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# **The Socioeconomic Profile of Farmers Affected by the Covid-19 Lockdown in Chhattisgarh's Surguja District**

**Saurabh Kumar Sinha<sup>a\*</sup>, Yogendra Kumar Singh<sup>a</sup>,  
Ankur Gupta<sup>b</sup>, Nitin Saratkar<sup>a</sup> and Shivangini<sup>c</sup>**

<sup>a</sup> Department of Technology Transfer, MGCGV, Chitarkoot Satna, M.P., India.

<sup>b</sup> Department of Agricultural Extension, Palli Siksha Bhavan, Institute of Agriculture, Visva-Bharati University, Sriniketan, W.B., India.

<sup>c</sup> Department of Agricultural Economics, IGKV Raipur, C.G., India.

## **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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## **ABSTRACT**

The present study was conducted in the villages of Sakalo, Sargwan, Ara, and Amatoli in the blocks of Ambikapur and Sitapur, which are both located in the Surguja district, in the state of Chhattisgarh. A total of 80 farmers were chosen on purpose from each village—20 from each village. The research project "the Socio Economic Profile of Covid-19 Lockdown Affected Farmer in Surguja District of Chhattisgarh" With the use of a personal interview method and scheduled interview schedule. They tabulated, examined, and analysed the data. The profile characteristics of all farmers affected by the lockdown. Growers reported that a majority of (61.25%) young age category, (48.75%) farmers ST category, (45%) illiterate, (40%) farmers small land holding, (63%) farmers' occupation is agriculture, (68.75%) irrigated type land, (50%) farmers is medium level income, majority of farmers family joint, (50%) farmers house is kaccha type, (55%) sources of

\*Corresponding author: E-mail: agrisourabh07@gmail.com;

drinking water is publicly, and (60%) farmers is a farmer. Low farm equipment levels, with (45%) farmers information sources are few, Understanding the socioeconomic status of farmers would be aided by the outcomes of the current study. The current study will offer helpful direction for comprehending the recommended set of farming methods.

**Keywords:** Covid-19; lockdown; farmers; socio-economic profiles; effects.

## 1. INTRODUCTION

"Agriculture Plays a vital role in the Indian economy. Over 70 per cent of the rural households depend on Agriculture. Agriculture is an important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population . Indian agriculture has been the source of supply of raw material to leading industries in India. Cotton, Jute, Sugar, Vanaspati industries and plantations depend on agriculture directly and also the cottage industries like handloom weaving, oil crushing, rice husking and such depend upon Agriculture for raw materials, Agriculture plays vital role in generating employment reducing poverty and sustaining growth in India Source of food security to the expanding population Total production of rice during 2019-20 is estimated at record 117.47 million tones. Total Pulses production is estimated at 23.02 million tones, Production of wheat during 2019-20 is estimated at record 106.21 million tones. It is higher by 2.61 million tones as compared to wheat production during 2018-19 and is higher by 11.60 million tones than the average wheat production of 94.61 million tones, A lockdown is a requirement for people to stay where they are, usually due to specific risks to themselves or to others if they can move freely. The term "stay-at-home" or "shelter-in-place" is often used for lockdowns that affect an area, rather than specific locations. The term is used for a prison protocol that usually prevents people, information or objects from leaving an area. The protocol can usually only be initiated by someone in a position of authority. A lockdown can also be used to protect people inside a facility or, for example, a computing system, from a threat or other external event. In buildings doors leading outside are usually locked so that no person may enter or exit. A full lockdown usually means that people must stay where they are and may not enter or exit a building or rooms within it, needing to go to the nearest place designated safe if not already in such a place. A lockdown drill may be held in the absence of a threat, to familiarize people with what they must do" [1]. "Rural areas also face labor shortages as

a result of migration. As certain farming practices demand high labor inputs, the initiation of farmers' groups may contribute to labor being exchanged between farm households" [2]. "The lockdown created both a shortage of labor and equipment - migrant laborers in India usually move to rural areas during harvesting of crop and smallholder farmers often rent harvesting equipment as this is cheaper than purchasing it Consequently, farmers have not been able to harvest their bumper crops of cereal and oilseed harvest this season, [3] said Unplanned and sudden imposition of the lockdown resulted in a massive and unprecedented disruption to agricultural activities such as harvesting, sale of agricultural produce, and purchase of inputs". The lockdown caused major disruption to the harvesting of wheat. Combine harvesters were not available in villages, During my study, I discovered the social and economic condition of the farmers, which is as follows maximum number of respondent belonged to middle age group of 36-50 years, majority of respondent belonged to ST, maximum of respondent had joint type of family, maximum of respondent illiterate, maximum of respondent had irrigated land, maximum numbers of to medium annual income, maximum of respondent had one occupation agricultural activities, maximum of respondent had low level source of information , Before this, many studies have been done on the economic and social condition of the farmers, but when the lock down was imposed after the arrival of Corona disease, then this information came to know about the effect on the economic and social condition of the farmers. Research students will study on this, this study will be beneficial for them, as well as the government will be able to know what was the real condition of the farmers after the covid lockdown and some appropriate steps can be taken [4-9].

## 2. MATERIALS AND METHODS

### 2.1 Description of the Study Area

Chhattisgarh is one of 29 states located in central India. It is the 10th largest state in India, with an area of 135,194 km<sup>2</sup> (52,199 sq mi).

With a population of 28 million, Chhattisgarh is located in eastern part of India between 17°46' N and 24°06' N latitudes. The state is surrounded by 7 states (Madhya Pradesh, Maharashtra, Orissa, Jharkhand, Andhra Pradesh, Telangana & Uttar Pradesh). A resource-rich state, it is a source of electricity and steel for the country, accounting for 15% of the total steel produced. Chhattisgarh came into existence on 1st November 2000 as 27th state of India. The present study was carried out in the Surguja district of Chhattisgarh. Among all the 29 districts of Chhattisgarh study was carried out in Northern Hill region Chhattisgarh State during the year 2020-21.

## 2.2 Sampling and Sampling Procedure

### 2.2.1 Selection of the district

Out of 29 districts of Chhattisgarh state, Surguja district was selected purposively for the present study as it has the highest farmers involve farming activities and nearly my home town compared to other districts.

### 2.2.2 Selection of blocks

Surguja district has a total 7 block/tehsil, only two blocks namely Ambikapur and Sitapur were selected purposively for the present study because these two blocks are near my residence area and highest farming activities performance by the farmers in this area.

### 2.2.3 Selection of villages

From the two selected blocks i.e. Ambikapur and Sitapur, the further selection of the villages was done randomly using a simple random sampling method. A list of villages was collected from the block and from the list of villages two villages were selected randomly from each selected block without replacement. The villages were selected using Random Number Generator. 125 villages come under block Ambikapur out of which I have chosen 2 villages namely Sakalon, Sargwan. And 51 villages come under Sitapur block out of which I have chosen 2 villages namely Ara, Amatoli for simple random sampling. Their study work on the basis of maximum availability of agriculture farmers in the villages.

### 2.2.4 Selection of farmers/respondents

From each selected village, twenty (20) Farmers were selected randomly. Those members who are

involved in agriculture and allied activities were selected as respondents. Thus, 80 (Total  $20 \times 4 = 80$ ) total respondents for the present study, the data were collected by using a well-structured interview schedule technique.

### 2.2.5 Statistical data analysis

For the study, data were collected in accordance with the study's predetermined objectives, which had been coded or scored, classified, and tabulated using appropriate statistical tools. It was calculated using formula as mean, percentage, frequency, and standard deviation [10-15].

## 3. RESULTS AND DISCUSSION

For conducting this research, sixteen parameters had been taken to assess the socio-economic profile of the farm respondents. These parameters had been classified as Personal, Economic, and Social Profiles like, age, education, caste, education, occupation, income, type of family, size of family, land type, land size, source of information, source of drinking water, comfortable assets, farm equipments, social participation. All the parameters are shown in the table by categorizing them into low, medium and high.

The data presented in Table 1 showed that higher percentage of the Farmer (61.25 percent) were of middle age group followed by young age group (25 percent) and old age group (13.75 percent) respectively, majority of farmers ST (48.75 percent), (22.5 percent) were found to be in SC, (23.75 percent) were found to be in OBC and (5.00 percent) were found to be in general, (45 percent) were found to be illiterate, (28.75 percent) were found to be in primary +middle school, (10 percent) farmers were found to be in up to high school, and (7.5 percent) were found to be higher secondary, (5 percent) were found to be graduate and (3.75 percent) were found to be graduate above, most of farmers (26.25 percent) had marginal size of land, (40 percent) and (18.75 percent) and (15 percent) farmers had small, medium and large size of land holding respectively. Thus, it is evident that higher percentage (40 percent) respondents had small size of land holding. (63.75 percent) farmers were found to be in occupation of agriculture activity, (23.75 percent) were found to be in agriculture + business, (12.5 percent) were found to be in agriculture and services, indicate that out of 80

**Table 1. Epidemiological study results**

| S. no | Parameters               | Category                                | Frequency (n=80) | Percentage% |
|-------|--------------------------|---|------------------|-------------|
| 1     | Age                      | Young (up to 35 years)                  | 20               | 25.00       |
|       |                          | Middle (36 to 50 years)                 | 49               | 61.25       |
|       |                          | Old (above 50 years)                    | 11               | 13.75       |
| 2     | Cast                     | General                                 | 04               | 5.00        |
|       |                          | Other backward cast(OBC)                | 19               | 23.75       |
|       |                          | Schedule cast (sc)                      | 18               | 22.5        |
|       |                          | Schedule tribe (ST)                     | 39               | 48.75       |
| 3     | Education                | Illiterate                              | 36               | 45.00       |
|       |                          | Primary + middle                        | 23               | 28.75       |
|       |                          | school Up to high school                | 8                | 10.00       |
|       |                          | Upto higher secondary school            | 6                | 7.5         |
|       |                          | graduate                                | 4                | 5.00        |
|       |                          | graduate above                          | 3                | 3.75        |
| 4     | Land holding             | Marginal farmer (up to 1haq)            | 21               | 26.25       |
|       |                          | Small farmer (1 to 2 haq)               | 32               | 40.00       |
|       |                          | Medium farmer (2 to 4 haq)              | 15               | 18.75       |
|       |                          | Large farmer (above 4 haq)              | 12               | 15.00       |
| 5     | Occupation               | Agriculture activity                    | 51               | 63.75       |
|       |                          | Agriculture + services                  | 10               | 12.5        |
|       |                          | Agriculture + business                  | 19               | 23.75       |
| 6     | Land type                | Irrigated                               | 55               | 68.75       |
|       |                          | Un irrigated                            | 25               | 31.25       |
| 7     | Annual income            | Low (up to 50.000/-)                    | 26               | 32.5        |
|       |                          | Medium (50.000 to 100000/-)             | 40               | 50.00       |
|       |                          | High (more than 100000/-)               | 14               | 17.5        |
| 8     | Family type              | Joint                                   | 57               | 71.25       |
|       |                          | Nuclear                                 | 23               | 28.75       |
| 9     | Family size              | Up to 3 members                         | 7                | 8.75        |
|       |                          | 3 to 5 members                          | 23               | 28.75       |
|       |                          | 5 to 7 members                          | 31               | 38.75       |
|       |                          | Above 7 members                         | 19               | 23.75       |
| 10    | Type of house            | Kacha house                             | 40               | 50.00       |
|       |                          | Pakkaa house                            | 22               | 27.5        |
|       |                          | Kacha pakka house                       | 18               | 22.5        |
| 11    | Source of drinking water | Own                                     | 36               | 45.00       |
|       |                          | Publicly                                | 44               | 55.00       |
| 12    | Comfortable assets       | Low( up to 5 assets)                    | 19               | 23.75       |
|       |                          | Medium(5 to 10 assets)                  | 46               | 57.5        |
|       |                          | High(above 10 assets)                   | 15               | 18.75       |
| 13    | Farm equipments          | Low(up to equipments)                   | 20               | 25.00       |
|       |                          | Medium(5 to 10 equipments)              | 48               | 60.00       |
|       |                          | High(above 10 equipments)               | 12               | 15.00       |
| 14    | Social participation     | No membership of organization           | 32               | 40.00       |
|       |                          | Membership of one organization          | 35               | 43.75       |
|       |                          | Membership of more then on organization | 13               | 16.25       |
| 15    | Source of irrigation     | Canal                                   | 23               | 28.75       |
|       |                          | Pond                                    | 9                | 11.25       |
|       |                          | Tube well                               | 25               | 31.25       |
|       |                          | Well                                    | 8                | 10          |
|       |                          | River                                   | 15               | 18.75       |
| 16    | Source of information    | Low (up to 3 sources)                   | 36               | 45.00       |
|       |                          | Medium (3 to 6 sources)                 | 31               | 38.75       |
|       |                          | High (above 6 sources)                  | 13               | 16.25       |

respondents, (68.75 percent) were found to be in Irrigated land, and (31.5 percent) were found to be in un irrigated land, (50 percent) farmers were found to be in Annual income is medium level (50,000 to 1,00000) (32.5 percent) low annual income and (17.5 percent) were found to be in high annual income, the data reveals that (71.25 percent) farmers belonged to joint family and (28.75 percent) farmers belonged to nuclear family, the size of family of farmers is (38.75 percent) farmers under to 5 to 7 members of each family and (28.75 percent) farmers above to 7 members of each family and (23.75 percent) farmers under to 3 to 5 members of family and (8.75 percent) farmers under up to three members, house type of farmers is (50 percent) were found to be in Kaccha house, (27.5 percent) were found to be in pucca house and (22.5 Percent) were found to be in kaccha pucca house, (55 percent) respondent were found to be in Sources of drinking water publicly and (45 percent) respondent were found to be in sources of drinking water is own facility, the farmers obtain comfortable assets like tv, radio, washing machine, motorcycle etc. is (57 percent) were found to be in Medium level of (5 to 10) comfortable assets (24 percent) were found to be in low level of (up to 5) comfortable assets and (19 percent) were found to be in high level (above 10) comfortable assets, farm equipments (60 percent) were found to be in Medium level of (5 to 10) equipments, (25 percent) were found to be in low level of (up to 5) equipments and (15 percent) were found to be in high level of (above 10) equipments, If we talk about the social participation of the adopted village farmers, among them (40 percent) were found to be in no membership any of organization, (43 percent) were found to be in membership of one organization and (16.25 percent) found to be in membership of more than on organization, (31.25 percent) respondent were found to be in sources of irrigation tube well, (bore) (28.75 percent) respondent were found to be in sources of irrigation canal, (18.75 percent) river, (11.25 percent) pond and (10 percent) respondent were found to be in sources of irrigation is well, source of information to farmers is (45 percent) were found to be in low level of sources of information (38.75 percent) were found to be in medium level of sources of information and (16.25 percent) were found to be in high level sources of information.

#### 4. CONCLUSION

On the basis of empirical results found in the present study that maximum number of farmers

belonged to middle age group of (36-50 years), majority of farmers belonged to ST, maximum of farmers had joint type of family, maximum of farmers illiterate, maximum of farmers had irrigated land, maximum numbers of to medium annual income, maximum of farmers had one occupation agricultural activities, maximum of farmers had low level source of information maximum of farmers had small size of land holding and maximum of farmers had medium level of comfortable assets and farm equipments. Maximum farmers had membership of one organization, maximum farmers had sources of irrigation tube well. Maximum farmers had Sources of drinking water is publicly

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#### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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