

## UNDERSTANDING THE IMPACT OF IRRIGATION MANAGEMENT TRANSFER

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## **ABSTRACT**

Poor or under-performance of many publicly financed irrigation infrastructure schemes have led to governments and donors seeking new approaches to irrigation management. While purely private sector management of public irrigation infrastructure is still a novelty for most developing countries, a semi-private or semi-public form of irrigation management has been emerging over the past decade – irrigation management through farmer water users' associations (WUA) or irrigators' associations (IA) or farmer water organizations (FWO) – as termed differently in different countries. These WUA serve as intermediaries for the public sector, within a broader context of participatory irrigation management (PIM). There has been a shift of approaches from largely government operated and managed irrigation systems to joint management of irrigation systems by agencies working with farmers. The development of WUA has led to irrigation management transfer (IMT) in some countries, i.e. the public sector transferring the management responsibility (a part of it) from a government agency to WUA.

While many governments and donors have made a great deal of effort and invested millions of dollars in WUA development and IMT, especially over the last decade, how much do we know about the impact of these IMT? Has IMT resulted in improvements in water delivery, in irrigation system maintenance, in reducing conflicts, in increasing water revenue collection, and in eventual reduction of agency cost? Has IMT resulted in impact on production and who have benefited? There is not much literature to document these impacts of IMT. We found few cases where comprehensive evaluation is carried out on IMT. In Indonesia and China, governments have carried out partial evaluations of WUA performance in certain areas. Still, little is known on the impact of IMT with back ups from field data.

Based on implementation of IMT under two World Bank projects in the Philippines, a World Bank team, working with the National Irrigation Administration (NIA) of the Philippines, attempted a study of IMT impact. The study, comprising three phases – farmer/NIA perception survey, technical and institutional in-depth review, and economic analysis of impact on production, used 63 IMT contracts that were

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International Seminar on PIM

implemented from 2-5 years as samples. The study included a comprehensive evaluation of IMT impact, by exploring assessment methodologies, design of questionnaires, and first-hand survey of farmers, WUA leaders and agency field staff who worked on IMT. Based on the results of the survey in Phase-1, the study continued with Phase-2 through an in-depth analysis of 12 selected IMT contracts that were judged as performing reasonably well and those judged as problematic. The in-depth analysis included a technical evaluation of the irrigation systems and how they may have affected the performance of IMT, and an institutional evaluation, focusing on performance of both WUAs and the government irrigation agency. For the first time, RAP (rapid appraisal process) and benchmarking methods were used in the technical evaluation of the irrigation systems while assessing IMT impact. Phase-3 attempted an analysis of the economic impact of IMT using one large irrigation system and its field survey data, comparing those with data from non-IMT areas. The study not only generated first hand field data from farmer feedback on IMT, linking physical design and operations with IMT implementation, but also provided lessons for those who wish to undertake similar evaluation of IMT performance in their countries or systems.