PROBLEM IDENTIFICATION AND PRIORITISATION OF RESEARCH OPTIONS : THE PRA AND AHP APPROACH

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ABSTRACT

In India the growth rate of agriculture was less than one per cent during the nineties compared to two per cent growth during the eighties. Considering this past status of agricultural growth, achieving 4 per cent growth envisaged in National Agricultural Policy 2000 is an uphill task. In recent years there are several problems faced by the farmers like low productivity, inappropriateness of technology, high variability in rainfall, pest and disease incidence etc., besides several socio-economic and policy bottlenecks. Due to the above problems, the agricultural growth is declining in many parts of India. This declining trend has to be reversed to make India a developed nation with strong agricultural base. The technology is one important key factor that can undo the decelerating agricultural growth. The appropriate technology generation based on the need of different stakeholders and adopting the same by them are the two most vital factors in boosting agricultural growth. In India, only 15-20 per cent technologies generated by the scientific institutions are adopted by the farmers. There are several socio-economic factors that are responsible for slow or non-adoption of technology besides the merit of the technology. Hence, the stakeholders or the farmers should be involved right from problem identification to technology generation stage, so that, the technology generated fits according to the farmers' needs. Participatory Rural Appraisal (PRA) exercise executed in the current study involved farmers in the problem identification and also helped in prioritising the important problem encountered by the farmers. Based on farmers-scientists' perception evolved through PRA approach, the topmost researchable problem identified in the study area was high pest incidence in cotton. To solve this problem research can be carried on Integrated Pest Management (IPM), development of transgenic variety; development of improved agronomic packages. However, due to financial, organisational and other constraints, research areas have to be prioritised. The Analytic Hierarchical Process AHP results revealed that the IPM strategy is best suited for the study area. Prioritising the research options based on different criteria undertaken in the current study by the multi-disciplinary scientific group using AHP will not only economise the research investment but also help the farmers due to its inherent cost and environmental advantage.

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