Water Users Associations (WUAs) structure. So under these present circumstances, the current study attempts to find a solution by employing moral suasion (creating awareness, training, educating and voluntary compliance) which can be an effective alternative approach to combat this problem and to encourage the farmers to operate and maintain common property resources. As a part of this a case study was carried out in Nalgonda district of Andhra Pradesh, India for comparing the modus operandi of formal and informal WUAs, which is a part of Participatory Irrigation Management (PIM). The results show that the area commanded by tank irrigation has substantially increased under the informal WUA due to rehabilitation of their irrigation tanks and developing them into a cascade. This in turn had an influence on yield of groundwater pumps in the area as well. The formal one is unable to manage this for long term due to lack of funds and burocratic supervision of Irrigation department. This paper also suggests a modified structure of WUAs for better managerial efforts.

Keywords: Irrigation tanks, moral suasion, stabilisation value, water users association

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