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Deceevaluation of argo-advisory services under Annapurna Krishi Prasara Seva in Nagarkurnool district of Telangana

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Abstract

Agriculture is a vital sector in India, with most of the population depending on it for their livelihood and economic development. However, farmers have traditionally relied on conventional practices, which often limit productivity and income. In this context, the integration of Information and Communication Technologies (ICTs) into the extension system has emerged as an effective approach for disseminating need-based and location-specific agricultural information. ICT tools facilitate efficient knowledge transfer across various agricultural domains, including crop production, protection, and marketing, while also strengthening forward and backward linkages. The present study highlights the effectiveness of agro-advisories disseminated through the Annapurna Krishi Prasara Seva (AKPS). The category-wise analysis of agro-advisories revealed that a higher proportion of respondents adopted plant protection measures, followed by crop management technologies, seed treatment & seed-related information, weed management, nutrient management, weather-based advisories, and natural resource management practices, indicating a preference for interventions addressing immediate production risks. The results further showed that 50.83 per cent of respondents perceived the advisories as accurate, 47.50 per cent reported their timeliness in alignment with crop growth stages, and 46.60 per cent considered them technically sound and useful. In addition, 31.67 per cent of respondents rated the advisories as highly relevant, while 30.83 per cent perceived them as practically applicable and economically feasible under field conditions. Overall, these findings highlight the effectiveness of ICT-enabled advisory services such as AKPS in enhancing the accessibility, reliability, and contextual suitability of agricultural information, thereby supporting informed farm decision-making and improving agricultural productivity and livelihoods.

Keywords: ICTs, agriculture, AKPS and information

Introduction

Indian farming is mostly subsistence in nature, where farming community is confronted with the no of issues in increase the yield of efficiency. The farming community has a lot of issues in maximizing the crop productivity; in this process they have experienced no of challenges in terms of production, processing, marketing and profit generation etc., here they realized that need based and location specification information is most important rather than farm inputs for getting higher yields. However, the introduction of information and communication technologies (ICT) in the field of agriculture has brought several changes in methods of extension system (Jayanthi, 2016) ^[2]. The information and communication technologies like radio, TV, newspaper, telephone and magazines are playing a major role in agricultural development since early decades. Now the modern Information Communication Technologies (ICTs) as mobiles and computers have created an information revolution. In the 21st century, cost effective and efficient communication technologies are required to take lead in changing agricultural scenario. Nowadays mobile phone usage has been drastically increased in the recent times (Kanavi, 2014) ^[3]. Due to advances in communication technology even the remote rural areas were also brought under the mobile phone network. Further, Mobile phone is becoming an all time partner to all the individuals and farmers were also now-a-days having mobile phones. Sending information to

the mobile is easy and scalable and reducing cost, time and money (Kailash, 2016) ^[5].

The Professor Jayashankar Telangana State Agricultural University (PJTU) has its Agricultural Extension wing delivering the frontline extension efforts in agriculture across the state at district level through Krishi Vigyan Kendras (KVKs) and District Agricultural Advisory and Transfer of Technology Centres (DAATTCs) is aiming at assessment, refinement and dissemination of the location specific technologies. The use of AKPS (Information interactive dissemination system-IIDS) in extension system is a new ICT initiative to meet the information needs and expectations of the farmers. AKPS started by The Indian Council of Agricultural Research (ICAR), Government of India, New Delhi under National Agricultural Innovation Project (NAIP), as a Consortium Leader with PJTU (formerly ANGRAU), Hyderabad, National Institute of Rural Development (NIRD), Hyderabad and Media Asia Lab, New Delhi as the partners. It has developed as an alternative ICT model to meet the information needs of Indian farmers. It was successfully pilot tested in Andhra Pradesh and Telangana states of India (Punnarao *et al.*, 2017) ^[6]. The major subject areas of AKPS are Crop production, Plant protection, Horticulture, Animal science, Home science, Dairy, etc. Advantages of AKPS are farmers can get location specific information with free cost, provide information in the form of text and voice in vernacular (local) language and cost effective. Therefore, keeping these points in view the present study focused mainly to find out the utility of agro advisories disseminated through AKPS by the respondents of Nagarkurnool district of Telangana.

Methodology

The AKPS is one of the flagship extension initiatives of Krishi Vigyan Kendra, Palem, designed to disseminate need-based and location-specific agricultural information to farmers of Nagarkurnool district. The programme has been operational since 2014–15, providing advisory services through a dedicated toll-free helpline (1800-425-3141). Over the years, AKPS has registered a total of 4,452 farmers, reflecting its growing reach and relevance among the farming community.

The study purposively selected the state of Telangana, as the AKPS initiative was first implemented here (when it was part of the erstwhile Andhra Pradesh) (Punnarao *et al.*, 2017) ^[6]. Additionally, the investigator's familiarity with the region

further justified its selection. The research focused on registered farmers from four administrative divisions of Nagarkurnool district—Nagarkurnool, Kollapur, Achampet and Kalwakurthy. From each division, 40 respondents were randomly selected, constituting a total sample size of 120 farmers.

An ex-post facto research design was employed to analyze the impact and effectiveness of the programme. Primary data were collected directly from the registered farmers using a structured interview schedule, while secondary data were obtained from official AKPS records maintained at KVK Palem and relevant online sources.

To assess the information-seeking behavior of farmers regarding agro-advisories, a comprehensive set of 31 statements was developed. These statements were carefully formulated in consultation with subject matter specialists, scientists and extension officials to ensure validity and relevance. The advisories disseminated through AKPS primarily covered key aspects of crop cultivation, including selection of crop varieties, weed management, nutrient management, pest and disease control, as well as weather-based guidance and other related agricultural information.

Furthermore, the study evaluated the utility of agro-advisories across multiple dimensions such as relevancy, accuracy, timeliness, clarity of message presentation, and overall message characteristics. This multidimensional assessment helped in understanding how effectively the advisories met farmers' needs and contributed to improved agricultural decision-making.

Overall, the study provides a systematic evaluation of AKPS as an innovative extension model, highlighting its role in strengthening farmer access to timely and reliable agricultural information at the grassroots level.

Results and Discussion

The present study exploring that the farmers utility of agro advisories like crop varieties, weed management, nutrient management, pest and disease management, weather and other related information disseminated through Annapurna Krishi Prasara seva at KVK, Palem for effective farm management. The utility in terms of relevancy, accuracy, timeliness, treatment of message and traits of the message of disseminated advisories through AKPS.

Table 1: Ranking assessed category wise

S. No	Category	Weighted Mean Score	Rank
1	Crop varieties	2.331	III
2	Crop management technologies	2.412	II
3	Weed management practices	2.235	IV
4	Pest & disease management	2.515	I
5	Natural resource management practices	2.172	VI
6	General aspects related to agriculture and allied sector (Weather and others)	2.192	V

The category wise analysis of advisories disseminated indicated that more respondents adopted plant protection advisories followed by crop management technologies and advisories on seed treatment and seed related information, weed management,

nutrient management, weather related advisories, and natural resource management practices (Table.1). The findings are in confirmation with earlier reports.

Table 2: Distribution of respondents according to their responses on utility of agro advisories (n=120)

S. No.	Theme	Frequency (F)	Percentage (%)
A	Relevancy		
	Highly relevant	38	31.67
	Moderately relevant	32	26.67
	Relevant	29	24.17
	Moderately irrelevant	12	10.00
	Highly irrelevant	9	07.50
B	Accuracy		
	Accurate	61	50.83
	Moderately accurate	33	27.50
	Inaccurate	26	21.67
C	Timely		
	Coincidence with crop period	57	47.50
	Early	38	31.67
	Late	25	20.83
D	Treatment of message		
	Less technical	20	16.67
	Moderate technical	34	36.67
	Highly technical	56	46.60
E	Treatment of the content		
	In considering its economic, technological and local feasibility of the information	24	20.00
	In considering the advantages of the information	23	19.17
	In considering the degree of complexity of the information	12	10.00
	In considering the degree of compatibility of the information	24	20.00
	In considering the degree of trialability of the messages	37	30.83

The findings presented in Table 2 provide a scientific assessment of the perceived utility of agro-advisories disseminated through the AKPS among the respondent farmers. The results indicate that 31.67 per cent of the respondents perceived the advisories as highly relevant, suggesting that the information was well-aligned with local agro-ecological conditions and farmers' specific needs (Table.2). Such contextual relevance facilitates better understanding and enhances the adoption of recommended practices at the field level, thereby contributing to improved farm productivity and economic outcomes (Archana *et al.*, 2020) ^[1].

A majority of the respondents (50.83%) reported that the advisories were accurate and reliable, reflecting the scientific soundness and credibility of the information disseminated through AKPS (Rajashekar *et al.*, 2022) ^[8]. This level of accuracy plays a crucial role in building farmers' trust and confidence, which in turn promotes the effective utilization of advisory services in farm decision-making.

In terms of timeliness, 47.50 per cent of the respondents indicated that the advisories were received in accordance with different stages of crop growth. The timely delivery of information is critical in agriculture, as it enables farmers to undertake appropriate interventions at the right stage, thereby improving operational efficiency and reducing potential risks.

Further, 46.60 per cent of the respondents perceived the advisories as technically sound and useful, indicating that the content effectively addressed complex agricultural issues such as pest and disease management, nutrient application, and crop protection. Additionally, 30.83 per cent of the respondents reported that the advisories were practically applicable and economically feasible under their farm conditions (Saikanth *et al.*, 2021) ^[9].

Overall, the results demonstrate that AKPS agro-advisories are characterized by relevance, accuracy, timeliness, technical soundness, and economic feasibility, which collectively enhance their effectiveness in supporting informed decision-making and improving agricultural performance among farmers.

Conclusion

The AKPS services, implemented by Krishi Vigyan Kendra, Palem, is an innovative ICT-enabled extension system designed to disseminate agricultural information effectively to farmers. It significantly enhances the outreach and efficiency of extension services by catering to farmers in remote and underserved regions. Through the provision of timely, need-based, and location-specific agro-advisories, AKPS helps bridge the gap between research institutions and the farming community, thereby facilitating improved access to scientific and practical knowledge. The category-wise analysis of advisories revealed that a higher proportion of respondents adopted plant protection measures, followed by crop management technologies, seed treatment and seed-related information, weed management, nutrient management, weather-based advisories, and natural resource management practices.

The findings further indicate that agro-advisories disseminated through AKPS are perceived as highly relevant to local farm conditions, economically viable, and easy to comprehend. Farmers reported that the advisories were need-based, time-saving, cost-effective, and practically applicable under field conditions. Such ICT-driven initiatives serve as an important catalyst for improving agricultural productivity and rural livelihoods in the present era. Strengthening infrastructural support and integrating advanced technologies can further expand the reach and effectiveness of AKPS, particularly in remote areas, thereby enhancing its overall impact on farmers' livelihoods and sustainable agricultural development.

References

1. Archana P, Sridhar K, Rama Krishna Babu A. Annapurna Krishi Prasara Seva- an innovative mobile based agro advisory service to Mahabubnagar farmers. Current Journal of Applied Science and Technology. 2020;39(9):81-87.
2. Jayanthi M. Impact of ICT enabled agricultural extension services among farmers in Tamil Nadu. Coimbatore: Tamil Nadu Agricultural University, Centre for Agricultural and

- Rural Development Studies; 2016.
3. Kanavi RS. An analysis of Kisan Mobile Advisory Service (KMAS) of Krishi Vigyan Kendra. Dharwad: University of Agricultural Sciences; 2014.
4. Thomas S, Mathew L. Plant growth promoting rhizobacteria enhancing vigour and yield: a brief review. *Agric Arch.* 2024;10.
5. Kailash. A study on use of mobile phone technology (smartphone) by the farmers of Nagaur district in Rajasthan. Varanasi: Institute of Agricultural Sciences, Banaras Hindu University; 2016.
6. Punnarao P, Reddy KJ, Anurag TS, Mahadevaiah M, Sailu P. Interactive information dissemination system (IIDS)-an alternative ICT model to meet the information needs of the farmers. *Journal of Pharmacognosy and Phytochemistry.* 2017;314-318.
7. Muzaffar SS. Meeting the demand: achieving zero hunger through balanced food supply and demand. *Agriculture Archives: An International Journal.* 2022.
8. Rajashekar B, Aruna K, Rajashekhar M, Prabhakar Reddy T, Jagan Mohan Reddy M, Shiva Charan G. Perception and utilization pattern of information and communication technology tools by the farmers of Nagarkurnool district. *Biological Forum – An International Journal.* 2022;14(4):1111-1114.
9. Saikanth DRK, Murugan PP, Prasanth A, Mahandrakumar K, Prabakaran K. Utilisation pattern of Annapurna Krishi Prasaar Seva (AKPS) by farmers of Nagarkurnool district of Telangana. *Current Journal of Applied Science and Technology.* 2021;40(48):33-37.
10. Arubalueze CU, Ilodibia CV. Impact of crossbreeding on the growth and yield improvement of two cultivars of *S. aethiopicum* L. found in Anambra State. *Acta Botanica Plantae.* 2024;3(1):13-16.
11. Babu S, Darjee S, Alekhya G. Enhancing farmer prosperity: implementing integrated farming systems for increased income. *Agriculture Archives: An International Journal.* 2022.
12. Ayana DT, Olika GI. Effect of mulching practice as soil moisture conservation for tomato (*Lycopersicon esculentum* Mill.) production under supplemental irrigation in Yabello district of Borana zone, Ethiopia. *Acta Biology Forum.* 2024;3(2):43-47.
13. Soumya B, Savitha B, Sreenivasa Rao I. Usefulness of agro advisories disseminated through interactive information dissemination system (Annapurna Krishi Prasar Seva) in the state of Telangana. *International Journal of Agriculture Sciences.* 2018;10(16):7006-7009.
14. Mba TN, Kenguele HM, Ntoutoume AJE, Mapasu S, Pambo-Pambo BA. Molecular assessment of *Streptococcus pneumoniae*: prevalence and risk factors among school-age children in Tchibanga, Gabon. *Journal of Diversity Studies.*
15. Mirekar N, Ananya M, Iddalagi S, Narayanachar VD. A comparative study of HPTLC fingerprint profile and standardization of *Benincasa hispida* (Thunb.) Cogn. pulp and seed. *Acta Botanica Plantae.* 2024.
16. Khatana K, Malgotra V, Sultana R, Sahoo NK, Maurya S, Das A, *et al.* Advancements in immunomodulation, drug discovery, and medicine: a comprehensive review. *Acta Botanica Plantae.* 2023;2(2):39-52.
17. Koppu Vasavi GK, Chandra M, Dwivedi PN. Study on antigenic relationship of Canine Parvovirus types with vaccine strain using in-vitro cross-neutralization assay. *Acta Biology Forum.* 2023;2(2).
18. Tiwari AK. Empowering farmers: integrating farming systems for sustainable prosperity. *Agriculture Archives: An International Journal.* 2023;2(2):35-38.
19. Sangma JJD. Next-generation functional foods: bridging gut microbiota modulation and personalized nutrition. *Microbiology Archives: An International Journal.* 2024;6(1):61-65.
20. Attitalla IH, Gaballa MF, ALraaydi NS, Abid AADM. Exploring the antimicrobial capabilities of date palm seed essential oil. *Microbiology Archives: An International Journal.* 2024;6(1):49-55.
21. Asma J, Subrahmanyam D, Krishnaveni D. Deciphering host plant resistance mechanisms against tungro virus in rice: a comprehensive exploration. *Agriculture Archives.* 2022. doi:10.51470/AGRI.1.
22. Saini PK, Sachan K, Surekha S, Asif Islam N. Rice tolerance to iron-deficient and iron-toxic soil conditions: elucidate mechanisms and implications. *Journal of Plant Biota.* 2022.
23. Renjan B. Enhancing intercropping research and practices in modern agricultural landscapes. *Agriculture Archives: An International Journal.* 2023.
24. Prabhavathi SJ, Subrahmaniyan K, Kumar MS, Gayathry G, Malathi G. Exploring the antibacterial, anti-biofilm, and anti-quorum sensing properties of honey: a comprehensive review. *Agriculture Archives.* 2023.
25. Nazneen S, Nausheed R. Exploring the contribution of botanical families to medicinal ethnobotany. *Journal of Plant Biota.* 2022;1(2):1-4.