An Analysis of Impact of Covid -19 on Agriculture, Horticulture Crops and Livetocks in Krishna District, India

Abstract

The study was conducted during 2022 to investigate the impact of Covid-19 on agriculture, horticulture crops and livestock production, marketing, input availability etc. The information was collected from 60 farmers. The study revealed that impact of covid-19 on production was 8.33% in agriculture crops, 28.33% in horticulture crops and 35% on live stock. Covid-19 impact on Farm gate prices was (25.00%) on agriculture crops, 86.70% on horticulture crops and 21.66% on live stock. Whereas impact on availability of inputs in agriculture is 20%, horticulture wasis 23.33% and livestock was 28.33% and on labour availability it was 68.33% in agriculture, 80% in horticulture and 40% in live stock. Farmers during COVID-19 were lack of labour availability, farm labour is huge demand and very costly, market sale prices very less for produce and no marketing facility and cost of cultivation is high are the important constraints faced by the farmers.

Note: Please re-write the abstract of the study in 1 page. The components of abstract are included:

1. The aim, objectives and problem statement of study
2. The research methodology including the research design, sampling design, data collections, instruments, types of data analysis, pilot test.
3. The research findings
4. The theoretical and practical implications
5. The contribution and recommendations of study

1.0. Introduction

The novel Corona virus (COVD-19) pandemic has rapidly spread across the world, adversely affecting the lives and livelihoods of millions across the globe. India has reported its first infection on 30 January 2020, prompting the authorities to soon initiate various measures to contain the spread of the epidemic. Given that disease is highly contagious; the much needed nationwide lockdown was enforced starting 25 march 2020 in order to contain the spread of covid-19 pandemic (NABARD, 2020) ~~[13]~~. During the initial few weeks, the restrictions were strict and all non-essential activities and businesses including retail establishments, educational institutions across the country were prohibited from operating. Subsequently these restrictions are being gradually eased in phased manner in most parts of the country. While other sectors are reported to be under significant stress, it is important to analyse the impact of Corona virus on agriculture and allied sectors which provide livelihood to majority of the population in India. The agricultural and allied sector carries immense importance for the Indian economy. It contributes nearly 16% to the Indian economy and provides employment to nearly 50% of the work force. (~~Source:~~ Directorate of economic and statistics, 2020). It is fundamental of for ensuring food security of the nation and also influences the growth of secondary and tertiary sector of the economy through its forward and backward linkages. The performance of agricultural sector greatly influences achievements on many other fronts (Katiki Srikar, 2020) ~~[4]~~ . Agricultural growth reduces poverty directly, by raising farm incomes, and indirectly, through generating employment and reducing food prices. In other words, a thriving agricultural sector is a boon for most sectors of the Indian economy. According to Adeeth Cariappa *et al,* (2021) the results of a 10 point strategy on mitigating the corona virus disease 2019 (COVID-19) on agriculture revealed that usage of social networking applications in the first phase of the nation-wide lockdown and in mitigating productivity losses and in overcoming market constraints. Although, India is one of the largest producer of some of the agriculture and horticulture products. Yet, the national yield of major crops is less than the global average yield production. Further, the national yield of such crops is for less than the highest yield achieved in other parts of the world. The Covid 19 pandemic has adversely impacted the global agriculture and Indian agriculture sector is no exception. (Note: Need more elaborations)

2.0. Research Objectives, Research Questions and Problem Statement

2.1. Problem Statement

2.2. Research Objectives

2.3. Research Questions

3.0. Research Methodology, Materials and Methods

The current study was conducted during 2022 on impact of Covid-19 krishna district of Andhra Pradesh. The data was collected through well structured interview schedule. A total of 60 respondents were selected for the study. In Andhra Pradesh, Krishna district was selected based on cultivation of agricultural, food and livestock. In Krishna district Nandigama, Jaggyyapeta and Kanchikacherla mandals were selected for the study. Two villages were randomly selected from each mandal and a total of six villages from three mandals were selected. From each selected village ten respondents were randomly selected thus making a total of 60 respondents. Primary data used for the study, the data was collected by researcher. The descriptive statistics tools like such as, mean score, frequency distribution, percentage and standard deviation used for the study.

Note Please re-write and more sharpen elaborations on:

The research methodology including the research design, sampling design, data collections, instruments, types of data analysis, pilot test.

4.0. Research Result and Discussions

From the ~~Tabel~~ Table 1 below it could be concluded that Impact of COVID-19 on agriculture and horticulture crops livestock/poultry Krishna district of Andhra Pradesh were 5 respondents (8.33%) (right √) decline in production of agriculture, 28.33 per cent (incorrect X) decline in horticulture and 35.00 declines in production of livestock. In agriculture crops 25.00 per cent decline in farm gate prices followed by 86.66 per cent decline in horticulture crops. In marketing majority 76.66 per cent of the farmers faced lack of marketing facilities in agriculture crops, followed by 95.00 per cent in marketing of horticulture produce and 53.33 per cent of the famers faced problems marketing of livestock produce. Impact of COVID-19 on Farming activities in Krishna district of Andhra Pradesh revealed that agriculture production 8.33 had not been adversely impacted significantly, mainly due to the fact that harvesting of rabi crops was almost complete by the end of April 2020. However, production in allied sector had declined significantly, especially in Livestock/poultry sector (35.00%) primarily due to drastic decline in demand for these products possibly due to the widespread fear circulating in the wake of COVID- 19 regarding safety of non-vegetarian food, particularly poultry. Similarly, production

in horticulture crops (28.33%) also reduced, owing to reduced demand for these products and disruption in their supply chain. Impact on Farm Gate Prices: Farm gate prices have shown one-fourth decline in agricultural crops (25.00%). Mainly due to supply disruption caused by restriction on movement of vehicles and closure of Agriculture Produce Market Committees (APMCs).

Table 1: Impact of Covid-19 on Agriculture Field, Horticultural Crops and Livestock/Poultry

(N =60)

S. No	Parameter	Agricultural crops		Horticulture crops		Livestock/Poultry	
		F	P	F	P	F	P
1	Impact on Production	5	8.33	17	28.33	21	35.00
2	Impact on Farm gate prices	15	25.00	52	86.66	13	21.66
3	Impact on marketing facilities	46	76.66	57	95.00	32	53.33
4	Impact on Availability of inputs	12	20.00	14	23.33	17	28.33
5	Impact on labour availability	41	68.33	48	80.00	24	40.0

Note : F – Frequency, P – Percentage
Source : Research Finding (2023)

Impact on availability of Agri Inputs: Due to restrictions imposed on movement of men/material and closure of shops, availability of agri inputs viz. seeds, fertilizers and insecticides. Impact on Prices of Agri Inputs - Due to disruption in supply chain owing to restrictions on movement of vehicles and closure of shops and markets, prices of agri inputs viz. Impact on Agriculture Marketing –Even though local procurement centres were opened by various State Governments under their jurisdiction, yet restrictions on movement of vehicles.

Impact on Labour availability: Due to disruption in supply chain owing to restrictions on movement men and vehicles 68.33 per cent labour shortage witnessed in agriculture crops followed by 80.00 per cent in horticulture crops and 40.00 per cent livestock activities. (please re-write)

Table 2: Post Lock Done Preparedness of Farmers in Production and Marketing Aspects

(N = 60)

Component	Production		Marketing	
	F	P	F	P
Dependence on social media platforms (WhatsApp, YouTube, Face book etc.,)	31	51.66	47	78.33
Interaction with ANGRAU Scientists (RARS/KVK/DAATTCS/DOA/ICAR)	18	30.00	13	21.66
Formation of FPOs	24	40.00	32	53.33
Interest in new technological advances	23	38.33	-	-
Professional communication	13	21.6	26	43.33

51.66 per cent them were dependence on social media platforms (WhatsApp, YouTube, Face book etc.,) dependence on social media for production aspects and 78.33 percent on them were on marketing aspects. Similarly 30.00 per cent of them were on production aspects and 21.66 per cent were on marketing aspects interaction with ANGRAU Scientists (RARS/KVK/DAATTCS/DOA/ICAR).

From the which table?? it could be concluded that 40.00 per cent on marketing and 53.33 percent them were production aspects form the farmer producer organization. 38.33 productions Interest in new technological advances to mitigate the covid-19 pandemic Professional communication preparedness 21.60 per cent in production and 43.33 per cent marketing aspects. (Note : Please re-write)

5.0. Conclusion

Constrains faced by farmers during Covid -19 in agriculture and allied sectors

The important constraints identified form the farmers were lack of labour availability, farm labour is huge demand and very costly, market sale prices very less for produce and no marketing facility and cost of cultivation is high were the important constraints. (Note: Please re-write)

6.0. Recommendations of study

6.1. Recommendations to the study

6.2. Recommendations to the future researchers

References

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