

Constraint Analysis of Paddy Promotion Programmes under Decentralized Planning

Salpriya Seby¹, M.J. Mercykutty² and R. Sendilkumar³

ABSTRACT

A study was conducted in Thrissur district of Kerala, with the objective to find out the constraints felt by the beneficiary farmers and extension personnel while implementing of paddy promotion programmes under decentralized planning. Ex-post facto research design was employed and multi-stage sampling method was followed. Thirty farmers, each identified from three gramapanchayats viz; Adat, Arimpur and Chelakkara and 30 extension personnel representing 3 blocks of Thrissur district were surveyed. Analysis was carried out using Kruskal Wallis test. The dimension wise constraints perceived indicates that financial, time, infrastructural, knowledge, market and scheme feature were the most severe, followed by manpower and input constraints as more severe in Arimpur panchayat. The major constraints perceived by the extension personnel were manpower constraints, financial, scheme feature, input, time and infrastructural constraints, in that order.

Keywords : Constraints; Paddy promotion programmes; Beneficiaries; Extension personnel

INTRODUCTION

Decentralized planning is an approach to balanced development and reduction of regional disparities by giving emphasis to beneficiary participation along with physical and economic factors. The distinctiveness of Kerala's decentralization is that, it has formularized a participatory framework with inbuilt social accountability measures to take in citizen's involvement in local planning and governance in harmony with the national and regional policies. Government of Kerala has been implementing need driven agricultural development programmes under people's planning with the help of Local Self-

Government for improving crop production and food security. Major responsibilities are vested with local bodies such as panchayats and the implementation process include coordinating various groups of farmers, agricultural labourers, extension functionaries, social activists and people's representatives. Though the achievement of these interventions have been impressive, there have been issues in implementation that need to be recognized and addressed to ensure the sustainability. The issues faced may differ due to diverse socio-economic and geographic conditions. Keeping this in view the present investigation on constraint analysis of paddy promotion

1. P.G. Scholar & 2. Associate Professor, Department of Agricultural Extension, College of Horticulture, Vellanikkara and 3. Professor (Agricultural Extension), College of Cooperation Banking and Management, Thrissur (Kerala Agricultural University), Kerala, India.

programmes under Decentralized planning was conducted. Against this backdrop, the objective of the study was framed to analyse the constraints felt by the beneficiary farmers and extension personnel while implementing these programmes.

METHODOLOGY

The study was conducted during 2017 in Thrissur district of Kerala state. *Ex- post facto* research design was employed. Based on the secondary data and discussion with the officials of State Department of Agriculture, three leading blocks viz; Pazhayannur, Puzhakkal and Anthikkad and from these one *gramapanchayat* each namely, Chelakkara, Adat and Arimpur respectively with substantial cropped area under paddy cultivation were selected. The respondents included randomly selected 30 extension personnel from the three selected

blocks as well as 30 beneficiary farmers each from the three selected grama panchayats. Pre-tested structured questionnaires, focused group discussions and interview method were employed to identify the constraints as 'the difficulties or problems felt by the beneficiary farmers and extension personnel while implementing the paddy promotion programmes'.

The respondents were asked to mark their response on a three point continuum with weightage, as 'most felt(3)', 'moderately felt(2)' and 'less felt(1)' constraint based on the gravity with which they had experienced the difficulty.

Overall as well as dimension wise constraint index was calculated for each respondent using the following equation:

$$\text{Constraint index (CI)}_i = \frac{\text{Total score obtained by the respondent} \times 100}{\text{Maximum possible score}}$$

The individual constraint indices of beneficiaries from three panchayats were further analyzed by employing Kruskal Wallis test and the major constraints for each panchayats were ranked based on the descending order.

Composite Constraint index was calculated for identifying the constraints felt by extension personnel by dividing the summated constraint indices with the number of constraints under each dimension and were ranked in their descending order.

$$\begin{aligned} \text{Composite Constraint Index(CCI)}_i &= \frac{\text{Sum of individual constraint indices}}{\text{Number of individual factors}} \\ &= \frac{\sum niCI_i}{\sum ni}, \end{aligned}$$

where *ni* is the dimension of *I*th factor

FINDINGS AND DISCUSSION

Constraints felt by the Beneficiary Farmers

The constraints experienced by the farmers are listed in Table 1.

The Kruskal Wallis test results revealed that beneficiaries from the study area Arimpur panchayat perceived maximum constraints in the implementation of paddy development programmes, as compared to Chelakkara and Adat panchayats.

The dimension wise constraints perceived indicate that financial, time, infrastructural, knowledge, market and scheme feature constraints were the most severe,

followed by manpower and input constraints as more severe in Arimpur panchayat. The delay in receiving the payment for the harvest was found to be a more severe constraint in the case of financial dimension, followed by high labour and plant protection chemical cost. Further they stated that the financial assistance provided at present was not adequate. Lack of timely monitoring, release of funds and input availability were perceived as the major problems. The farmers disclosed that their dissatisfaction with respect to their quality and quantity of the inputs supplied. It was also identified that the absence of proper storage and logistic facilities and fragmented

Table. 1

Constraints felt by Beneficiary Farmers

Sl.No	Dimension	Kruskal Wallis test (n = 30 each)			
		Adat	Arimpur	Chelakkara	H value
	Sub-dimension wise constraints				
1	Input constraints	24.20 (3)	47.70 (2)	64.60 (1)	39.3**
2	Time constraints	17.77 (3)	61.97 (1)	56.77 (2)	60.1**
3	Financial constraints	24.42 (3)	66.55 (1)	45.53 (2)	43.6**
4	Infrastructural constraints	28.25 (3)	57.12 (1)	51.13 (2)	21.7**
5	Manpower constraints	31.98 (3)	50.10 (2)	54.42 (1)	15.0**
6	Knowledge constraints	17.35 (3)	72.12 (1)	47.95 (2)	67.9**
7	Market constraints	35.43 (3)	53.12 (1)	47.95 (2)	8.0*
8	Scheme feature constraints	42.12 (2)	53.87 (1)	(3)	5.4#
	Dimensions				
I.	Overall constraints	23.47	64.93	48.10	38.4**

() Ranks are given in parenthesis ** significant at 5 per cent * significant at 10 per cent # Not significant

land holdings also affected the successful implementation of scheme in the panchayat. The knowledge level of the famers were found to be poor especially the technical know-how and scientific practices relating to plant protection chemicals. Among market constraints, the delay in payment made by Supplyco was identified as the most severe constraint. In scheme feature, lack of trainings on skill development and value addition activities, absence of programmes promoting cultivation of local varieties were listed out as the main problems. Non-availability of labour as well as lack of timely supply of required quantity of quality inputs were the moderately perceived constraints.

Chelakkara *panchayat* experienced severe input and manpower constraints followed by time, financial, infrastructural, knowledge and market constraints. In Chelakkara *panchayat*, water scarcity was identified as a major problem, which resulted in frequent crop failure. In addition to this lack of timely availability of quality inputs in required quantity further aggravated the situation. Labour shortage and non-availability of officers for regular field visits were also severe. Lack of timely release of fund, low financial assistance, high labour and plant protection chemical cost, delayed payment for the produce, lack of storage facility, and lack of technical and scientific knowledge were also identified as predominant constraints.

Beneficiaries of Adat *panchayat* perceived scheme feature constraints as more severe and others as less severe.

Adat farmers listed that the absence of programmes promoting for cultivation of local varieties, lack of training programmes on skill development and value addition activities, complexity involved in availing schemes as the major constraints followed by delayed payment, manpower shortage and lack of storage facilities.

The findings of the study is in conformity with the results obtained by Nath & Patil (2014) who also reported that resources like seeds, fertilizer, plant protection inputs, scientific know-how, marketing facility and agricultural labour were available in varying degree in time but with great difficulty and similarly technological, infrastructural, economical constraints also viewed as most serious one.

Constraints felt by the Extension Personnel

Constraints felt by the extension personnel were studied and are furnished in Table 2.

It could be inferred from Table 2, that the major constraints perceived by the extension personnel were manpower constraints (labour shortage and non-availability of adequate implementing officers) followed by financial, scheme feature, input, time and infrastructural constraints. Among financial constraints, high labour cost, delay in receiving payment for the produce sold to *Supplyco*, high cost of plant protection chemicals and insufficient financial assistance were the main items. In scheme feature constraints, lack of components in the scheme addressing the crop loss due to various climatic vagaries, complexity involved in availing the scheme, absence of programmes promoting local varieties, lack

Table 2.
Constraints Perceived by Extension Personnel

(n=30)

Sl. No	Dimension	Composite Constraint index	Rank
1	Input constraints	71.48	4
2	Time constraints	64.81	5
3	Financial constraints	80.56	2
4	Infrastructural constraints	60.89	6
5	Manpower constraints	85.56	1
6	Scheme feature constraints	73.11	3

of training programmes in value addition and skill development activities respectively were perceived as the major drawbacks. Lack of quality inputs and water scarcity were the important constraints identified under input category while lack of timely availability of inputs and delay in release of fund were the major difficulties under time constraints. Lack of storage facilities was the foremost limitation identified under infrastructural constraint.

The results of the study reveal that the beneficiaries from Arimpur *panchayat* perceived maximum constraints in the implementation of paddy development programmes, followed by Chelakkara and Adat *panchayat*. This emphasizes the need for inclusion of more schemes and scheme components. The dimension wise constraints perceived indicates that financial, time, infrastructural, knowledge, market and scheme feature constraints were the most severe, followed by manpower and input constraints as more severe in Arimpur *panchayat*. The major constraints perceived by the extension

personnel were manpower constraints, followed by financial, scheme feature, input, time and infrastructural constraints.

CONCLUSION

In light of the results of the study, a few suggestions are made to overcome the constraints :

- The yearly financial allocation should be increased and provision for timely disbursement of procurement price to the farmers should be made.
- Formulate projects for financial assistance for establishing infrastructural facilities at panchayat level. The procedure for availing schemes should be simplified.
- Create awareness about the features of every scheme before the implementation.
- Promote schemes on processing and value addition to capture the market.
- Merge with Mahatma Gandhi National Rural Employment Guarantee Scheme for ensuring adequate labour supply.

- Service of more field officers for regular monitoring of field activities may be ensured based on the geographical area of the *panchayat*.

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