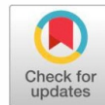


Research Article

Open Access

A Study on Agriwar-Room an Initiative by ICAR-Krishi Vigyan Kendra in Raichur District of Karnataka State: To address agro-based Advisory Services during Covind-19.



Vijayachandra Reddy.S.^{1*}, Moulasab² and Pavithra.B. S³

^{1*} Department of Agricultural Economics, University of Agricultural Sciences, Raichur-584104, Karnataka State, India

²Department of Agricultural Extension Education, College of Horticulture, Munirabad, University of Horticultural Sciences, Bagalkot- 587104, Karnataka State, India

³Department of Agricultural Economics, College of Agriculture, VC Farm Mandya-571405, India

ABSTRACT

The Agriwar-room was an initiative taken by the University of Agricultural Sciences, Raichur to assist farmers in obtaining information related to farming, ranging from the technical knowledge base to price information for selling the produce in distant markets across the state during the lockdown period of COVID-19 in 2020. The findings reveals that, the agro-based services were widely spread across Six major Districts of kalyan Karnataka region consisting of Raichur, Kalaburagi, Yadgir, Lingsugur, Koppal and Bellary districts which were accounted for 91.47 % to the total received calls (598 calls received) by ICAR-KVK, University of Agricultural Sciences, Raichur during the period of 3 months (April to July) in the year 2020. Further, the farmers were provided with necessary information based on their requirements majorly related to crop production, plant protection, marketing information and other services. The findings reveal that, Majority of the calls were received from Raichur district, accounting for 48.49 % followed by Kalaburagi district with 22.91% and Yadgir (8.19%) were the three major district farmers who were benefited largely from the Agriwar room during CoVID-19 period. The study also highlights the importance of information about Agriculture produce marketing facilities which was essential during covid-19 period because many of the farmers don't know about the information where they have to dispose of the produce in which market so that they can get better prices for their produce during COVID-19 situation due to lack of mobility.

Keywords: Market, Produce, Price, Information, technology, Advisory service, Agri.

INTRODUCTION

Agriculture and allied sectors play very significant positions in the regional level to meet the food and nutritional requirement of the growing population but also for the whole development of the nation [1]. At present, agriculture at the global level faces many challenges such as led food price anomalies and supply chain disruption [2] at farm level challenges such as input efficient use and management, doubling of farmers" more-from less-for more", income, by optimal and eco-friendly allocation of farm resources-land, labour, and capital with agriculture becoming more needed and demands more knowledge especially during providing agro-industry services [3]. The importance of technology will play important when it is locally adoptable, especially this kind of creation and transfer of technologies are very essential and economically viable in long

run and socially desirable for the development of farming communities.

The global economy was highly destructive due to impact of the Covid-1 [12]. This has given rise to an imbalance the economic activities leading to visible negative growth in economic growth [9]. Global trade was restricted, it lead to threat for most of the agriculture exporting countries, this resulted into trade to be flat curve during the lockdown. The scenarios of both import and export restrictions on agricultural commodities were witnessed among global economies in the world. As a result food supply chain was disruptions it resulted huge in impact on the agriculture sector across the globe [11].

The COVID-19 pandemic has disrupted the Indian agricultural system extensively [8]. A pandemic shock has resulted in very significant changes and impacted on economies mainly as a result due to loss of human lives when compared to a weather shock like flood or drought or a trade embargo at both regional and national levels in the country [9,1].The pandemic created a sort of dis-equilibrium between the demand and supply of food resulting on the global food supply chain; while droughts lead to be regional changes affecting associated sector or stakeholders of the particular zone[4].

Due to COVID-19, the country was imposed lockdown, it has

*Corresponding Author: Vijayachandra Reddy.S
Email Address: vijaychandraphd@gmail.com

DOI: <https://doi.org/10.58321/AATCCReview.2023.11.03.125>
© 2023 by the authors. The license of AATCC Review. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

impacted overall production levels in both agricultures contributing decline in overall growth about 47% on Agriculture Production. In case of allied sectors, the maximum sectors have a decline in production especially poultry having the greatest decline of about 19.6% second position was found in case of fisheries with a decline of about 13.6% in production. However, crop production was minimally impacted with a negative growth of 2.7% [12].

In India during the year 1974, the first Krishi Vigyan Kendra (KVK) was established at Puducherry, later the number of KVK was risen at regional and even at newly created districts also. The KVKs are sanctioned to ICAR institutes, Agricultural Universities, other related Government Departments and Non-Government Organizations (NGOs) working in Agriculture and allied fields. Among, National Agricultural Research System (NARS) KVK play an important role and aims at technology assessment especially for location specific in agriculture and allied enterprises, refinement and demonstrations, through technology assessment. These KVKs have been functioning as Resource and Knowledge Centre of agricultural technology supporting initiatives to the farming communities apart from public, private and voluntary sector contributing for improving the agricultural economy of the sepecific region and are linking the agricultural research system with the extension education system and farmers. At present, in view of helping farming communities and part of government initiatives, agriwar room was established to share required information to the farming communities exclusively during COVID-19 period for kalyan Karnataka region farmers. The agriculture sector growth is facing a battalion of challenges that signal for not only improved technology but also infrastructure, quality market support, and inputs information for favourable climate, etc. during COVID crisis period. At this backdrop, the study aimed to study component wise call details and which is advisory services are more needed were the main objectives of this study.

Materials and Methods

The primary and secondary data was collected and analyzed based on the selected information required for stated objectives in the year 2020. The agro-based services Information was collected from kalyan Karnataka region spread across Six major Districts such as Raichur, Kalaburagi, Yadgir, Lingsugur, Koppal and Bellary districts with 16.2160° N, 77.3566° E, 17.3297° N, 76.8343° E, 16.7626° N, 77.1442° E, 16.1550° N, 76.5199° E, 15.3505° N, 76.1567° E and 15.1394° N, 76.9214° E respectively. The information was gathered during April to July, 2020. Further, Literature has been compiled from various Government reports; scientific journals; online published articles; newspapers and websites of different organizations and institutions working during during COVID for providing agro-based services. The compiled information was reviewed further to draw a logical conclusion about the agro-advisory services and help the farming community to take proper decisions in the marketing of agricultural commodities.

Results and Discussion

The findings about information regarding calls received from major six districts during COVID-19 from April to July, 2020 for providing Market Linkages support to the farmers at Krishi Vigyan Kendra (KVK) at the University of Agricultural Sciences (UAS), Raichur district in Karnataka state are presented in table 1. The findings reveals that, the agro-based services were widely spread across Six major Districts of kalyan Karnataka region consists of Raichur, Kalaburagi, Yadgir, Lingsugur, Koppal and Bellary districts which were accounted for 91.47 % to the total received calls (598 calls received) by ICAR-KVK, University of Agricultural Sciences, Raichur during the period of 3 months (April to July) in the year 2020. only 6.02% calls were received from farmers belonging to the district such as Bijapur, Bagalkot, bidar, Haveri and Dharwad. The third position was contributing only 2.51% of farmers to the total calls sharing among hassan, davengera, kolar, chamaraj nagar, belgaum and bangalore district during COVID-19.

Table. 01

Sl. No.	Name of the Districts	Total calls received	Percent (%)
1	Raichur	290	91.47
2	Kalaburagi	137	
3	Yadgir	49	
4	Lingsugur	26	
5	Koppal	25	
6	Bellary	20	
a	Total	547	
Districts received calls More than 5 less but than 10 calls			
1	Bijapur	10	6.02
2	Bagalkot	7	
3	Bidar	6	

4	Haveri	8	
5	Dharwad	5	
b	Total	36	
Districts received calls Less than 05 calls			
1	Hassan	2	2.51
2	Davangera	2	
3	Kolar	2	
4	Chamaraj nagar	1	
5	Belgaum	4	
6	Bangalore	4	
c	Total	15	
Grand total (a+b+c)		598	

The findings related to component wise calls received during COVID-19 at KVK, UAS, Raichur are presented in table.2. The results show that, highest calls from farmers were received for information on Agriculture produce marketing accounting for 31.77% followed by general information about availability of farm inputs accounting for 14% and about 13.38 % calls were for obtaining information on Crop Production technologies. These were the three major issues faced by the farmers who are desperate to get information about these items during COVID-19.

Table. 02

Sl. No.	Particulars	Calls received	Percent (%)
1	Agriculture produce marketing	190	31.77
2	Crop Insurance, finance & subsidy information	48	8.03
3	Soil Testing & Problematic Soil Management	64	10.70
4	Plant Protection measures	68	11.37
5	Crop Production technologies	80	13.38
6	Horticulture Production Technologies	28	4.68
7	Farm Machinery information	17	2.84
8	Animal Husbandry	19	3.18
9	General information (Agriwar)	84	14.05
10	Total	598	100.00

The findings about season wise calls received at agriwar room conveys that, about 34.45 % during summer season and 65.55 % during kharif season, collectively it was 598 calls received during COVID-19 agriwar period at KVK. The findings on Agro-Based major advisory services provided during COVID-19 at ICAR-KVK, UAS, Raichur are presented in table.3. The results convey that, farmers made calls in order to get information regarding plant protection measures accounting for 40 % to the total and crop production technologies and horticulture production accounted for 45 % to total and least was related to the transfer of technologies at farmers field level accounted for 15% to the total.

Table. 03

Sl. No.	Particulars	Call received
1	Plant protection measures	68(40.00)
2	Crop Production technologies & Horticulture Production	80(45.00)
3	Transfer of Technologies	28(15.00)
Total		176

CONCLUSION

Study conveys that, there is need to strengthen Information technology and related Infrastructure of KVKs especially during a crisis situation like COVID-19. The study also focus that, due to interruption in the marketing of agriculture produce in local mandis and non availability of farm inputs at village level, it has resulted its impact on decline farm gate prices. This results in poor income in farming. Hence, more number of private players in the area of delivery companies, e-commerce and along start-ups during crisis period.

FUTURE SCOPE OF STUDY

Agricultural advisory services play vital status for transforming modern agriculture. We need to gather all our experts having vast experiences in agriculture and allied fields and get all actors to participate. The major challenge is to know how these actors will co-ordinate. How resources can be mobilized for gather information about agriculture technology for future generation is question of sustainability.

DECLARATION OF CONFLICT OF INTEREST

The authors declare that there is no conflict of interest

ACKNOWLEDGEMENT

It is my proud privilege to express my respected regards and a profound deep sense of gratitude and heartiest thanks to Director of Education, UAS, Raichur, Karnataka State, India for offering me to work at KVK as in-charge of extension advisory services. Further, this paper is Conceptualization, investigation, and original draft preparation by Vijayachandra Reddy, Data collection, entry, analysis and Tabulation Vijayachandra Reddy, Moulasab and Pavithra. All authors read and approved the final manuscript.

References

1. Bellemare MF 2015 Rising food prices, food price volatility, and social unrest. *American Journal of Agricultural Economics* 97(1):1 21.
2. Cariappa, A. A., Acharya, K. K., Adhav, C. A., Sendhil, R., & Ramasundaram, P. (2021). Impact of COVID-19 on the Indian agricultural system: A 10-point strategy for post-pandemic recovery. *Outlook on Agriculture*, 50(1), 26-33.
3. Chengappa PG 2013 Secondary agriculture: a driver for growth of primary agriculture in India. *Indian Journal of Agricultural Economics*, 68(1):1-19.
4. Harris J, Depenbusch L, Pal AA, Ramakrishnan Madhavan Nair & Srinivasan Ramasamy 2020 Food system disruption: initial livelihood and dietary effects of COVID-19 on vegetable producers in India. *Food Security* 12:841-851.
5. Jaacks LM, Gupta N, Plage J, Awasthi A, Veluguri D, Sanjay Rastogi, Elena Dall'Agnesse, GV Ramanjaneyulu, Abhishek Jain 2022 Impact of the COVID-19 pandemic on agriculture in India: Cross-sectional results from a nationally representative survey. *PLOS Sustain Transform* 1(8): e0000026. <https://doi.org/10.1371/journal.pstr.0000026>.
6. Jena Pradyot Ranjan, Majhi R, Kalli R, Managi S, Majhi B. Impact of COVID-19 on GDP of major economies: Application of the artificial neural network forecaster. *Economic Analysis and Policy*. 2021:69, 324-339.

7. Kalsi SS, Sandoval L, Sood D 2020 COVID-19 in India Trade Situation Update Report Highlights, USDA, Foreign Agricultural Service, Global Agricultural Information Network Report No. IN2020-0017.
8. Mishra A, Bruno E, Zilberman D 2021 Compound natural and human disasters: managing drought and COVID-19 to sustain global agriculture and food sectors. *Science of the Total Environment* 754:142210.
9. National Bank for Agriculture and Rural Development, Mumbai
10. Ramkumar R. Agriculture and the Covid 19 Pandemic: An Analysis with special reference to India. *Review of Agrarian Studies*, 2020, vol. 10, issue 1
11. Shams, M. (2020). Socio-Economic Impact of COVID 19: a gendered pandemic assessment in Dhaka City, unpublished research paper, IDMVS, DU