Assessing the Needs of Farmers using Participatory Rural Appraisal Techniques: Experiences from India

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Abstract

*The Indian Agricultural Extension system has been modeled on the Training & Visit (T&V) system that follows a top-down approach. In most situations, the needs of the farming community are assessed by experts using survey questionnaires. The need for involving the local community in assessing their needs is being increasingly felt. One such assessment was conducted by the Andhra Pradesh Water Management Project (APWMP) of the Acharya N.G. Ranga Agricultural University (ANGRAU) in India. It is a The Netherlands assisted FAO project. The project adopted Participatory Rural Appraisal (PRA) techniques in assessing the farmers’ needs, and based on the identified needs the project installed a Sub Surface Drainage (SSD) system in rice fields to mitigate the problems of soil salinity and water logging.*

The purpose of this poster is to present the experiences of APWMP in identifying farmers’ needs in a canal command area using PRA techniques. The poster will present information reporting the success of PRA techniques in assessing the needs of the farmers correctly.

A total of 90 acres of rice fields were selected as the project area where an SSD system was installed based on the needs the farmers identified for themselves. APWMP collaborated with a non-governmental organization in conducting the PRA. Techniques like participatory mapping, seasonality analysis, matrix ranking, rainfall analysis, transect walk, Venn diagram,
and time-line were employed. Eighty farmers, irrigation department officials, Water Users Association members, and the village panchayat presidents participated in this exercise.

The major problems identified by the farmers were: intrusion of saline water into the rice fields from the drains leading to surface soil salinity, water logging in fields due to undulated topography, and salinity of sub-surface soil and ground water. The farmers identified installation of an SSD system in their fields as an immediate need. The identified problems and needs were triangulated with those analyzed by the experts from Wageningen University, The Netherlands and ANGRAU, and they were found to be the same. Based on these results, an SSD system was installed.

The success of this exercise shows the usefulness of a participatory approach in assessing farmers’ needs. It is recommended that future extension works adopt this approach based on the resources they have at their disposal. The experiences gained here suggest that involving the local community will contribute to effective extension work. Also, a participatory approach will help identify the talents in the farmers that can be harnessed for implementing future educational and transfer of technology efforts by extension. Also, the participatory approach builds a sense of ownership in the farmers which helps in the long term sustenance of implemented technologies.

Keywords: Needs assessment, PRA techniques, Rice fields, Soil salinity, Sub Surface Drainage system