



## PERCEPTION OF FARMERS ABOUT COVID-19 PANDEMIC IMPACT ON THEIR LIVELIHOODS

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**ABSTRACT** The COVID-19 pandemic and the associated lockdown for an extended period must created a significant adverse impact on different sectors, including that of the agriculture. Enforcement of curfew as a control measure caused adverse effect in both rural and urban people live and livelihood. Nationwide lockdown against the novel coronavirus disease, the agricultural system and farmers heavily endured a period of deterioration. The present study aimed to depict intricacies of COVID 19's influence on farmer livelihood. For the purpose 200 farmers in Tamil Nadu had identified and state their opinion through digital mode. The findings of the study indicated that significant decrease in agricultural output, consumption, and marketing, as well as a significant increase in input prices and the country's labour shortage.It also emphasize the epidemic has impacted farmers' earnings and standard of living.

**KEYWORDS :** COVID 19, Perception, Livelihood, Marketing, Profitability

### INTRODUCTION

The continuing coronavirus pandemic (COVID-19) has been a public health emergency all over the world, which further becomes important for a country like India with a population of over 1.3 billion. The enforcement of continuous lockdown more than 3 months has been a new experience for everyone. The distress of millions of poor and marginal farmers for tradable their crops thereby assuring their livelihoods is challenging. The economies of the countries have been severely impacted by the widespread, as well as the steps taken by the countries to stop the spread of disease, such as lockdowns, travel restrictions, and a range of further measures. This pandemic has major influence on agricultural systems, input and output flow, processing, marketing, and employment in the agricultural sector leads to food insecurity, hunger, and poverty. According to the most recent FAO statistics on the State of Food Security and Nutrition in the World, the COVID-19 pandemic might add 130 million people to the global chronic hunger population by 2025<sup>(1)</sup>.

In India lockdown was announced on March 23, 2020 as a control mechanism. The economic activity was halted, nearly 1.3 billion people's livelihoods were jeopardized. Farmers' credit and liquidity position to meet input requirements for farming were impacted by the interruption in receiving farm revenue combined with lockdown. Movement limitations disrupted supply chains, preventing the continuous flow of inputs and outputs from agricultural activity<sup>(2,3)</sup>. The supply of perishable commodities was particularly impacted, posing a threat to the food and nutritional security of the most vulnerable members of society<sup>(4)</sup>. The objective of this study is to document the COVID 19 pandemic on farmers crop cultivation practices, inputs and labors availability, marketing hindrance.

### MATERIALS AND METHODS

**Study Design:** It was an observational cross sectional study.

**Study Participants:** Consists of farmers from various districts of Tamil Nadu

### Data Collection:

Due to ongoing pandemics the study was conducted using online Google questionnaire. Google questionnaire was framed and circulated to participants through emails or whatsapp. The questionnaire was used to detect various factors of farming including crop productivity, input availability, labour availability, produce pricing, marketing and profitability in relation to COVID-19 and lockdown. The said questionnaire consists of 14 questions to evaluate the impact of this pandemic on farmers' lives.

### DATA ANALYSIS:

Responses from the participants were recorded on Google Excel sheet and same information was used to generate graphical displays.

### RESULT AND DISCUSSION

The deadly corona virus has definitely threatened the livelihoods of the country's farmers. Nonetheless, it had an impact on all sectors of agriculture, from crop production to marketing. Farmers faced several problems, including high input price, e-pass requirements, transportation challenges, a labour shortage, a lack of a viable market, and low product pricing.

### Cropping Pattern

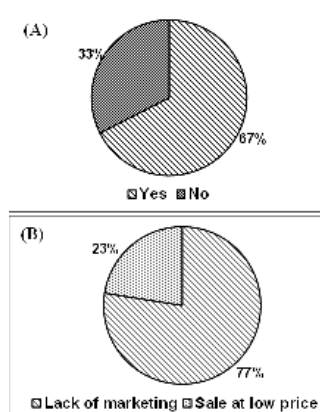
Out of 200 farmers polled, 91.4 percent were afflicted by the epidemic, while 8.6 percent were unaffected. According to the survey results, both agriculture and horticulture crops were cultivated as usual. The cropping pattern remained unchanged. Rice, maize, sorghum, coconut, banana, Bengal gram, papaya, onion, ginger, garlic, tomato, brinjal, chilly, and coriander were grown in the districts of Coimbatore, Tirupur, and Erode. Tea, coffee, pepper, and carrot were grown in Nilgiris. Rice, sugarcane, onion, and groundnut were the most common crops grown in areas such as Tanjore, Kadalur, and Permbalur. Mango, sapota, and amla were grown in Tirunelveli and Thoothukudi. In the western portions of Tamil Nadu, ornamental crops such as carnation and chrysanthemum were produced.

### Impact on Production

Ninety percent of the farmers polled reported difficulties in both agricultural output and marketing. In terms of production input shortages, price increases for fertilizers and other inputs, and labour availability, the main issue was a lack of workers. 67.5 percent reported a price increase in fertilizers and seeds, and 65.1 percent reported a labour shortage. A study by Saho and Rath<sup>(5)</sup> highlights that the non-availability of migrant labors affected the harvesting and pre-sowing activities mainly on crops such as wheat and pulses in North India. Due to global trade disturbance, farmers are facing the shortage of agricultural inputs like seed, fertilizer and pesticides<sup>(6)</sup>. Fertilizer prices in Coimbatore have risen from 20 percent to 60 percent. For example, the price of DAP increased from Rs.1200 to Rs.1850. To make up for the labour deficit, 84.5 percent of farmers' family members worked in the fields. Because to the lockdown, no product was processed in Nilgiris. Dueto a labour shortage, tea leaves were not gathered. Seleimanet al.<sup>(7)</sup> describes that in the developed countries such as Italy, there is lack of imported manpower than it is in the under-developed countries due to the further restrictions imposed by governmental measures to immigration, because of COVID-19. Stephens et al.<sup>(8)</sup> stated that labour shortage due to COVID-19 crisis created severe disruptions in livestock production, horticulture, planting, harvesting and crop processing sectors which are labour intensive. Yet Richards and Rickard<sup>(9)</sup> emphasized that even before COVID-19 outbreak there existed a shortage of farmworkers.

**Impact on Marketing**

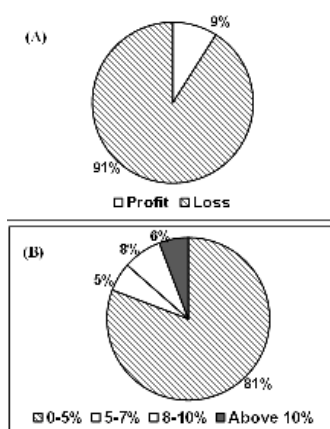
Produce marketing and pricing has long been a problem in agriculture. This lockdown has exacerbated the situation. There are interruptions in supply chains due to transportation issues and different issues, costs have declined for wheat, vegetables, and different yields, yet buyers are regularly paying high<sup>(10)</sup>. Zhou et al.<sup>(11)</sup> confirms that in China the pandemic has affected almost every stage of the vegetable crops supply chain especially the marketing section being the most affected. According to the report, 77.5 percent of farmers did not receive a fair price for their produce, and 22.5 percent had transportation challenges (Figure 1). As e-passes became necessary, 60.8 percent of farmers claimed they had no market for selling, while 22.5 percent sold their produce at a very low price in adjacent marketplaces. Because there were no processing units in operation, product exports fell. Farmers in Nilgiris who sell their goods to manufacturers were not paid on time because the factories cited a lack of sales, co-operative factory sales decreased, most procurement shops of coffee and pepper were closed, and the coffee sales price was very low. Farmers were unable to deliver their crops to Kerala markets. Similarly, Palsaniya and Maity<sup>(12)</sup> found that the livestock farmers faced difficulty in selling milk and other meat products. Hailu<sup>(13)</sup> identifies the shocks in supply and demand of the food manufacturing sector emanating from a sharp decline in the demand of those processed food as a result of trade restrictions and border closures.



**Figure 1. COVID 19 pandemic affected agriculture production (A) and marketing (B).**

**Impact on farmers income**

Ninety one percent of the 200 farmers polled experienced a loss due to lockdown (Figure 2A). Tea producers in Nilgiris lost between 1 and 2 lakh rupees per acre owing to covid19. In the case of vegetable producers, the loss might be as high as 30%. Coconut producers in Coimbatore suffered a 60% loss when the price fell from Rs.2 to Rs.4 per coconut. The remaining 9 percent claimed to have profited from the outbreak. 80.8 percent of the farmers profited up to 5%, while the remaining farmers profited more than 5% (Figure 2B). In the research conducted in New York city by Yaffe-Bellany and Corkey<sup>(14)</sup> highlighted that closing of schools, restaurants had left some farmers with no buyers for more than half of their produces has resulted in their loss.



**Figure 2. Impact of COVID 19 pandemic on agriculture income (A) and profitability range (B).**

**CONCLUSION**

COVID 19 pandemic caused a negative impact on farms production and marketing of agriculture produce in Tamil Nadu. There is no denying fact that the unparalleled shocks of this pandemic have impacted the production, consumption, marketing and exporting of agricultural produce in India. Crop production and marketing being the potential factor of agriculture has shown a declining phase which tandemly led to the loss in the yield and profitability of the produces in this new normal. This pandemic undoubtedly took a sinister turn in the livelihoods of the farmers reminding us the need of rural development, mechanization and enforcement of new technologies that accolades the Indian agriculture.

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