J Krishi Vigyan 2024, 12(4) : 790-794
DOI : 10.5958/2349-4433.2024.00136.5
ISSN 2319-6432 (Print)
ISSN 2349-6433 (Online)

Constraints of Technical Staff at Rythu Bharosa Kendras in Delivering Agricultural Services

M D Saifuddin[1], M Rama Devy[2], G Sekhar Babu[3] and M S Rao[4]
Department of Agricultural Extension Education, Agricultural College, Bapatla, 522101,
Acharya N.G. Ranga Agricultural University, Andhra Pradesh

ABSTRACT

Effective extension models are vital for empowering farmers and enhancing both productivity and profitability. Rythu Bharosa Kendras (RBKs), an innovative initiative launched by the Andhra Pradesh government, aim to provide an integrated platform addressing farmers' needs from seed to sale at the village level. RBKs represent a significant advancement in agricultural support at the grassroots level, understanding and addressing the constraints faced by the technical staff was essential. This investigation offered insights into the required corrective measures to ensure the effective operation and service delivery of RBKs to the farmers. The study investigated the constraints encountered by RBK staff in delivering agricultural services using ex-post facto research design and multistage sampling approach, collecting data from 120 respondents across four districts of Andhra Pradesh. Constraints were analyzed through Garret ranking technique, revealed that discrepancies between old survey records and e-Panta geo-coordinates complicate accurate e-crop booking by staff, Village Agricultural Assistants (VAAs) involvement in unscientific activities mandated by higher authorities compromised the quality of services to farmers and delay in releasing soil testing reports undermine farmers' trust in VAA at RBKs were the predominant constraints. These constraints collectively impact the effectiveness of RBKs in delivering agricultural services. Tackling these diverse constraints with specific interventions is therefore essential for optimizing RBK operations, improving service delivery, and increasing agricultural productivity.

Key Words: Agriculture, Constraints, Economics, Service ,Technical.

INTRODUCTION

The agricultural sector plays a pivotal role in ensuring economic stability and food security for rural communities, especially in regions where farming constitutes the primary livelihood. Over the years, agricultural extension systems have evolved significantly, enhancing the transfer of technology and support to farmers (Saifuddin *et al*,2024). Despite advancements from the pre-green revolution era to the present, several challenges remain pervasive. Farmers often grapple with limited access to extension services, a disproportionate extension worker-to-farmer ratio of 1:1162, difficulties in acquiring agricultural inputs, selling their produce, and insufficient facilities for testing agricultural inputs. These issues contribute to considerable economic losses for farmers (Anuhya *et al*,2022). In response to these challenges, the state government of Andhra Pradesh launched a transformative initiative by establishing 10,641 Rythu Bharosa Kendras (RBKs) during 2020. These RBKs are strategically positioned across villages in the state to deliver a comprehensive range of services designed to address various needs of the agricultural community (Reddy, 2020). Services provided by RBKs include input delivery, technical advisories, soil testing, training, crop insurance, market intelligence, health clinics, and expert consultations via digital platforms. Additionally, RBKs facilitate the procurement of farmers' produce (Saifuddin *et al*, 2022; Chowdary *et al*, 2022). Each RBK is staffed by qualified professionals based on the primary cultivation

Corresponding Author's Email - mohammadsaifuddin2003@gmail.com
1,3 M.Sc. (Ag.) Scholar,
2,4 Professor, Department of Agricultural Extension Education, Agricultural College, Bapatla, 522101

Table 1. Operational and resource management constraints faced by technical staff. (n= 120)

Sr.No.	Operational and Resource Management Constraints	Garret Mean Score	Rank
1.	Discrepancies between old survey records and e -Panta geo-coordinates complicate accurate e -crop booking by staff	66.87	I
2.	Non- availability of micronutrient fertilizers and pesticides at RBK prevents VAAs from supplying essential inputs to farmers	55.57	II
3.	Insufficient government funding for the regular maintenance of RBK	50.56	III
4.	Lack of government funding for labour in crop cutting experiments and soil sampling forces VAAs to pay personally	47.77	IV
5.	Delays in animal feed provision from RBKs hinder the timely support provided by technical staff	42.33	V
6.	Insufficient supporti ng staff during seed distribution makes it challenging for VAAs to manage alone	34. 28	VI

practices in the region, Village Agricultural Assistants (VAAs) or Village Horticulture Assistants (VHAs), or Village Fisheries Assistants (VFAs), alongside a Village Animal Husbandry Assistant (VAHA) to address animal health concerns (Saifuddin *et al*, 2023). These technical staff members play a crucial role in delivering RBK services that span from seed to sale, which are vital for enhancing agricultural productivity, sustainability, and the overall well-being of farming communities.

Despite their critical role, the technical staff at RBKs encounter various constraints that can impede their effectiveness in supporting farmers. Identifying and analysing these constraints systematically was essential for understanding the barriers faced by the RBK staff. This study aimed to elucidate these constraints in detail to inform the development of strategies that can enhance the effectiveness of RBKs. The research will provide insights into operational inefficiencies, policy gaps, resource allocation issues, and areas need capacity building. The findings from this study are expected to guide improvements in operational efficiency, inform policy formulation, optimize resource allocation, and identify key areas for capacity building (Saifuddin *et al,* 2024). By addressing these constraints, the study aims to contribute to a more robust agricultural support system, yielding better outcomes for farmers and promoting greater agricultural sustainability in Andhra Pradesh. Ultimately, the insights gained will support the development of targeted interventions to strengthen RBK operations, enhance service delivery, and improve the overall impact of agricultural extension services on rural livelihoods.

MATERIALS AND METHODS

The study was conducted in four districts of Andhra Pradesh *i.e.*, East Godavari, Chittoor, West Godavari, and Prakasam by adopting an *ex-post facto* research design to identify the constraints faced by the technical staff of Rythu Bharosa Kendras (RBKs) in delivering services to the farmers. The research employed a multistage sampling approach integrating both purposive and random sampling methods to select the technical staff of RBKs. Initially, the four districts were purposively chosen due to their highest number of RBKs. Subsequently, within each district, three mandals were selected purposively, again based on the number of RBKs present. From each selected mandal, ten RBKs were randomly chosen. Within each RBK, one Village Agricultural Assistant (VAA) was selected, resulting in a total sample size of 120 Village Agricultural Assistants. To identify the constraints hindering the effective delivery of RBK services, a pre-tested structured schedule was used to gather data on various constraints faced by the technical staff. These constraints were categorized into three main categories: operational and resource management, training and technical capability, and farmer engagement and trust. Respondents were asked to rank the constraints within each

Table 2. Training and technical capability constraints faced by technical staff of RBK (n = 120)

S. No.	Training and Technical Capability Constraints	Garret Mean Score	Rank
1.	VAAs' involvement in unscientific activities mandated by higher authorities compromises the quality of services to farmers	61.84	I
2.	Insufficient trainings for RBK technical staff on the latest agricultural technologies limits their effectiveness	54.40	II
3.	Pressure from higher authorities on RBK technical staff to increase input sales	52.00	III

Table 3. Farmer engagement and trust constraints faced by technical staff of RBK (n=120)

Sr.No.	Farmer Engagement and Trust Constraints	Garret Mean Score	Rank
1.	Delays in releasing soil test reports undermine farmers' trust in VAAs at RBKs	64.18	I
2.	Engagement of VAHAs in non -veterinary tasks limits their ability to deliver timely emergency services to farmers	55.57	II
3.	Lack of credit for fertilizers at RBKs deters farmers, increasing VAAs' burden and causing excess stock	50.56	III
4.	Farmers' lack of interest in the polambadi program leads to VAA decreased motivation to conduct it	47.31	IV
5.	Delay in the delivery of Rythu Bharosa magazine causes lost subscriptions and hinders staff from achieving targets	44.08	V

category based on their perceived severity and impact. The ranking data was analyzed using Garret ranking technique. For this analysis, each respondent's rank for a given constraint was converted into a percent position using the formula:

$$\text{Percent Position} = \frac{100\ (R_{ij} - 0.5)}{N_J}$$

Where,

R_{ij} = Rank given for the i^{th} attribute by j^{th} respondent

N_j = Number of attributes ranked by j^{th} respondent

Using Garret's table, the percent positions were then converted into scores. The scores for each constraint were aggregated across all respondents to calculate the total score and mean score for each constraint. This methodology was followed by Deepika *et al* (2024). The constraints were then ranked based on their mean scores, with the highest mean score indicating the most critical constraint. This methodology allowed for a comprehensive evaluation of the constraints faced by the RBK technical staff, providing a clear understanding of the most pressing issues impacting the delivery of RBK services.

RESULTS AND DISCUSSION

Operational and resource management constraints

The data (Table 1) revealed that the most significant constraint, with the highest Garret Mean Score of 66.87, was the discrepancy between old survey records and e-Panta geo-coordinates. This misalignment complicates accurate e-crop booking, a crucial process for linking farmers with essential RBK services. The inconsistency between outdated land records and current GPS data not only hampers precise field mapping but also undermines the effectiveness of various support services provided by RBK, emphasizing the need for urgent resolution.

Following this, the non-availability of micronutrient fertilizers and pesticides at RBK centres was ranked second. This shortage prevents Village Agricultural Assistants (VAAs) from supplying essential inputs, directly affecting agricultural productivity and the support available

to farmers. The inability to provide these critical resources disrupts the essential services that VAAs are supposed to offer. The findings were in accordance with the Madhuri *et al* (2024). The third-ranked constraint was insufficient government funding for the regular maintenance of RBK. This financial shortfall impacts the operational readiness and upkeep of RBK facilities, potentially leading to reduced service quality. Adequate maintenance is crucial for ensuring the smooth operation of these centers and sustaining the quality of services offered to farmers.

Pressure from higher authorities on RBK technical staff to increase input sales was ranked as third, this pressure potentially shifted the focus from providing unbiased technical support to meeting sales targets, which might have compromised the quality of the advice and services offered to farmers. Although ranked lower than the other two issues, this constraint still represents a considerable challenge, as it introduces a conflict between sales objectives and the goal of delivering high-quality agricultural guidance.

Farmer engagement and trust constraints

It was observed that delay in releasing soil test reports, ranked first, was found to undermine farmers' trust in VAAs at RBKs. This issue was primarily due to the lack of on-site equipment at RBKs, necessitating that soil samples be sent to block-level laboratories for testing. This procedural delay resulted in extended waiting periods for soil reports, thereby eroding farmers confidence in the services provided by VAAs. In contrast, the second major constraint is the engagement of Village Animal Husbandry Assistants (VAHAs) in non-veterinary tasks. This misallocation of resources limited their ability to provide timely emergency services, affecting the overall effectiveness of the support provided to farmers. The third constraint was the lack of credit facilities for fertilizers at RBKs, which deterred farmers from purchasing, leading to unsold stock and increased burdens on VAAs to manage and protect the inventory. This issue highlighted the need for implementing credit options to better engage farmers and manage stock effectively.

Farmers' lack of interest in the polambadi program, ranked fourth, results in decreased motivation among Village Agricultural Assistants (VAAs) to conduct the program effectively. This diminished engagement suggested that revitalizing the program or enhancing its appeal could be beneficial for improving both participation and effectiveness. Delay in delivering the Rythu Bharosa magazine to farmer subscribers, ranked fifth, results in lost subscriptions and hampers staff from achieving their targets. This issue is likely due to the magazine often being delivered three to four months late, which stems from delays in the publication process. Addressing these delays was crucial for maintaining subscriber engagement and enabling staff to meet their objectives.

CONCLUSION

This study elucidated the constraints encountered by technical staff at Rythu Bharosa Kendras (RBKs) in delivering agricultural services, categorized into operational and resource management, training and technical capability, and farmer engagement and trust issues. Key operational constraints identified include discrepancies between land records, shortages of micronutrient fertilizers, and inadequate maintenance funding. Training deficiencies were characterized by insufficient updates on contemporary agricultural technologies and the assignment of unscientific tasks to staff. Issues related to farmer engagement encompass delays in soil testing reports, lack of credit facilities for fertilizers, and diminished interest in programs such as Polambadi. These constraints collectively impair service delivery, erode trust, and hinder productivity. To enhance RBK operations, it is crucial to address these multifaceted issues through targeted interventions that improve operational efficiency, staff training, and farmer engagement. Implementing these solutions will strengthen the agricultural support system, resulting in better outcomes for rural communities and more effective extension services.

REFERENCES

Anuhya P, Khare N K, Bisht K and Nahatkar S B (2022). Extent of adoption of Rythu Bharosa Kendra's technologies and services in Ananthapuram district of Andhra Pradesh. *Asian J Agri Ext Eco & Sociol* **40**(10): 51-55.

Chowdary K R, Jyotsna M K and Jyothi I (2022). A study on perception and utilization of services of Rythu Bharosa Kendra's (RBKs) by the farmers in Chittoor district of Andhra Pradesh, India. *Curr J App Sci and Tech* **41**(27): 40-47.

Deepika M, Arun Kumar G and Yedida S (2024). Study on constraints faced by farmers in adoption of green technologies in rice-based ecosystem. *J Krishi Vigyan* **12**(2): 401-404.

Madhuri K, Panduranga G S, Somasekhar S and Peeru Saheb, Y (2024). Constraint analysis of RBK services at farmers level and VAA level in Annamayya district of Andhra Pradesh, India. *J Exp Agri Int* **46** (8): 185-189.

Reddy D A (2020). RBKs of Andhra Pradesh–one stop solution for the needs of farming community. *VIGY VARTA* **48**(51): 22- 25.

Saifuddin M D, Rama Devy M and Rao M S (2024). Knowledge of farmers on services rendered by Rythu Bharosa Kendras (RBKs): Test development and assessment. *Indian Res J Ext Edu* **24**(4): 89-96.

Saifuddin M D, Rama Devy M and Suseela K (2024). Scale construction and assessing farmers' attitude towards the functioning of Rythu Bharosa Kendras. *Gujarat J Ext Edu* **36** (2): 1- 6.

Saifuddin M D, Rama Devy M, Rao M S and Suseela K (2022). Profile of the beneficiary farmers of Rythu Bharosa Kendras (RBKs). *The Andhra Agri J* **69**(2): 288-294.

Saifuddin M D, Rama Devy M, Rao M S and Suseela K (2023). Effectiveness of Rythu Bharosa Kendras (RBKs) services as perceived by farmers in the East Godavari district of Andhra Pradesh. *Asian J Agri Ext Eco & Sociology* **41**(4): 34-41.

Received on 29/8/2024 Accepted on 22/10/2024