IMPACT OF COVID-19 PANDEMIC ON THE SMALLHOLDER FARMERS IN INDIA
Rapid Research on the
IMPACT OF COVID-19
PANDEMIC ON THE
SMALLHOLDER FARMERS
IN INDIA

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COVID-19 is spreading at an alarming rate and its impact on agriculture is complex and varied. Even among the different segments, its impact varies widely on different aspects such as Livelihood, Food security and Livestock. With shortage of labour and inability to access markets for produce the agricultural sector seems to be jolted.

Having realized the gravity of this situation, an initiative was undertaken by Caritas India to conduct a RAPID RESEARCH on the impact of Covid-19 on the issues and challenges being faced by farmers especially the small holder farmers. This research study is a culmination of experiences and challenges voiced out by our farmer stakeholders across 18 states in India on the aspects of their livelihoods, decline in their household income, indebtedness and lack of food security and nutrition.

I would like to appreciate all our diocesan partners who contributed to this study and to our research team for taking the efforts of bringing out the analysis of the plight of our farmers and the key recommendations for the policy makers, Agri based Institutions and our farming community for a renewed thinking and direction.

The end of the lockdown will not end the problems. On the contrary, they are likely to be compounded at the onset of the new agricultural sowing season.

We hope that these research findings shall be an eye opener for our policy makers and the government machinery to evolve new short term and long-term strategies for safeguarding our farming community and ensuring their sustenance and dignity during this crisis.

Jai Kisan

Fr. Paul Moonjely
Executive Director

Preface
Caritas India undertook the Rapid Research on the impact of Covid-19 on the farming sector in India. We, the team designated for this Rapid Research would like to express our deep sense of gratitude to Fr. Paul Moonjely, the Executive Director of Caritas India for his constant encouragement, valuable guidance and support throughout this research. We would like to express our gratitude to Fr. (Dr.) Jolly Puthenpura, the Asst. Executive Director for his help and encouragement at various levels. We also acknowledge the support of Mr. Rajesh Upadhyay, HoD, Partner Support for his guidance and motivation. This rapid research has become successful due to the support of 44 partners of Caritas India across India as they were very supportive in data collection for 424 respondents mainly the small holder farmers.

We thankfully acknowledge the support of the Directors and Coordinators of Diocesan Social Service Society for their support in data gathering. Caritas India is grateful to the service of the team members designated for conducting this rapid research and would like to thank the team members including Ms. Usha, Mr. Dileesh, Dr. Pallab, Dr. Sadanand, Mr. Sunil Simon, Mr. Prabal Sen, Mr. Pradipta, Mr. Mukund for their active involvement in collecting data. Special thanks to Mr. Dileesh and Mr. Pradipta for their support in data analysis, interpretation help in drafting the final report. The State Managers/ Officers of Caritas India have been supporting in collecting data through connecting farmers and partners. We appreciate and thank them for their support. We would like to thank in a special way the support extended by Mr. Patrick Hansda and Mr. Abeesh Antony for helping in designing this research booklet.
ABBREVIATIONS

AWC : Anganwadi Centre
CBO : Community Based Organization
CI : Caritas India
COVID-19 : Corona Virus Disease -2019
FPO : Farmer Producer Organisation
FPC : Farmers Producer Company
HH : Household
ICAR : Indian Council for Agriculture Research
ICDS : Integrated Child Development Service
KCC : Kisan Credit Card
MGNREGS : Mahatma Gandhi National Rural Employment Guarantee Act
NABARD : National Bank for Agriculture and Rural Development
NRC : Nutrition Rehabilitation Centre
PDS : Public Distributions system
PM-KISAN : Pradhan Mantri Kisan Samman Nidhi
PPE : Personal Protective Equipment
WHO : World Health Organization
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Introduction

About two-thirds of the developing world’s rural people live in small farm households having smaller than 2 hectares of land holdings. Majority of them are poor, food insecure, limited access to local and agriculture markets and other rights and entitlements to access necessary farm inputs and supply. Their choices are constrained, but they farm their land and produce food for a considerable proportion of the nation’s food requirements. Besides farming they have multiple economic activities, often in the informal sector/economy, to contribute towards their small incomes.

India’s small and marginal farmers comprise 78% of the country’s farmers but own only 33 percent of total cultivated land and produce 41 percent of the country’s food grains. The productivity of these small farms is somewhat higher than that of medium and large sized farms. Smallholder contributions in food security and poverty alleviations are thus dis-appropriately high and increasing. Smallholders constitutes more than half of the national population. Having a greater role in supplementing nation’s food requirement, smallholders are hit hardest due to the Covid-19 pandemic and the subsequent lockdowns.

Since the outbreak of COVID-19 in late December 2019, it has spread over more than 227 countries and territories affecting 14.348.858 individuals as on July 20th, 2020. The virus has affected every walks of life. In India, there are more than 1.15 million corona positive cases and now struck with the spread of COVID 19 at an alarming rate, and in geometric proportions, from person to person, and across multiple nations in the world with no signs of slowing down. It is really worrying and horrifying, as the medical science and the scientific community at large seems to be at a loss, at least in the current scenario. The Central and State Governments are doing their best to reduce the spread through surveillance and containment of infections, quarantine and isolation, as well as treating the infected, though a specific vaccine is yet to be developed. As the infection is assuming pandemic proportions, the Government has declared four stages of nation-wide lockdown starting from March 24th, 2020 to contain the spread of this dangerous disease. However, the small and marginal farmers who are having less than two hectare of land holdings accounts for 86.2% (nearly 126 million) a large majority of the farming community have been hit very badly by this pandemic.

In realizing the present situation, Caritas India took an effort in conducting a Rapid Research on assessing the immediate challenges on the Impact of COVID-19 and the subsequent lockdown posed on the Smallholder farmers in India to suggest mitigative measures to ensure a sustainable food system during and post-covid crisis period. The study has interviewed 424 smallholder farmers and 44 intermediary partners organisations in 44 districts of 19 states across India to collect the primary information on the following aspects of their livelihoods during the pandemic:

i. Impact on Smallholder Farming and Production
ii. Availability of Agricultural inputs
iii. Problem being faced due to the Marketing
iv. Changes in Small Farm Family level income and indebtedness
v. Food and Nutritional Security of Small Farm Family
India is home to about 78% smallholder farmers who contribute 'over 41% of the country's grain production, and over half of its fruits, vegetables, oilseeds and other crops. Much of the global share of food staples such as rice and wheat goes from India, and almost half of the population in India depends on agriculture for their livelihood. Every year, smallholder farmers face risks such as low rainfall, price volatility and rising debts but risks from the COVID-19 pandemic are putting new challenges before the smallholders and agriculture sectors which is already under threat.

The nationwide lockdown came at an unfortunate time for smallholder farmers, as it was the harvest season for the rabi (winter) crops. The lockdown created labor problem as well as availability of equipment's. Laborers in India who usually move back to rural areas during harvest, and smallholder farmers often rent harvesting equipment as this is cheaper than purchasing it. Consequently, farmers have not been able to harvest their crops, in some places the crops have been abandoned while in some areas the harvest is coming more than a month late due to limited and higher labour cost.

During this panic time, where the transportation and markets were closed, and smallholder are forced to store their harvest at home. Due to fear and uncertainty, many of them have not accessed neither the local markets nor agriculture mandis and sold their harvest to middle man in very low rates.

Smallholders rely on a variety of both on-farm and off-farm activities to sustain themselves. The various activities adopted by these smallholders depend on the obtainability of the five capital assets, namely;

i. Human Capital: This includes smallholder's knowledge on local agriculture production and availability of human labour.
ii. Natural Capital: Accessibility to the farm components like Land, Soil, Water (rainfall), since most of the smallholder practice rain-fed agriculture.

iii. Financial Capital: This includes smallholder savings in many forms like personal savings, savings in groups or collectives, credit linkages, access to loan opportunities etc. which can be used to support their farming activities.

iv. Physical Capital: Availability of tangible farm assets like farm equipment's, livestock's etc. for their various uses.

v. Social capital: Participation in social networks, groups, multi-stakeholder platforms for collaboration, technical support, accessing entitlements and other service deliveries.

Considering the above scenario, Caritas India took an effort to conduct a RAPID RESEARCH on the impact of Covid-19 on smallholder's food security due to its subsequent lockdown. The impact of Covid Pandemic on agriculture is complex and varied across diverse segments that form the agricultural value chain. Even among the different segments, it was found that the impact varies widely among different regions on different aspects such as food security, smallholder's livelihood, accessing farm components from local markets or agriculture mandis, livestock, seeds, planting materials etc. It even effected the labours.

Women to be considered as homemakers and playing major role in managing their family food requirement. Keeping this as a priority, during Rapid Research Survey, Gender was considered to be one of the key component where, almost 30.4% female respondents were covered in order to get diverse information on the impact of Covid-19 through their lens.

Since the survey was conducted mostly among small and marginal tribal farm families and they are lived in joint families. The survey findings also evident that, 68.4% of families are having 10 or more members while 79.9% are having 5-10 members in their families. This shows the amount of daily food requirement by each family.

It was found that, the income of 80% small farm families has reduced due to Covid-19 and the restrictions in movement which has adversely impacted on their production and income. 57.8% of respondents said that they received less return as compared to their last harvest. 48.3% have faced agriculture labour issue, 26.2% have faced accessibility to agriculture mandis or market to sell their farm produces and 23.6% smallholders didn't get the required farm inputs from any sources.

Based on the situation and facilities available at their local level, 54.2% smallholders expressed their concern toward availability of the essential agriculture inputs for coming kharif season like seeds, fertilizers and other planting materials during this lockdown while access to agriculture mandis and market are the major concern for 15.6% smallholders. 61.2% smallholders said that, they didn't get enough price nor appropriate market while selling their livestock produces.

It was also evident that, 73% of small farm families are under debt out of which 60% are not sure whether they would repay the loan amount as per the schedule. There are sources available like local saving groups (SHG, FG etc.), Banks and family or neighbors where, 41.8% small farm families have borrowed money from more than one source but 12.2% small farm families are from local money lenders in a higher interest rate. This shows the compulsion and indebtness of the resource poor small farm families.

The Secondary information collected from various sources are substantiated with primary data. The purpose of collecting the primary information is to assess the gravity of the situation among small and marginal farm families and suggest the appropriate mitigation measures to maintain their farm production and income even in the pandemic situation.

While maintaining all necessary measures of social distancing, a structured interview schedule was used for the data collection. The Rapid Research followed a mixed method approach and developed both quantitative and qualitative tools for eliciting the desired information required as per the objectives of the study and brought out many findings and recommendations which are explained in detail in this report.
Caritas India constituted a team of experts to carry out the study in the 19 States, where Caritas India has been implementing different agricultural interventions. The overarching objective of the study is to assess the Impact of COVID-19 on small farm families in India and measure the problems in smallholder farming and production, accessibility of agriculture inputs, post-harvest and market accessibility, changes in small farm family level income and indebtedness and food and nutritional security issues. Keeping in line with the main objective, the current objectives of the study include:

1. To identify issues and challenges faced by Farming Communities and how these issues impacted on their lives in the context of Corona Pandemic
2. To identify gaps in the systems and recommend mitigation plans.
3. To work out potential areas of Caritas's agricultural interventions in post-COVID phase

Rationale of the study:

Caritas India, the leading humanitarian organization with more than 200 partners in India has been promoting sustainable farming practices with the active support of like-minded organizations in India. With the outbreak of Covid-19 pandemic and the subsequent lockdown, Caritas India started immediate disaster response activities across India, especially with most vulnerable groups in the community, like agricultural labors, small scale farmers, migrant workers, etc. with the support of its partners. Caritas India team received much anecdotal evidence from its program team, in which the current challenges are being faced by the agricultural community in the country. Hence, to understand the stress in farming sector, Caritas India conducted a pan India rapid research to understand the existing condition, opportunities, and risks in agricultural sector India, which will help Caritas India to strategize its future programs effectively. This rapid research assessed how the pandemic impacted agricultural production, distribution patterns, availability of food and nutrition, income generation and expenses etc. among the targeted respondent's group.
**Study Design**
The study followed a mixed methods approach and developed both quantitative and qualitative tools for eliciting the desired information. Both close ended and open-ended interview schedules were designed and used for getting information on key aspects from the target respondents, while the qualitative (open ended questionnaires) were used for getting views and insights of the program staffs and partner directors. The qualitative tool aimed to understand predominant problems due to Covid-19 outbreak in the field of agriculture and small farm household level.

**Methodology:**
The methodology includes collecting information from the field on the present situation of smallholder farmers in the context of coronavirus outbreak. The Secondary information collected from various sources are substantiated with primary data collected from 424 farmers across India. 45 project partners of Caritas India who are involved in agricultural programs have selected maximum 15 and minimum 5 farmers from each partner location. While maintaining all necessary measures of social distancing, a structured interview schedule was used for the data collection.

The smallholder was selected based on the criteria such as farmers having at least 1 to 5 acres of agricultural land (own or leased) in each survey targeted districts. Additionally, all the partners including functionaries and thematic experts were interviewed for understanding the impact on smallholder and farming issues occurred due to Covid-19.

The interviews with the above target respondent were held with the help of a well-designed survey questionnaire to collect the data and information which were analysed by using MS-Office excel application. All the interview schedules were shared with Caritas India management and the final approved questionnaires were used in the survey. Considering the travel restrictions amidst of Covid-19, the study was done through different virtual platforms such as telephonic interview method in Orange and Red zone areas, but the study team have tried to connect maximum respondents from the in green zones.

**Sampling Framework:**
The study conducted in 19 states and 44 districts across India. Considering the high restriction in mobility and limited time frame, a purposive sampling method was used for the research. The respondent selected from the Caritas India’s existing agricultural intervention locations used “maximum variation” criteria which ensured inclusion of different selection of people in the survey. The overall geographical coverage of the study is shown in the table -1
### Table 1: Sampling Grid - Rapid Assessment

<table>
<thead>
<tr>
<th>States</th>
<th>Number of Partners</th>
<th>Expected Sample Size</th>
<th>Actual Sample Size**</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East (4 States)</td>
<td>4</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>West Bengal</td>
<td>3</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Bihar</td>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>3</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Kerala</td>
<td>3</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Gujarat</td>
<td>2</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>3</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Odisha</td>
<td>2</td>
<td>30</td>
<td>12</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>2</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>2</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Andhra &amp; Telangana (2 States)</td>
<td>5</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Karnataka</td>
<td>3</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td><strong>19 States</strong></td>
<td><strong>44</strong></td>
<td><strong>470</strong></td>
<td><strong>424</strong></td>
</tr>
</tbody>
</table>

### Indicators:

This research aims to assess the issues and challenges faced by Farming Communities and how these issues impacted on their lives in the context of Corona Pandemic. It highlights the important role of traditional wisdom, information and capacity to cope up with the situation, a suitable research framework has developed. The framework divides the whole aspect into 6 types:

1. **Background of the Respondent**
2. **Respondents Knowledge on COVID-19**
3. **Covid-19 Impact on Farming and Production**
   a. Farming - Availability of Agricultural Inputs
   b. Marketing
4. **Impact on Income and Debt**
5. **Nutrition and Food Security**
6. **Support Required**

![Figure 1: Geographies Covered in Rapid Research](image)
Enumerators Training:

The data collection tool has been finalised in consultation with the team members through virtual meeting in Microsoft Teams platform. The data collection responsibilities were given to the core team members. Before starting the data collection exercise, the core team had an in-depth orientation on the data collection format with the respective state officers of Caritas India. This training was done to sensitize enumerators on the modalities for collecting primary data from the respondents.

The selection of respondents is done in consultation with the partners directors and program coordinators. The core team members with the support of state officers took the responsibility to sensitize the partner team on various aspects of study such as objectives, research methodology, interviewing techniques, necessary COVID-19 precautions to be ensured while meeting the respondents at field level. In many places, the data collection has been done in the field keeping in place the covid-19 protocols set by the Government.

Data Quality Control Measures

The following steps were undertaken to ensure the quality of data collected by the field teams:

1. In-depth orientation on the questionnaire provided to all enumerators through virtual platforms followed by a mock exercise for their better clarity by the Caritas India team.
2. Maximum enumerators were selected based on the previous experiences in data collection and sound understanding on local language.
3. For ensuring the quality of data, Caritas India team oversee the entire data collection process and provided necessary handholding support during data collection.
4. A pre-populated data sheet was shared with partner team for data entry to avoid the data transfer issues.
5. The district specific data sheets were verified by the concern state officers at their level before submission for data analysis.
6. A master data sheet was prepared on the basis of verified district/ partner wise data submitted and considered for data analysis.

Challenges and Limitations

The study aimed to collect data from 500 farmers from 20 states, but only 424 farmers were interviewed from 19 states. Some of the study targeted areas were affected by natural disasters like cyclone Amphan, hailstone and attack by Locusts, hence few partner organisations were unable complete data collection by stipulated time frame and this partner organisations/ districts were excluded from analysis.

Unavailability of the respondent group from these states hinders to get holistic pictures of farming sectors in the state. The study used telephonic interview as the medium of data collection, and it hamper in some way to have an understanding of the perspectives and ideas of respondent on various issues.
The study presented here is the result of interactions held at small farm level and part of the on-going programs. An essential element in the work was coordination among teams and partners for data collection and triangulation. Without coordination and support of the partner organisations, the study was not thinkable considering the covid-19 situation. An responsible risk undertaken by the entire team to ensure harmonized information as collected from different parts of the country for analysis and to suggest appropriate mitigation measures.

The Covid-19 Rapid Research was carried out through interactions with farmers in 19 states. While reporting the findings, the names of the state have been mentioned to identify the location of the interactions. The study, in addition, attempts to cover the perspectives of partner directors and other agricultural experts in the locations.

1. BACKGROUND OF THE RESPONDENT:

The general features that characterizes the sample smallholder farmers are depicted as follows:

**Figure 2: Gender wise distribution of respondents**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>69.5%</td>
<td>295</td>
</tr>
<tr>
<td>Male</td>
<td>30.4%</td>
<td>129</td>
</tr>
</tbody>
</table>

Figure-1 demonstrates the gender distribution across all states where survey was conducted. The overall representation of male is 69.5% whereas, 30.4% are female respectively. Table indicated that a good number of females are involved in the farming activities who took part in the survey to share challenges as well as opportunities in their views.
Table 2: Socio-economic profile of respondents

<table>
<thead>
<tr>
<th>Economic Status of the Household based on Ration Card</th>
<th>Number (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Poverty Line</td>
<td>81</td>
<td>19.1</td>
</tr>
<tr>
<td>Antyodaya</td>
<td>30</td>
<td>7.1</td>
</tr>
<tr>
<td>Below Poverty Line</td>
<td>293</td>
<td>69.1</td>
</tr>
<tr>
<td>No Card</td>
<td>14</td>
<td>3.3</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Table 3: Other Vulnerability Status

<table>
<thead>
<tr>
<th>Other Vulnerability Status of respondents</th>
<th>Number (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differently Abled</td>
<td>14</td>
<td>3.3</td>
</tr>
<tr>
<td>Widow/ Widower</td>
<td>41</td>
<td>9.7</td>
</tr>
<tr>
<td>Old age</td>
<td>61</td>
<td>14.4</td>
</tr>
<tr>
<td>Others</td>
<td>21</td>
<td>5.1</td>
</tr>
<tr>
<td>No Disability</td>
<td>287</td>
<td>67.7</td>
</tr>
</tbody>
</table>

Table 4: Land Holding Pattern

<table>
<thead>
<tr>
<th>Land Holding Pattern of Respondents</th>
<th>Number (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Land</td>
<td>330</td>
<td>77.8</td>
</tr>
<tr>
<td>Land on lease</td>
<td>63</td>
<td>14.9</td>
</tr>
<tr>
<td>Both (Own and Lease)</td>
<td>16</td>
<td>3.8</td>
</tr>
<tr>
<td>Community Land</td>
<td>9</td>
<td>2.1</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>1.4</td>
</tr>
</tbody>
</table>

5: Average Family Size

<table>
<thead>
<tr>
<th>Average Family Size</th>
<th>Number (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>141</td>
<td>33.3</td>
</tr>
<tr>
<td>5 to 10</td>
<td>264</td>
<td>62.3</td>
</tr>
<tr>
<td>10 and Above</td>
<td>19</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Out of the total household surveyed, 69.1% small farm families belongs to below poverty line whereas, it has been evident that, almost 32.5% respondents are from most vulnerable category. Around 77.8% small farm families are having their own land, however, 14.9% are belongs to tenants who take land lease on verbal agreement without any tenure security. It has also been found especially in North East region the 2.1% small farm families using community land to earn food and livelihood for their families.

There are 62.3% small farm families who have 5 to 10 members and 33% have 1 to 4 members in their families. It was also brought to the notice that, due to unprecedented lockdown, smallholder who migrated to towns and cities have return to their home and since there is no choice left other than to stay back, it has affect their food requirements, savings and other essentials.
The figure shows that, more than 70% small farm families have their own land in both family categories (1 to 4 and 5 to 10 members) whereas, 68.4% smallholder families with more than 10 members have their own land in north east region. However, a total of 38.1%, small farm families are found, who do not have any land ownership. These smallholder families are considered as tenant farmers with land, lease on verbal agreement basis and often vulnerable to many climate hazards.

The data above also shows that, a total 22% smallholder families irrespective of all categories, have both own and lease land (especially 15% in North East region) to ensure sufficient food production for their families.

2. RESPONDENT'S KNOWLEDGE ON COVID-19 AND BENEFITS RECEIVED

Knowledge and awareness on mode of disease transmission, basic hygiene principles and measures in public health crisis are vitally important for developing effective control measures. A right amount of knowledge on symptoms, remedial measures, and government support measures are essential to address the impact COVID -19 pandemic in an individual's life. Rapidly changing information and lack of access to make themselves up to date on Covid-19 are a significant challenge in rural areas of the country.

It was found that, 89.2% small farm families are aware and have adequate information on the symptoms and preventive measures of Covid-19; however, 10.8% of the respondents do not have access to proper knowledge on symptoms and preventive measures. Considering the situation, with immediate action, orientation was provided by the survey volunteers to the respective small farm families on Covid-19 symptoms and necessary precaution measures.
55.4% of people have received support from both G ovt and NGOs. 9.4% of the respondents have not accessed any support either from governments or NGOs. 29% received benefits from only Government while 6% received only from NGO sector. Limited awareness about schemes distance from the distribution locations was the main hindrance to obtaining benefits. This gap should be addressed in the future emergency response plans. Better coordination between G overnment and civil society organizations could be help avoid duplication.

The figure shows that, 61.6% smallholder families have received support from Non-Government Organisation (NGO) however, 38.4% smallholder families have not accessed.

From the gender lens, 59.7% Female and 53.6% male have accessed essential services from both the Government and NGO whereas, 22.5% female and 31.9% male have received services only from the G overnment and 54.% female and 6.4% male have received services from NGO. However, there are 12.4% Female and 8.1% male respondents found who have not received any support neither from Government nor from NGO.
The findings show, out of the total respondents, 57.8% and 80.4% have received less yield and income respectively as compared to their last harvest whereas, 36.8% and 16.3% have expressed their views that they don't see any changes in their yield and income however, only 4.2% and 3.3% have acknowledged slight increase in their yield and income respectively.

3. COVID-19 IMPACT ON FARMING AND PRODUCTION:

The rapid assessment study clearly revealed that Covid-19 has impacted agriculture and farming sector adversely, which will affect life and livelihood of farmers in short term and long term. The study revealed that due to the transport restrictions and quarantine measures hampered the smallholder access to local as well as agriculture markets, limiting their productive capacities and hindering them from selling their produces. Shortages of labour is also identified as one of the major issues in disrupting timely harvesting and other essential supports.

Another issue was the availability and access to farm inputs like seeds, fertilizers and other planting materials for the next season. Due to insecurity and fear, smallholders, may face the disruptions in their production capacity and accessibility to farm inputs which may lead various implications like increase in price and making these resources inaccessible to them.

Figure 9: Most Important challenges faced in the last harvesting season
It shows that, out of the total respondents, 48.3% have identified labour as one of the key issues faced during last harvesting whereas, 27.8% and 26.2% have faced difficulties in getting transportation facilities and marketing of their own farm produces respectively. Almost 23.6% have shared unavailability of sufficient agricultural (farm) inputs at local level for next season and 12% have confirmed untimely harvest and selling of their farm produces in low prices however, 10.8% and 9.9% have acknowledged covid-19 restriction made them financially more vulnerable.

The lockdown has also hampered the accessibility of tested farm inputs. Failure of production in the last season may lead to a cyclical effect in the farming; concerned departments and organizations should ensure the availability of resources at the local level. The farmers and key agriculture experts in the area expressed their concern over the availability of agricultural inputs in the future also, since the farmer's affordability to purchase farm inputs may also be negatively impacted due to reduced income level. Similarly, due to the unavailability of food supply, the farmers were forced to use their existing stocks (including stocks preserved for seeds) for daily consumption. The farmers also conveyed their apprehension on upcoming agriculture seasons and the same is depicted in figure-18.

The impact of Covid-19 is observed in the upcoming agriculture season as well. As the figure demonstrates, around 54.2% of farmers expressed their concerns over the availability of agriculture (farm) inputs like seeds and fertilizers and other planting materials whereas, 19.3% believe that, they have to pay high price for the agriculture (farm) inputs for next season. Due to this uncertainty and financial burden, farmers are hesitant to make new investments, and around 20% of the respondents are facing financial crisis to undertake farming in the next season. Almost 17% respondents is afraid of labour crisis however, 15.6% raised their concern on accessibility of local and agriculture markets to sell their produce in good prices.

The study respondents were asked about their short term and long-term concerns of pursuing agriculture. Based on the response, 9 major concerns were RANKED as mentioned in table 4.
Table 6: Respondents perspective on the long-term & short-term challenges

<table>
<thead>
<tr>
<th>Short Team Concerns</th>
<th>Rank</th>
<th>Long Team Concerns</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to the agriculture Inputs</td>
<td>1</td>
<td>Reduction in income and increase in debt</td>
<td>1</td>
</tr>
<tr>
<td>Changes in agri. Input, yield and price</td>
<td>2</td>
<td>Reduction in price and Marketing</td>
<td>2</td>
</tr>
<tr>
<td>Restrictions for pursuing farm activities due to Covid-19</td>
<td>3</td>
<td>Unavailability of Labour and increase of labour Cost</td>
<td>3</td>
</tr>
<tr>
<td>Unavailability of Labour force</td>
<td>4</td>
<td>Poverty, Hunger and Food insecurity</td>
<td>4</td>
</tr>
<tr>
<td>Financial problems for fresh investments</td>
<td>5</td>
<td>Unavailability of Agricultural Inputs (Seeds, Fertilizers, machinery etc.)</td>
<td>5</td>
</tr>
<tr>
<td>Health Security Concerns</td>
<td>6</td>
<td>Difficulties for doing farming due to restrictions like social distancing</td>
<td>6</td>
</tr>
<tr>
<td>Covid related Restrictions</td>
<td>7</td>
<td>Limited Government and other support</td>
<td>7</td>
</tr>
<tr>
<td>Availability of Food Stock</td>
<td>8</td>
<td>Others</td>
<td>8</td>
</tr>
<tr>
<td>Transportation Issues</td>
<td>9</td>
<td>Livelihood issues</td>
<td>9</td>
</tr>
</tbody>
</table>

The study seeks to identify the various long-term and short-term concerns of the farmers in the wake of the COVID-19 outbreak. According to the farmers interviewed:

- Accessing agriculture Inputs, Frequent changes in price, and Restrictions for pursuing farm activities due to Covid-19 ranked first three major short-term concerns. Whereas,
- Reducing income and an increase in debt is identified as the most crucial long-term concern.

Smallholder raised marketing of agriculture and livestock products as one of their major concern whereas, around 80% of the respondents said they have faced difficulties in selling their agriculture products and 61.2% shared that they are not getting enough price and markets for their livestock products due to Covid-19 lockdown.
51% smallholders have responded that, they faced all kind of listed issues (Market accessibility, less price, market accessibility, product processing and transportation), while 31% of farmers faced specific marketing issues. Lack of transportation facilities forced them to sell products with lesser price, and sometimes vegetable products were rotten and spoiled due to limited hours of selling. High dependency of farmers on middleman for marketing aggravates the vulnerability of farmers. Farmers informed that they are forced to sell products in local market buyers or mediators; thus, they received less income in this season.

4. INCOME AND INDEBTEDNESS

The COVID-19 pandemic is considerably affecting smallholder producer's access to markets. Immediate impacts tend to be more severe for perishable products which are often produced by smallholder farmers. To limit the spread of the virus, physical isolation is required at various levels on people's movement and these cause transportation delays and blocked the flow of supply chain even at the local level due to fear and uncertainty.

Most of the surveyed households were quite poor. 24.3% of households having an average annual income of less than 10,000 rupees, and another 28.3% of the respondents come under the income bracket of 25001 to 50000. As can be seen, poverty is quite endemic in these districts, and this plays an essential factor pushing them into the issues of debt and food security issues.
The COVID-19 pandemic and the lockdown announced by the Government drag down many farmers into indebtedness. Farmers from the various states who participated in the survey conveyed their inability to repay the loan availed from banks and Self-Help. Across all the States, 73% of the HH already are in debt, however, this may be common amongst in the rural areas. On an average, every second HH surveyed acknowledged the existence of debts that they had to pay off. This indebtedness has led them more vulnerable in the crisis situations.

The study findings show that 41.8% of farmers borrowed money from more than one sources; however, saving groups, like SHGs, are active in the village. Around 19% of farmers have taken loan from Saving groups. 12.2% farmers depended on local money lenders in the locality to meet their financial needs.
Figure 16 shows that more than 60% of the respondents think they cannot repay the loan amount as per the schedule. Missing repayment will drag down the HH to the vicious circle of debt and financial stress, however, the impact of indebtedness will be multi-layered. Social organisations can plan more income diversification programs with farming community.

5. IMPACT ON NUTRITION AND FOOD SECURITY:
Malnutrition and Anaemia are prevalent in good numbers in the rural areas of India even before Covid-19. Unemployment, limited market access, and insufficient access to public welfare schemes led the situation worse. Many small farmers/households have developed household gardening which helped to address the nutritional gap in the COVID time; this model should be promoted further to address nutritional issues, especially like health emergencies.

Table 7: Food security

<table>
<thead>
<tr>
<th>Availability of Food Stock at HH Level</th>
<th>Response</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>191</td>
<td>49.1</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>198</td>
<td>50.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How long can you sustain with the stocked food</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Week</td>
</tr>
<tr>
<td>Always</td>
</tr>
<tr>
<td>More than one week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own Farm</td>
</tr>
<tr>
<td>Market</td>
</tr>
<tr>
<td>Own Farm and Market</td>
</tr>
<tr>
<td>Other HHs within the Village</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household members skip a meal last 10 days because of not enough food available at Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Can't Say/ Can't Recollect</td>
</tr>
</tbody>
</table>
The findings show that 49% of the surveyed household have limited availability of food stock. The survey also enquired about the food source and consumption pattern in the COVID situation. 51% of the surveyed households depend on own Farm as a source of food, and another 23.6% of small farm families buying food items from the market. Surprisingly, 16.5% of the surveyed small farm families said that some of the HH members skip a meal in last ten days because unavailability of enough food at the HH level.

The area where survey has been conducted are mostly consisted of small and marginal farmers; and most of their produce is stored for self-consumption. The lockdown has changed the way individuals consumed food within the family. For example, it is observed that since migrants started returning to their families, food grains and other food items have become insufficient to meet nutritional demand of the demand of all the family members.

Situational assessment data shows that food security crisis may make heavy toll in nutrition status of the women, children, old aged and sick persons in the household. In tribal areas, people mostly depend on meat for protein, but COVID-19 impacted the accessibility of meat products. Another issue shared is that the Nutrition Residential Centers (NRC) and Anganwadis are not functioning in full capacity; therefore, malnutrition cases may increase in the coming days. Reduction in access to these government services and enough food weaken the immune system of population, especially children and women. Increased caseload of malnourished individuals among those that can’t ensure proper food intake due to illness and loss of incomes; this will add pressure on the family health and health facilities. There are no severe malnutrition issues that have been reported so far; however, prolonged lockdown might lead to malnutrition issues in rural areas.

Food security and related issues: Farmers and their local food supply systems have confronted with various kinds of issues in the lockdown period. Food insecurity in many locations are at stake due to less market access and other kind of natural distress like hailstone, cyclone, locust invasion, and other climate induced changes. The survey indicated that the local food systems and supply chains were disrupted after the outbreak of covid-19 pandemic. The rapid assessment revealed a substantial fall of income in agricultural households, which will be expected to impact food demand and food security. Unavailability of food storage at household and village is another hurdle which is affecting the thereby food security. It is noticed that small scale farmers, with small and marginal landholdings, maintain only storage systems for their household consumption.

MAJOR CHALLENGES IDENTIFIED:

I. Public Distribution System: Govt. agencies have distributed various food materials to the community through Public Distribution System but the vulnerable small and marginal farm families having no ration cards (food security card) failed to access this benefit.

ii. Mid-day Meal: Lockdown has badly affected the ICDS services in the mid-day meal program in most backward areas; this may hamper the performance of nutrition indicators in these geographies. This has increased the demand of additional food in the family as all family members are at home and mid-day meals and AWC (community level child development centres) services are closed during lockdown.

iii. Food Availability: Food supply chain disrupted which led to limited availability of essential food products in the markets. Panic buying led to the shortage of basic commodities resulting increase in prices of essential goods in many areas.

iv. Food Access: Movement restrictions limit physical access to the markets. Purchasing power reduced due to drop-in households’ incomes. Price rise of staple food items due to the outbreak Covid-19 impacted the whole supply chain.

v. Utilization: Prioritization of inferior nutrition quality products that are more affordable - due to large number of smallholders returned to home, food consumption is increased in families. Anecdotal evidence of the survey indicated that in very poor households, adults are skipping their meals; this led to malnutrition issues in women and children.

vi. Stability: Long term household food security is at risk for all vulnerable populations. Poorest people tend to spend higher percentages of their income in food, they don’t have savings or access to credits, and an increase in prices could push them into deeper poverty. The assessment revealed that, the rise in food price and economic crisis due to Covid-19 the sufferings were more among poor households, female-headed households, families with high dependency ratio, casual laborers, and petty traders. Although people in rural areas produce part of the food they consume, the reality is that in poorer families even in the rural areas depend on their incomes for family food security.

IDENTIFIED OPPORTUNITIES:

The rapid research revealed that Covid-19 and nationwide lockdown lead to suspension of agriculture activities created serious consequences in the livelihood and food security of the Agri based households. However, any further delay to restart agriculture activities may disturb the production and supply systems.
To addressing this issue, it is important to link the farming community to central and state government's various agriculture support systems. Farmers are in need of funds and many occasions this led to debt bondage and the rapid assessment found that 73.3% of the surveyed HH are in debt, hence provisioning affordable credit to farmers are an important aspect in the current crisis. “Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) address the credit crisis and maximum number of farmers should link with the scheme”.

i. Poor families get 5 kg wheat or rice and 1 kg of preferred pulses for the next three months
ii. Women Jan Dhan account holders to get Rs 500 per month for next three months
iii. Free gas cylinders would be provided to 8 crore poor families for the next three months
iv. Increase in MNREGA wage to Rs. 202 a day from Rs. 182
v. Ex-gratia of Rs. 1,000 to poor widows and poor disabled
vi. Government to front-load Rs. 2,000 paid to farmers in first week of April under existing PM Kisan Yojana to benefit 8.7 crore farmers
vii. Rs. 50,000-Crore in Garib Kalyan Rojgar Abhiyan for returnee migrant workers

These schemes help families to address the short-term issues, but the issues prolong further may need additional measures. Smallholders and agriculture labours have to be included in the in-kind assistance package or any social protection programs announced by the governments. At present, PM-Kisan includes only landowners. Tenant farmers who are the actual cultivators should be included in the scheme.

Government role in availing agricultural (farm) inputs are critical. Quality seeds must be reached to farms for uninterrupted sowing operations in the current and following seasons. Automated machinery facility should be introduced which may help the farmers in the time of labour shortage. These may demand in some policy changes. Thus, both the role of central and state governments has to play some crucial roles in
strengthening Indian agriculture sector at this time of pandemic to maintain the continuous flow of food production.

The Indian Council of Agricultural Research (ICAR) has issued The National agro-advisory for farmers during lockdown period due to COVID-19, the state-wise guidelines for farmers to be followed during the lockdown period. The advisory for farmers mentioned in the guideline specifies conditions to be followed mentions specific practices during harvest and threshing of various rabi (winter sown) crops as well as post-harvest, storage and marketing of the farm produce. As the harvesting and handling of the produce including its movement to the market are inevitable, farmers are to follow precaution and safety measures to be taken to prevent the spread of Covid-19. Measures including social distancing, maintaining personnel hygiene by washing hands with soap, wearing face mask, protective clothing and cleaning of implements and machinery. Farmers and farm workers to follow safety measures and social distancing in the entire process of field operations.

The Reserve Bank of India (RBI) has also announced specific measures that address the “burden of debt servicing” due to COVID-19 pandemic. Agricultural term and crop loans have been granted a moratorium of three months (till May 31) by banking institutions with 3 percent concession on the interest rate of crop loans up to Rs. 300,000 for borrowers with good repayment behavior. Various State governments also announced different schemes by understanding the economic stress in the sector.

COVID-19 Mahabank Kisan Rahat Yojana: A term loan scheme valid up to 30.06.2020 with an amount from Rs. 10,000 to 1,00,000 with a repayment period of 2 years is introduced by Govt. of India for the purpose of meeting the emergency requirements for agriculture and domestic purposes for tiding over temporary difficulties in the wake of Covid-19 outbreak. This scheme is applicable to individual farmers, joint borrowers having Kisan Credit Card (KCC). While around 7 crore KCCs have been issued already, another 2.5 crore cards will be issued to cover all PM-KISAN beneficiaries.

Tamil Nadu’s farm-to-table initiative: Tamil Nadu’s farm-to-table initiative has come to fruition rather unexpectedly, owing to the outbreak of Covid-19. The state has launched an initiative to ensure people get access to fresh produce without overcrowding the markets, where there is a chance of transmission of the infection. First, the state government announced the introduction of mobile carts in neighborhoods across the state.

Assistance Required: The study seeks various suggestions from the respondents to maximize the impact of future programme interventions. The respondents recommended the following priority areas, considering their long term and short-term needs.

a. Covid-19 Management: (from GO & NGO)
   i. Considering the extensions of lockdown and prolonged restrictions it is important to promote protective and preventive measures for the communities
   ii. Proper awareness to be conducted regarding precautions and proper safety measures.
   iii. Address unavailability of hygiene and PPE supplies

b. Agriculture and Livestock Management: (from GO & NGO)
   i. Easy access to various agriculture (farm) inputs in rural areas
   ii. Provision for multiple or alternative livelihood options during crisis
   iii. Availability and accessibility to local and agriculture markets (mandis) for their farm and livestock products.
   iv. Provisions for financial support/Loan facility for smallholder farmers to start fresh cultivation
   v. Provision for livestock management practices at local level.

c. Food and Nutrition: (from GO & NGO)
   i. An alternative option needs to be provided for Anganwadi, ICD S and NRC services
   ii. Supply Food kit for needy people and community
   iii. Cash support to buy essential HH food materials

d. Other Support: (from GO & NGO)
   i. Support for children’s education
   ii. Medical support assistance for needy people
   iii. Technical support for farming and livestock management
Smallholder farmers and food security as a whole are now at a turning point. The covid-19 pandemic has affected significantly on smallholder's produce and their accessibility to markets and plunge into a downward curve of under-investment, decrease in production as compared to last year harvest and financial insecurity. Moreover, Covid-19 pandemic came at a time when food security and the food systems were already under threat due to many factors like climate change, natural disaster, recent locust attack etc. Considering the above and the data findings, following are the key recommendations;

- **Appropriate Sensitisation and Awareness on Covid-19 at the community level.** Since the research focused on the impact of covid-19 on smallholders who comprise around 78% of the country's farmers and produce 41% of the country's food grains, consider as “Annadata”, appropriate measures and provisions must be provided to make them safe and protected during this pandemic by testing and practicing safety measures like sanitizers, personal protective equipment, face mask and maintain social distancing.

- **Suitable implementation of Covid-19 guideline in the remote areas.** Considering the small and marginal farmers knowledge and capacity, though lockdown guideline has been introduced by the Government appropriately that exempt the agriculture operations, agriculture markets like mondis and supply chain, still 20% small farm families out of the total sample do
not have required information from any sources and lead many other secondary crisis. Hence, the involvement and role of community based institutions and groups and representatives assigned are crucial in orientation of the guideline in local language for their better clarity.

- **Quality Food Assistance to the deprived and most vulnerable small farm families.** Such assistance needs to be provided with immediate action to protect the smallholder's life and help them to recover during pandemic. As the data show, 62% and 68% are having 5 to 10 members and more than 10 members respectively in their families and running short of food requirement. Community based organisations/institutions supported by both GO and NGOs should be mobilised in ensuring these support.

- **Direct CASH Transfer to the most vulnerable small farm families.** The early cash transfer can help vulnerable small farm families to soften the sock of sudden announcement of covid-19 lockdown and provide support until the circumstances improves. Since 69.1% were belongs to below the poverty line and around 38.1% small farm families are belongs to tenant category having a practice of land leasing on the basis of verbal agreement became more vulnerable without having no proper documents on land leasing and being excluded in accessing compensation during any disaster. Such people should be identified and supported with immediate cash support to manage their livelihood during such crisis.

- **Adequate support to smallholders to enhance their farm production and income by ensuring quality seeds and other agri-inputs on time for kharif season.** The primary food growers of the country must have multiple alternatives to ensure their farm production and income. There are 54.2% of smallholders who expressed their concerns over the availability of agriculture (farm) inputs whereas, 19.3% believe that, they have to pay higher price for next season. Around 48.3% smallholders have expressed their concern over unavailability of labour during last harvesting season and almost 23.6% have experienced unavailability of sufficient agriculture inputs at local level. Out of the total sample, 80.4% have received less income. Hence, they should be accessed to agro-advisories, agriculture inputs like quality seeds, planting materials at their arm length. Direct cash transfer, safetynet programs, integrated farming system,
collective farming initiatives, dry land horticulture, promotion of reuse and recycling of farm resources to reduce external dependency, low cost backyard poultry for women farmers could be the suitable options to minimise the risk crop loss and help them to diversify and enhance their production and productivity. Banks should waive fees on farmers’ loan and the repayment deadlines should be extended.

- **Stimulus package to the most needy small farm families by the local Government.** Looking to the scenario, one of the way to address this need is to use the social protection programs to ease their lives by providing immediate food and cash incentives, linking with various schemes and provisions like PDS, Pension schemes etc entitled to them. Based on the findings, 69.1% small farm families are belongs to BPL out of which, the annual income of 28.3% SHF families are coming under the income bracket of INR 25001.00 to INR 50000.00. However, it also evident that, 73.3% SHF families are under debt out of which 41.8% have borrowed money from more than one sources. Considering this scenario, the vulnerable farm families should be ensured with stimulus packages including liquidity needs for small scale enterprises, promotion and create scope to organise smallholders by formation of FPO/FPC, provision of MGNREGA works and soil and water conservation measures to cope up with situation and maintain their livelihood.

- **Employment to smallholder and farm labourers to improve their livelihoods.** As the farm labourers are returning to their villages, they can improve their livelihoods through providing employments in creating community assets of soil & water conservation measures such are trenches, bunds, ponds etc. The employment can be provided through MGNREGS. This is a potential way to reduce rural distress. In the present situation of covid-19 outbreak, some changes need to be made in the design and implementation pattern of employment schemes like MGNREGS as the labour communities are grappling with economic aftershocks. Considering the protocol, the schemes that are relatively less material intensive need to be taken up as it is difficult to procure materials at this time. They can be involved in the setting up farm and non-farm-based infrastructures, food processing, silage fodder bank, water management which helps in maintaining production level too. The covid-19 has
given an opportunity to initiate small scale enterprises of food processing for value addition, livestock rearing, tailoring, workshops and marketing with the support of the Government. Returnee labour forces should be skilled with modern agriculture techniques and livestock rearing, so that they can earn more income in their native place. A mapping could be done initially to identify existing skills and gaps and potential to link with MSME

- **Smallholder friendly market for smallholders.** All food system are affected by this crisis where, smallholder are the one who have limited access to market, loss of payments, lack of employment due to sudden lockdown. The findings also revealed that, 80% respondents said they have faced difficulties in selling their agriculture products and 61.2% shared that they are not getting enough price and markets for their livestock products due to Covid-19 lockdown. Hence, to avoid such loss, the local authority needs to take proactive action in ensuring smallholders’ continued access to agriculture markets, allow mandis to operate smoothly, provision for more procurement centres locally. This will enhance the cultivator-consumer-connectivity at local level. The local Government should have the provision to buy the small farm agri food at the nearest centres which can be reserve especially the non-perishable commodities to boost food supply to the most vulnerable farm families.

- **Food and nutritional security of vulnerable small farm families through social protection system.** Considering the socio-economic effects of the Covid-19 pandemic, the social protection system will become the mainstay for the vulnerable small farm families living geographically challenged areas. The findings show that 49% small farm families have limited availability of food stock and 23.6% of HH buying food items from the market while 16.5% them said, some of the family members have skipped one or more meal in last ten days because there were no enough food at their home. Hence, the local government should take adequate measures in coordination with other civil societies to ensure food access to the most vulnerable farm families where necessary, by providing dry food kits, feeding through community kitchen initiative, functional PDS and other community based programs as an alternative of Mid-day meal, Anganwadies since the education centres are closed due to Covid-19 pandemic. For many children in remote areas, school closures means they don’t have access to a healthier diet.

- **Nutrition security by promoting of integrated family farming (cereals, vegetables, fruits, small ruminence, poultry etc.):** Available evidence from the data indicated that food security might be a significant problem in the post-COVID phase, so upcoming programs of the Government and Non-Governmental Organizations can specifically focus on food security and nutrition issues. Additionally, promoting more numbers of community managed seed banks, nutrition garden to be developed by each HH, promote use of organics farming technics to reduce external dependency. They should be encouraged to promote the cultivator -consumer-connectivity through home delivery of groceries and E-commerce as the demand and scope of home delivery during lockdown period has risen. In these difficult times, it is important to avoid export ban and import restrictions. The rapid research analysis and anecdotal evidence of the study strongly felt that the Household Nutrition gardening/ Kitchen garden models at the time of lockdown were useful, workable, and cost-effective; this should be promoted further.

- **Structural reform on Land Leasing with secure tenureship for tenant farmers.** Though there has not been uniform implementation by the state authority and the entire sector is ignored somehow. This can be considered by the central government with suitable encouragement for tenants. Findings shows that around 15% of small farm families's livelihood soley depend on the present system making more vulnerable and insecured without proper leasing agreement. So, the structural reform is much needed to streamline the process of secure tenureship, mapping of available fallow land and waste land and making available for collective farming can help tenants to ensure sufficient food production and income.
Towards rebuilding resilient small farms

“Our civilization needs to downshift, take stock, and renew itself. You are the indispensable builders of this change that can no longer be put off”, wrote Pope Francis as his Easter 2020 message referring to the on-going COVID Pandemic. Indeed, COVID 19 Pandemic has shaken the whole world by what is happening around us. In particular, it impacted in the emergence of diverse complex realities on Indian agriculture and agriculture value chain systems. Even among the different segments, it was found that the impact varies widely among different regions on different aspects such as Livelihood, Food security, Livestock etc. Sadly enough, the COVID 19 pandemic even affected the farm laborers. The country-wide lockdown phases and the present unlock phases continue to bleak the future of millions of India’s unorganized sector agriculture workforce. It may take several months for the farming community to build back their lives and livelihoods with very little scope for finding
the immediately needed resources to meet even the basic requirements of the COVID effected families whose only sustenance source is agriculture and allied activities.

The Secondary information collected from various sources are substantiated with primary data collected from 424 farmers across India. The primary data probed into different aspects of India farmers' livelihoods such as the availability of agricultural inputs, problem being faced due to the marketing, changes in household level income & indebtedness and household level food security and nutrition. This Research Study reflects the multiple impacts of COVID 19 on the farming sector. The problems faced by the Indian farmers may be long-lasting and affect the supply chain of the agriculture sector and overall food securities of the communities. However, Governments and Civil Society Organizations can play a crucial role in minimizing the negative effects of COVID 19 in agriculture sector.

The Rapid Research Study pioneered by Caritas India on the impact of COVID 19 on the issues and challenges being faced by farmers especially the smallholder farmers is an effort and attempt to capture the depth of harrowing experiences and the complexities of issues faced by the farming communities during the lockdown.

Indeed, India's farming sector is in a traditional phase from traditional subsistence level farming to sustainable and profitable agriculture practices backed by modern agri-based technology. It is hoped that the above-mentioned recommendations will bring greater levels of respite to the stress-ridden smallholder farmers of our country. In this effort, different Development Organizations like Caritas India could be torch bearers and continue to play accompanying roles to the farming communities.

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References


