Factors Responsible for Non-Adoption of Improved Rice Varieties Among the Tribal Farmers of Meghalaya

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Rice, the staple crop of north eastern region (NER) is cultivated extensively. But the productivity (1499 kg/ha) is much lower in comparison with the all india productivity level of 1750 kg/ha (Anon, 1997). The estimated requirement by the year 2010 is likely to be 3.05 million tonnes. As a result of such low productivity the region has a deficit of around 0.5 million tonnes of rice. The situation of Meghalaya in this respect is quite alarming as the gap between demand and supply is much wider than most of the North Eastern States. Systematic efforts are being made to replace the local varieties with different improved varities developed and identified by ICAR Research Complex as a humble effort to narrow down the existing gap. Though these varieties like DR-92, IR-36 and RCPL-1-87-8 possess a number of good attributes, still the farmers are not convinced to replace the traditional varieties of their own. A study was hence conducted for the following veasons :

To identify different factors responsible for slow adoption of improved rice varieties by the tribal farmers and to suggest suitable measures to increase the adoption level.

This study was conducted in four adopted villages of Ri-Bhoi district. The selection of sample was based on the list of rice growers in those four villages who were supplied with the different developed varieties from 1993 to 1998. A random selection of 50 farmers was made for the collection of relevant information pertaining to different problems with the help of a pre-tested interview schedule. The data so collected were analysed by simple percentage method.

For the interpretation of the results the findings were categorised into two groups i.e. constraints related to technological aspects and constraints related to non-technological aspects (Table 1).

The technological constraints (quality of improved varieties, taste, stickiness) indicate that the farmers were facing some difficulties regarding the full adoption of the recommended varieties (Table 1). The taste factor was observed to be the most important one (92%) followed by dwarfness (90%) and absence of stickiness quality (88%). The other important factors indicated by the farmers are non-responsive to low/no input situations, absence of multiple resistance quality and low combined yield. It was observed that the farmers were not averse to adopt the

Table 1. Technological constraints in adopting improved rice varieties as perceived by the farmers.

Constraints	Frequencies	Percentage
Improved varieties do not perform well under low/no input situation	31	62
Lack of multiple resistance quality	27	54
Absence of desirable taste	46	92
Absence of stickyness quality	44	88
Low combined yield (grain & straw)	27	54
Difficult to harvest due to dwarfness	45	90

improved /recommended varieties but some specific qualities should be incorporated to make the varieties popular among the tribals.

Regarding the non-technological factors, the farmers highlighted the need for infrastructural facilities, credit facilities and supply of inputs in time. The non-technological factors (Table 2) must be solved at the earliest to help popularising the improved varieties among the rice growers.

Cost factor greatly influenced the rice growers towards the low adoption. Lack of supply of seed in time and high cost of cultivation were the other two important aspects . The other significant factors were lack of marketing facilities, labour/intensive, post-harvest operations and lack of credit facilities.

Table 2. Non-technological constraints as perceived by the farmers

Constraint	Frequency	Percentage
Lack of seed supply in time	39	78
High cost of associated inputs	48	96
Cost of cultivation is high	34	68
Lack of credit facility	25	50
Meagre marketing facility	24	48
Post-harvest operations are highly labour intensive	24	48

Taste, stickyness, short duration, low input consumption were major attributes to be incorporated in improved verieties of rice for easy acceptability of the tribal farmers of Meghalaya, besides other factors like credit and marketing facility.

REFERENCE

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