

AWARENESS AND CHALLENGES FACED BY FARMERS DUE TO COVID-19 & LOCKDOWN

(WITH SPECIAL REFERENCE TO HARYANA, PUNJAB & RAJASTHAN STATE)

Ankita*
Heemika Sharma**

ABSTRACT

Majority of the Indian population is dependent on Agriculture. The present paper studied the awareness level of farmers regarding COVID-19 from three states: Rajasthan, Punjab, and Haryana. Along with that present study examines the challenges faced by farmers due to COVID-19. The paper aims to focus on the quantitative data and primary in nature provides the actual insight of the farmers of three major geographical area; Haryana, Punjab and Rajasthan. The data is collected from 235 farmers (79 farmers from Haryana, 26 farmers from Punjab and 130 farmers from Rajasthan) with the help of purposive sampling. It can be found that majority of the respondents are aware about COVID-19 and also taking precautions like mask & sanitizer along with their labours. It can also be concluded that farmers are facing many problems due to COVID-19 & lockdown. The study will help the policy makers to know the major challenges faced by farmers & it also helps in overcome the shortcomings of their policies for helping farmers.

Keywords: Lockdown, Agriculture, COVID-19, Farmers, Haryana, Punjab, Rajasthan.

Introduction

According to International labour organisation "Agriculture is important in Africa and Asia, where its employment share is 49 and 30.5 per cent, respectively. Agriculture is a major source of employment for women also, who account for 41.9 per cent of the agricultural workforce in the developing world. Primary sector of India included agriculture in which 58% of the total population is engaged. In India, agriculture is a primary source of income. In India agricultural contribution in Gross value Added is 16.5%.

Prime minister of India announces lockdown in India to limit the spread of corona virus. For the first time from 25 March 2020 to 14 April and it's for 21 days. The second phase of lockdown is started from 15 April 2020 to 3 May 2020 and it's for 19 days. Third phase of lockdown was announced on 4 May 2020 to 17 May 2020 and the fourth lockdown is announced from 18 May to 31 May. There is little bit relaxation given in 3 & 4 phase of lockdown. Activities prohibited during lockdown are: - Stepping out from homes are disallow except any emergency, all shops and services are ban except hospital, banks, grocery shops and other essential services, all worship places, public & private transport, educational institutions, prohibition on all type of gathering activities.

According to Cambridge English Dictionary: - "Lockdown is a situation in which people are disallowing to enter or exit one place to other because of some emergency".

At the time of lockdown the Rabi harvest season is at peak. Due to this farmers faces many problem in cultivating crops this time.

* Research Scholar, IIS deemed to be University, Jaipur, Rajasthan, India.
** Research Scholar, JECRC University, Jaipur, Rajasthan, India.

- **Rabi Harvest:** The agricultural crop which are cultivated in winters and harvested in the spring season in India. Examples of Rabi are Chickpea, Barley, Flax Seed, Pea, Wheat, Potato, Mustard Plant etc. Kharif harvest: - Kharif crops, monsoon crops or autumn crops which are sown from June to November. Examples of Kharif are rice, maize, sorghum, bajra, cereals, pulses, soyabean, cotton etc. During the lockdown period there is a time of harvesting Rabi crop. Present paper will study the problems faced by farmers in harvesting their crops. Every state government makes their own norms to insure smooth purchasing of harvested crops from farmers in this pandemic period. The COVID-19 has a serious impact on labor intensive crop because of migrant labourers. The labourers are moved from their work place to home due to this lockdown.
- **Major Problem faced by Farmers are:** Even though government allotted specific markets to farmers for selling their crop in lockdown period but still many farmers are not able to access markets. This leads in huge loss to farmers. In Lockdown period all local markets, restaurants, bars, hotels are temporarily closed. Because of this situation farmers are not able to sell their fruits & vegetables. Due to these farmers suffers huge loss & wastage. Migrant workers are moved to home in lockdown. So there is a serious impact on labor intensive crops.
- **Agriculture in Haryana:** The Gross State Domestic Product of Haryana is 831610.21 & 572239.70 crore at current & constant price respectively. The agriculture & allied sector at constant price in 2019-20 is 83174.62 crore. The agriculture & allied sector includes agriculture, forestry, logging & fishing. The agriculture & allied sector contribute 16.6% toward Gross State Value Added in 2019-20. Industry & allied sector contributed 50.6% and 32.8% at constant price (2011-12). In last few years the state become more dependent on industry & service sector as compare to agriculture. But still agriculture is important livelihood source for Haryana.
- **Agriculture in Punjab:** After the green revolution Punjab is known for 'Bread Basket' of India. According to the survey of NABARD in 2016-17 found the average income of agricultural household in Punjab & Haryana is 23,133 & 18,946 respectively. The agriculture contribution in Gross State Value Added is 28.1 % in 2019-20. The income is highest among all states in India. 26% of the population has agriculture as livelihood source. Industry & service sector 33.1% & 40.9% share in employment.
- **Agriculture in Rajasthan:** In Rajasthan agriculture plays important role in economy. The Gross State Domestic Product at current price in 2019-20 is 10, 20,989 crore and at constant price (2011-12) is 7,11,627 crore. The agriculture & allied sector includes; cultivation of crops, animal husbandry, fisheries & forestry. In 2019-20 at current price agriculture contribution in Gross State Value Added is 25.59%. The Gross State Value Added of agriculture & allied sector at current price is increases from 1.19 lakh to 2.47 crore in 2011-12 to 2019-20 respectively.

So, we can conclude from the above discussion that agriculture is the main source of livelihood for Haryana, Punjab & Rajasthan. So it's important to study the perspective of farmers of these states.

Review of Literature

Varshney, D., Roy, D. & Meenakshi, J.V. (2020) assesses the impact of the spread of COVID-19 and the lockdown on wholesale prices and quantities traded in agricultural markets. Author also examines whether impacts differ across non-perishable (wheat) and perishable commodities (tomato and onion). Data consists of daily observations for 3 months from nearly 1000 markets across five states and use a double- and triple- difference estimation strategy. It can be concluded that results differ by type of commodity.

Rawal, V., Kumar, M., Verma, A., & Pais, J. (2020) studied the impact of COVID-19 lockdown on agriculture and on rural economy of India. Author also examined the major announcements of the government related to agriculture and the rural economy, and also pointed out the several misleading claims made by the government secondary data available on different aspects of the rural economy. It can be concluded that the disruptions caused by the lockdown have resulted in considerable additional economic burden on farmers because of higher costs, increased debt burden, inability to sell the produce at reasonable prices and crop losses.

Jámbor, A., Czine, P., & Balogh, P. (2020) focuses on secondary data collected global newspaper articles and websites. Results conclude that agriculture-related pandemic effects can be grouped into supply, demand, labour, food security, food safety, trade and other effects.

Poudel, P. B., Poudel, M. R., Gautam, A., Phuyal, S., Tiwari, C. K., Bashyal, N., & Bashyal, S. (2020) analyse impact of global pandemic COVID -19 on Food and Agriculture across the globe as it primarily involves the sustainability of human life and secondarily involves the economy. The results concluded that food and agriculture are not outside the impact of COVID-19. Crop, Livestock and Fisheries have been affected by this pandemic. It can also found that food safety and security are the global concern at present scenario and the supply chain has been affected by COVID-19, which has put food security of most vulnerable segment of population at risk.

Tamru, S., Hirvonen, K., & Minten, B. (2020) focuses on qualitative and rapid appraisal of the vegetable value chain based on a large value chain survey that IFPRI undertook in February 2020. Study includes small-scale farmers, large-scale investors, brokers, agro-input dealers, and developmental agents are interviewed through phones. The results reveals that, urban demand for fruits and vegetables with high-value, nutritionally rich foods is declining and there is a need for widespread and effective information campaigns and trade is affected by travel bans, as well as reduced competition. Producer prices are lower, and input prices are up or inputs are not available. Farmers will thus have less incentive to produce these crops.

Need of the Study

COVID-19 impacts the economies all over the world. India is known for its agriculture production. Agriculture sector is the major source of their income in India. Agriculture is main source of livelihood for Haryana, Punjab & Rajasthan. So it is important to address the impact of COVID-19 on agriculture sector. There is dearth of literature on impact of COVID-19 on agriculture. The study will provide the direction to future researcher also. The study will help the government official to take a suitable step for farmers who are suffering due to this pandemic.

Research Question

- What are the challenges faced by farmers during COVID-19 & lockdown period?
- Does farmers aware regarding COVID-19?

Objective of the Study

- To examine the awareness level of farmers regarding COVID-19.
- To study the challenges faced by farmers due to COVID-19.

Research Methodology

- **Research Design:** Present study is descriptive in nature as no statistical tool is applied. The descriptions of the respondents are given through tables & graphs.
- **Sample:** The sample size of the study is 235 farmers from three states of India: Rajasthan, Punjab and Haryana. Present study adopted purposive sampling technique. The sampling frame of the study is farmers from Rajasthan, Punjab and Haryana states.
- **Data Collection Tool:** The data is collected through questionnaire and formulated in Hindi and English language. The questionnaire consist 3 sections, First section consist Demographic profile of Farmers, Second section consist Awareness level of farmers regarding COVID-19 and third section consist challenges faced by farmers.

Analysis & Interpretation of Data

Table 1: Demographic Profile of Farmers (In Frequencies)

State	F	Age	F	Education	F	No. of Labour	F	Awareness regarding COVID-19	F
Haryana	79	20-30	110	5-8 Class	2	1-3	114	Yes	225
Punjab	26	30-40	77	8-10	20	4-5	63	Little bit	10
Rajasthan	130	40-50	32	11-12	45	6-7	28		
		50-60	14	Undergraduate	168	8-9	16		
		Above 60	2			More than 9	14		
Total	235		235		235		235		235

Source: Primary Data

Table 1 shows the frequency table of the respondents. The table shows that present study have 79 respondents from Haryana and 26 & 130 respondents are from Punjab & Rajasthan respectively. Majority of the respondents are from 20-30 age groups. There are 77 respondents from 30-40 age groups in the study. 32 & 14 respondents are belonging to 40-50 & 50-60 respectively. Only 2

respondents are belonging to above 60 age groups. Majority of the respondents are undergraduates in the study. Only 2 respondents have 5-8th class education qualification. 20 & 45 respondents have 8-10 & 11-12th class education qualification. Majority of the farmers have 1-3 labour working in their field. 63 farmers have 4-5 labours in the field. 28 & 16 farmers have 6-7 & 8-9 labours working in their field. Only 14 farmers have more than 9 labour working in their field. Majority of respondents are aware about COVID-19 but 10 respondents are little bit aware about COVID-19.

Table 2: Precaution for COVID-19

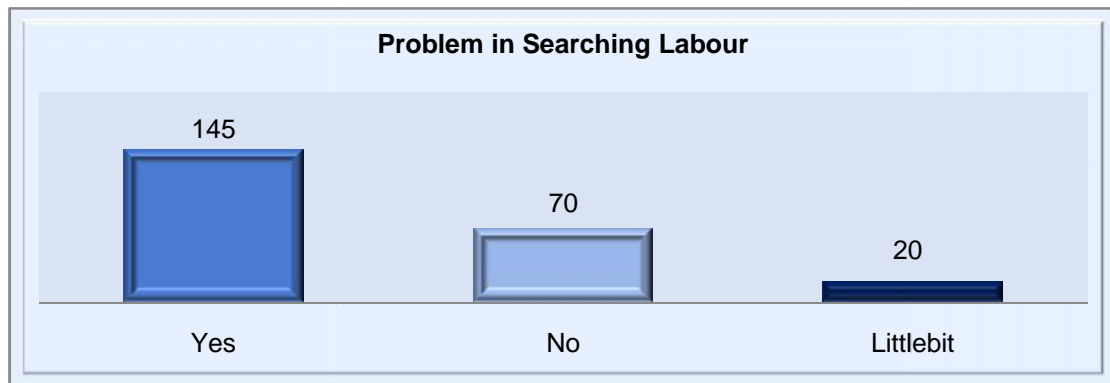
Question	Yes	No	Sometimes
Are you Using Sanitizer in field?	120	74	41
Are you using Mask in the field?	164	39	32
Your Labour use Sanitizer?	130	68	37
Your Labour use Mask?	162	41	32
You will prefer Mask & Sanitizer in Future?	171	35	29

Source: Primary Data

The table 2 show the precautions used by farmers for COVID-19. The result shows that majority of the respondents are taking precautions for COVID-19. The working labour is also using mask & sanitizer.

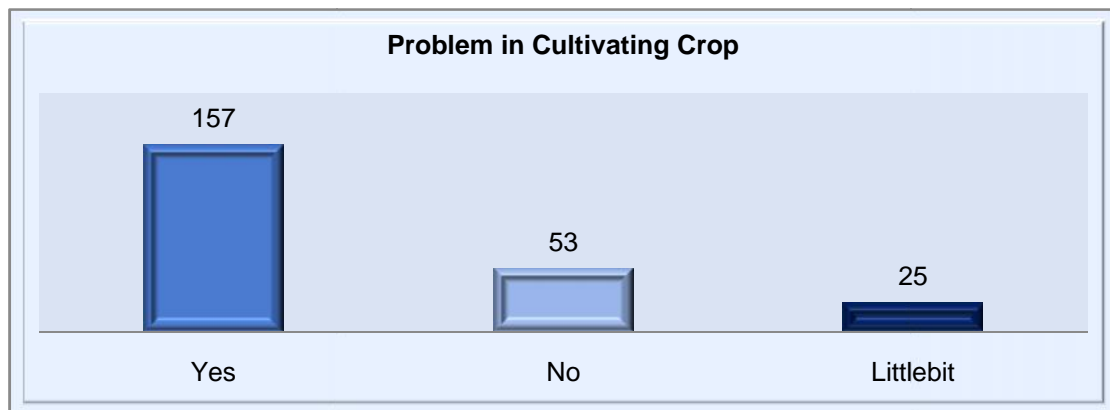
Challenges faced by Farmer

Figure 1



Source: Primary Data

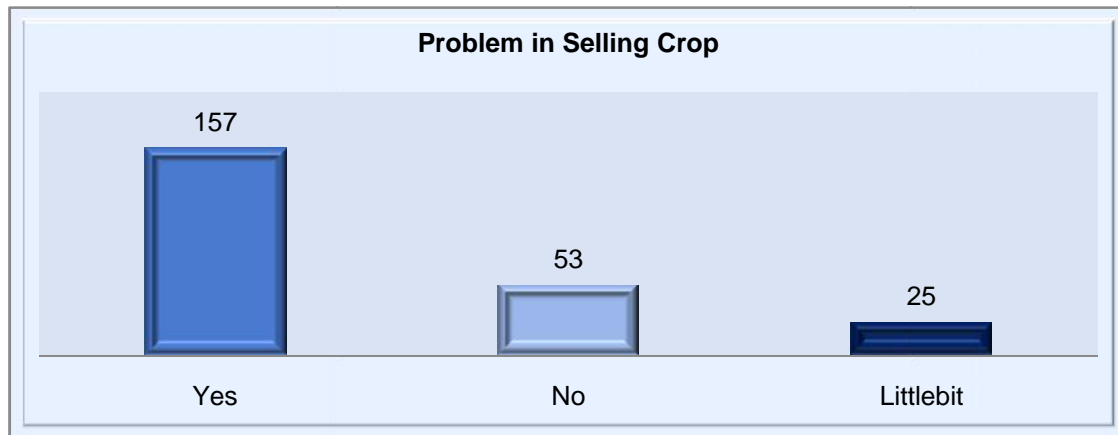
Figure 2



Source: Primary Data

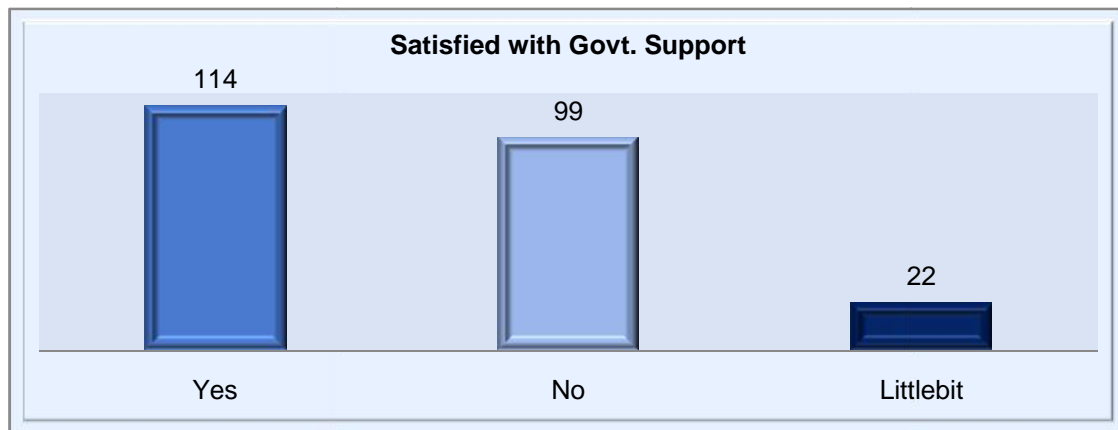
Figure 1 shows that 145 respondents are facing problem in searching labour during the lockdown period. From all the respondents, 70 respondents are not facing any problem in searching labours & 20 respondents are facing little bit problem. The figure 2 shows that majority of the respondents 157 are facing problem in cultivating crops and 53 respondents are not facing any problem in cultivating crops. Whereas only 25 respondents are facing little bit problem while cultivating the crop.

Figure 3



Source: Primary Data

Figure 4



Source: Primary Data

Figure 3 shows that 157 respondents are facing a problem in selling their crops during the lockdown period. 53 respondents are not facing any problem, and 25 respondents are facing a little problem. Governments of different states initiated many efforts during the lockdown period for farmers. Figure 4 shows that 114 farmers are satisfied with government efforts, and 99 farmers are not satisfied with government efforts. 22 respondents are a little bit satisfied with government support.

Figure 5

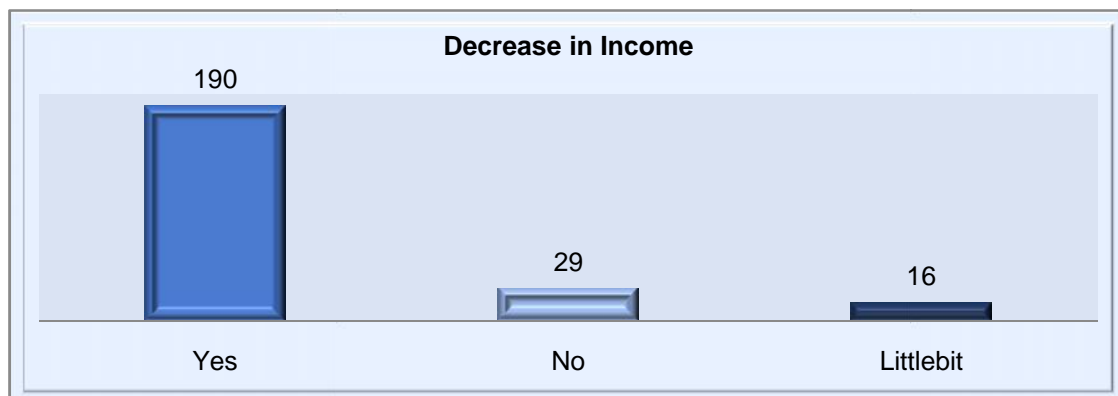


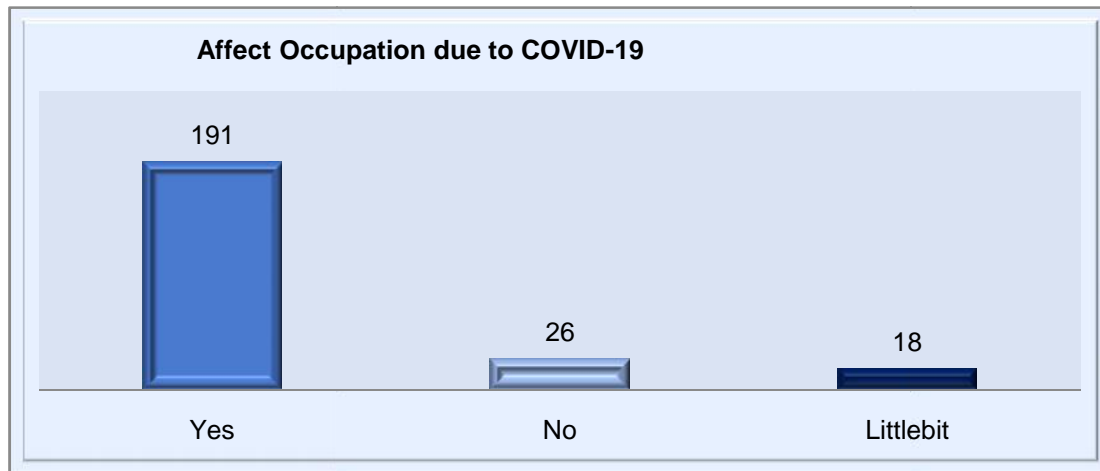
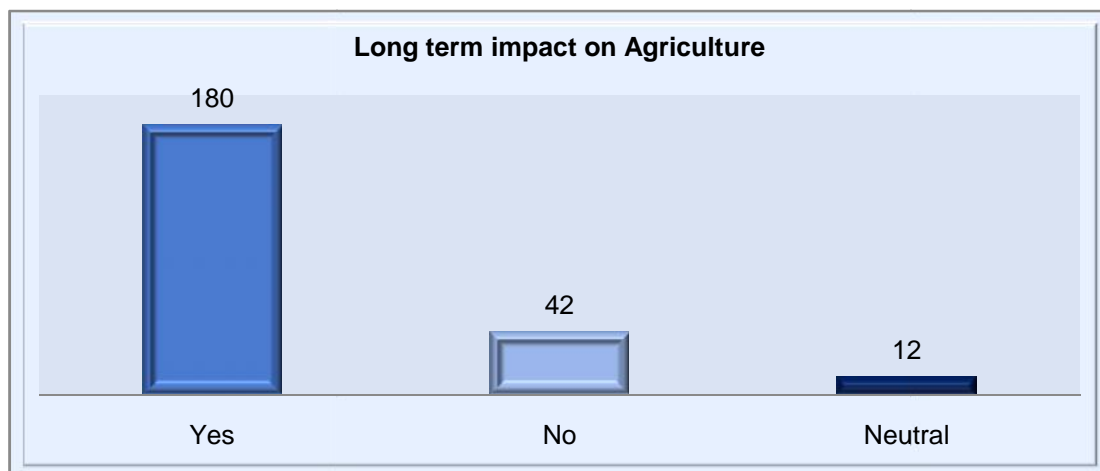
Figure 6

Figure 5 shows that majority of respondents income is decreased due to due to COVID-19. The figure 6 shows that majority of respondents think that their agricultural occupation is affected due to COVID-19. 26 respondents believe that COVID-19 does not affect their agricultural occupation and 18 respondents are in believe that their agriculture occupation is little bit affected due to COVID-19.

Majority of the respondents believe that COVID-19 has long term impact on agriculture. 42 respondents believe that COVID-19 has not long term impact on agriculture.

Figure 7

Conclusion

The present study describes the perception of farmer regarding challenges & awareness level regarding COVID-19. The study consist farmers from three states: Haryana, Punjab, Rajasthan. The result shows that farmers are aware of COVID-19 & majority of famers & their labour taking precaution in field. Most of the respondents facing problems: searching labour, cultivating crop, selling crop, decrease in income and agriculture occupation is affected due to COVID-19 & lockdown. Most of the respondents believe that COVID-19 has long term impact in agriculture.

Contribution of the Study

Agriculture sector is important sector in India. Various past researches have been conducted on agriculture sector though very few researches have been conducted on COVID-19 and its effect on agriculture especially in India. The present study contributes in quantitative research and provide the perspective of farmers from three state; Haryana, Rajasthan and Punjab.

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