

## **LIVELIHOOD CHALLENGES AND COPING STRATEGIES OF AGRICULTURAL WORKERS DURING COVID-19 PANDEMIC**

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**Abstract:** Bangladesh is one of the high-risk countries of the COVID-19 pandemic and its consequent losses. The main objectives of this research were to find out the livelihood challenges and coping strategies of agricultural workers during pandemic situation. This study was conducted targeting lower income group of people (temporary agricultural worker, casual agricultural workers). As the nature of the research was qualitative, the researcher used convenience sampling to select respondents because this is the most common non-probability sampling strategy where respondents were selected in an ad hoc fashion based on their accessibility. However, the researcher has taken 60 respondents as sample in analyzing data, descriptive statistics (frequency and percentage) of responses are estimated. Scores of livelihood challenges are the means of a 4-point Likert-type scale used. From this study find that most of the respondents did small business but they did not get any help or small loan from NGO. Most of the respondents drive rickshaw, auto as their off day. Due to closing of school, respondents' children engage themselves to earning activities.

**Keywords:** *Covid-19 pandemic, coping strategies, Livelihood challenges, Agricultural workers*

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### **1. Introduction**

Due to job loss and other shocks to income and weakened livelihoods, the impact of the coronavirus disease (COVID-19) pandemic is growing every day on the poor. Casual day workers, small-scale producers, and others who have less access to social security due to a lack of savings or limited alternative means of income, both in urban and rural settings, are among the most vulnerable members of society. As a direct result of the economic crisis, tens of thousands of people are losing their jobs and slipping into the trap of approaching poverty. According to the International Labor Organization, 50 percent of the global workforce may lose their jobs as a result of the coronavirus pandemic, with 1.6 billion employees in the informal economy at risk.

In most developing countries and some affluent ones, the majority of waged agricultural laborers are hired on a seasonal, casual, or temporary basis. Casual workers are individuals who are hired and paid at the end of each day or on a project basis. Those working for a specified but short length of time are referred to as temporary workers. The majority of seasonal, casual, and temporary workers do not receive any type of social security or unemployment benefits, paid vacations, or sick or maternity leave. Hasnin examined a study

on the influence of the coronavirus on the livelihoods of Bangladesh's rural and low-income population (Hasnin, 2020). Only 7.69 percent of daily agricultural employees possess more than 400 decimals of cultivable land, according to his research. A half of rural household members mainly rely on non-farming jobs, of which about 35 percent of people whose main jobs are waged employment and 15 percent of them are self-employed. Among the population whose main employment in agricultural production, 45 percent of them have part-time non-farming jobs. Many rural residents migrate and work in the city without resident restriction. Most of them moving to urban areas only do simple jobs such as, motorbike taxi, riders, porters, helpers etc., without stability, labor contracts, insurance, nor secured accommodations. Only 19.5 percent of the rural workers working as hired labor are employed in the formal sector.

The aim of the study to identify livelihood challenges of agricultural workers during COVID-19 and coping strategies of agricultural workers. Most of the study do not mention about coping strategies during pandemic situation. So, there was a gap which needed to be addressed. The findings of this study might be helpful to know the actual situation of agricultural workers during the pandemic.

## **2. Review of Literature**

Although most of the literature primarily focuses COVID-19 impact on most vulnerable people (agricultural laborer, small-scale producers, daily wage earners) income, livelihood, health condition etc. Mottaleb et al., (2020) depicted a study on COVID-19 induced economic loss and ensuring food security for vulnerable groups: Policy implications from Bangladesh. He observed in his study found that, in Bangladesh, out of a 60.8 million employed labor force, 24.7 million (40.6 percent) are directly engaged in farm sector, of which 44.4 percent are paid on daily basis, and 36.1 million are engaged in nonfarm sector, of which 18.5 are paid on daily basis.

Chowdhury, (2020) conducted a study on Livelihoods, Coping and Support During COVID-19 Crisis. The poor in North Bangladesh are the worst victims of COVID-19 fallout. He found that shows that 53 percent of the families are maintaining their living standards by borrowing money from multiple sources such as relatives, neighbors and microfinance agencies. Some of them are also taking money as advance wages from potential future employers, which in turn will cause them to lose income during the peak employment time. Some 37 percent of the families interviewed were forced to sell whatever small assets they had left in the family in order to buy food.

Kissam, (2020) conducted a study on the impact of the COVID-19 pandemic on California farmworkers: Better local data collection and reporting will improve strategic response. He showed that the impact of COVID-19 on the vulnerable population of farmworkers, is not fully captured by analyzing race/ethnic disparities. Bochtis (2020) demonstrated that 50% of the agricultural workforce and 54% of the workers annual income are at moderate to high risk.

Paul et al. (2021) found that limited economic opportunities, restricted movement, less scope of meeting relatives, friends, neighbors from whom they used to seek help in emergencies, fear of being infected by COVID-19, and lack of confirmed support from the government –all had made lower income people's life vulnerable and stressful.

If the COVID-19 situation lasts much longer, a large number of low-income people living above the poverty line will fall below it, and many moderate poor households will drop lower down the poverty line. The overarching successes of Bangladesh in relation to poverty

reduction will disappear as a result of this stagnancy in economic activities. The government has taken different initiatives to support the vulnerable people, such as food support, open market sale of rice at a lower price, and cash support for the extreme poor.

### **3. Methods and Materials**

#### **3.1 Study population**

This study was conducted Bangabandhu Sheikh Mujibur Rahman Agricultural University (BSMRAU), Gazipur targeting lower income group of people (temporary agricultural worker, casual agricultural workers). Because these fractions of people usually have limited access to the internet, the researcher conduct physical interviews maintaining at least 3m distance. In this study primary data were collected from both temporary and casual agricultural workers of the BSMRAU area through a structured questionnaire. Primary data were being collected from 10 June to 22 June.

#### **3.2 Study setting**

The researcher has to decide to conduct the study based on data collected from primary data sources. The researcher has decided to consider the reliance of data. Data has been collected from primary data through a questionnaire. This study has been conducted with structured questionnaire. The study used both quantitative and qualitative approaches for the primary data collection. The questionnaire divided into three parts a) socioeconomic condition of the respondents b) livelihood challenges of the respondents c) coping strategies during covid-19 situation.

#### **3.3 Participants and sampling**

As the nature of the research is qualitative, so the researcher has used convenience sampling to select respondents because this is the most common non-probability sampling strategy where respondents are selected in an ad hoc fashion based on their accessibility. However, the researcher has taken 60 respondents as sample. On an average, each interview took about 15 minutes. The interview held at different places near the university area. The researcher strongly believed that the collected information can provide the best information to achieve the objectives, Likert scale has been used to measure the data collected the questionnaire. The researcher approached respondents randomly and those who (18 years and over) agreed were interviewed. And briefly described the aims of the research to the selected respondents and their verbal consent is noted.

#### **3.4 Analysis**

In analyzing data, descriptive Statistics (frequency and percentage) of responses were estimated. Scores of livelihood challenges are the means of a four-point Likert-type scale used. The arranged data have been formed or grouped together in tables. Pie chart also used for displayed some analysis results.

### **4. Results**

#### **4.1 Sociodemographic characteristics of respondents**

Table 1 illustrated percentage distribution of sociodemographic characteristics of the sampled respondents. The highest proportion of the respondents (62 percent) belonged to the young age group (up to 35 years), closely followed by the middle age (30 percent) group (35–50 years) old age group. Among sixty respondents, 72 percent were male and 28 percent were

female. The majority of the respondents (50 percent) can sign only, while the least number of respondents illiterate (17 percent). Table 1 shows that the proportion of variables was higher among the respondents who had small family size (less than 5 members), followed by medium (5-8 members) and large (>8 members) family size. The findings also indicated that about three-fourth (77%) of the respondents had small-sized family (<5 members), whereas 18 percent and 5 percent of the respondents had medium (5-8 members) and large size (> 8 members) families respectively.

**Table 1. Percentage distribution of the socioeconomic characteristics of the respondents**

<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
<b>Age (in years)</b>		
<i>Young aged (&lt;35)</i>	37	62
<i>Middle aged (35-50)</i>	18	30
<i>Older aged (&gt;50)</i>	5	8
<b>Gender</b>		
<i>Male</i>	43	72
<i>Female</i>	17	28
<b>Education</b>		
<i>No schooling</i>	10	17
<i>Sign only</i>	30	50
<i>Primary</i>	13	22
<i>Secondary+</i>	7	12
<b>Family size</b>		
<i>&lt;5 members</i>	46	77
<i>5-8 members</i>	11	18
<i>&gt;8 members</i>	3	5

#### **4.2 Livelihood Challenges**

The frequency distribution of respondent livelihood challenges was illustrated in Table 2. Table 2 shows that 90 percent of the respondent's livelihood is affected by COVID-19 outbreak. To 64 percent of respondents, the level of livelihood impact is high to extreme. Most of the respondent's family member worked outside but due to lockdown they lost their job. This actually has negative impact on their family income. Results from Table 2, it can be said that 57 percent of the respondents confess during COVID-19 their income decrease. This study shows that 76.7 percent of the respondents go out another district for cutting paddy during harvesting season. But during COVID-19 due to lockdown they cannot go another district. This really hamper their extra earning. During COVID-19, 51.4 percent respondents face loss in their small business.

**Table 2. Percentage distribution of livelihood challenges of the respondents**

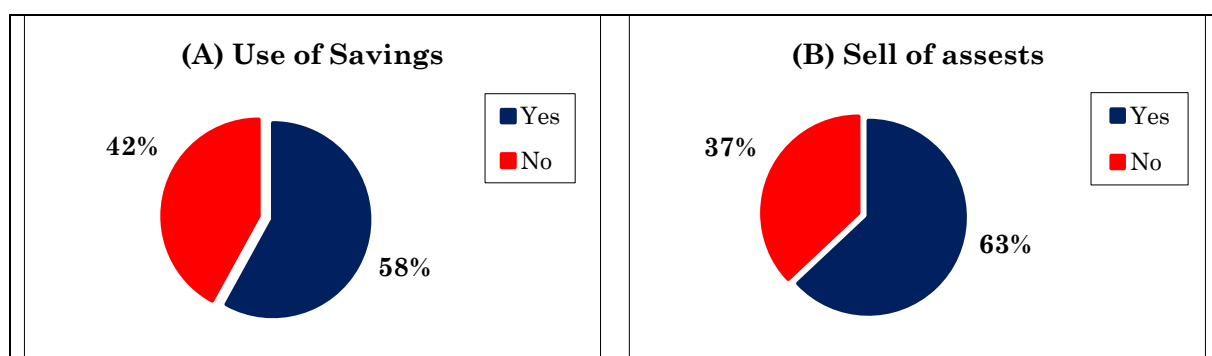
<i>Variables</i>	<i>Frequency</i>	<i>Percentage</i>
<b>Affected livelihood by COVID-19</b>		
<i>Yes</i>	54	90
<i>No</i>	6	10
<b>Affected level</b>		
<i>Little</i>	14	23
<i>Moderate</i>	9	15
<i>High</i>	16	27

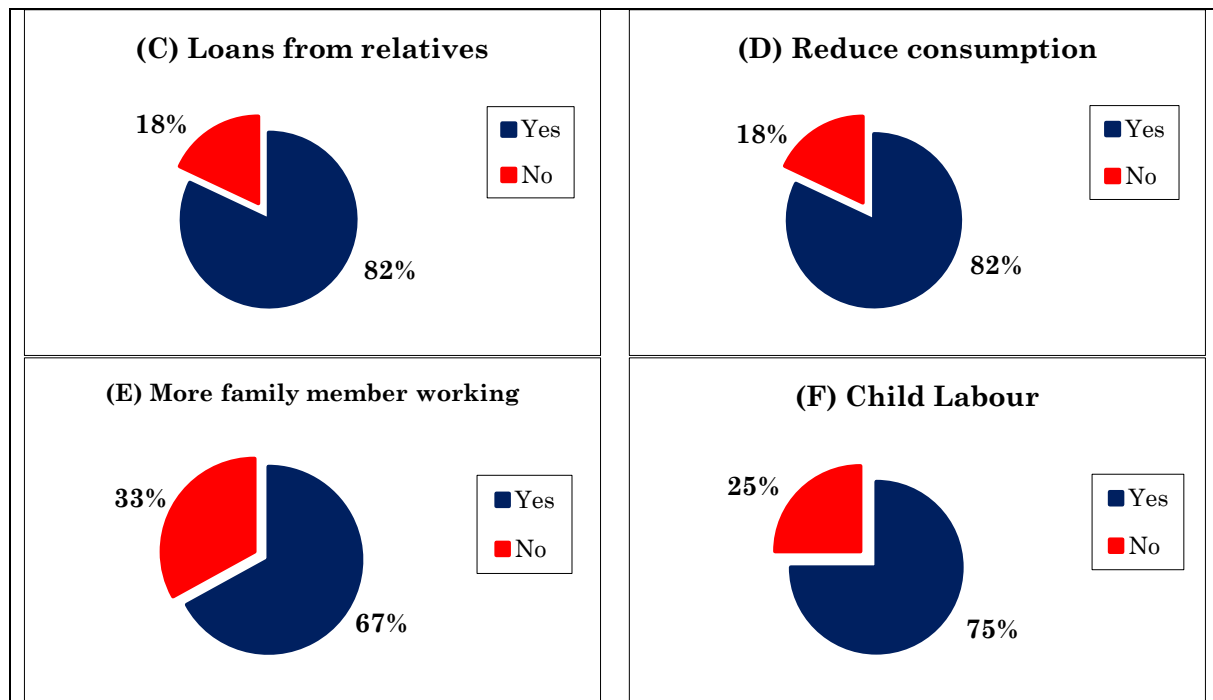
<i>Extreme</i>	21	35
<b>Family wage earner</b>		
<i>By self</i>	15	25
<i>Others</i>	45	75
<b>Impact level on income during lockdown</b>		
<i>Little</i>	12	20
<i>Moderate</i>	14	23
<i>High</i>	34	57
<b>Seasonal laborer</b>		
<i>Yes</i>	46	77
<i>No</i>	14	38
<b>Faced problem on seasonal laboring during lockdown</b>		
<i>Yes</i>	54	90
<i>No</i>	4	7
<b>Loss of business during COVID-19</b>		
<i>Yes</i>	31	52
<i>No</i>	20	33

### 4.3 Coping strategies during COVID-19 pandemic

Figure 1 displayed the coping strategies during COVID-19 pandemic which includes “use of savings”, “sale of assets”, “Loans from relatives”, “Reduce consumption”, “More family member working”, and “child labor”.

This study found that 58 percent respondents use savings for running their family during lockdown (Figure 1(A)). They also said that they use their savings in two to three months. Majority (63 percent) of the respondents sell their productive assets for buying food (Figure 1(B)). A respondent said he sold his hen for buying food because there is no another option during this time and had no money for buying food. It is impossible for the respondents to run the family the whole month in limited income. For this they take loan from their friends or relatives. Majority (82 percent) of the respondents said they took loan from relatives (Figure 1(C)). Due to increase price of all food, they reduce their consumption level. Majority (82 percent) of the respondents said they reduce their consumption from before (Figure 1(D)). For better earning more family members working outside. Most of the respondent’s family member engage agriculture related activities. Around (67 percent) of the respondents said their family member work outside for better earning (Figure 1(E)). During pandemic child labor increasing because due to closing school most of the children engaged many working activities. This study shows that 75 percent child engage child labor (Figure 1(F)).





**Figure 1. Coping strategies during COVID-19 pandemic**

## 5. Discussions

There was a negative impact on the Bangladesh's economy during the COVID-19 pandemic (Hossain, 2021). So, it is important to identify livelihood challenges of agricultural workers during COVID-19 and coping strategies of agricultural workers which was the main purpose in this study.

Majority of the respondents reported that due to COVID-19 lockdown it was hard for them to maintain their family expenses. This study find that COVID-19 badly affect the livelihood of majority of the respondents. The effects of COVID-19 pandemic don't seem to be solely restricted to health however even have a serious impact on the social and economic aspects (Bhuiyan et al., 2020). The results of another research suggest that COVID-19 severely affected human livelihoods in both urban and rural areas (Paul et al., 2020).

Most of the participants in this study were seasonal laborer, and they faced problems during the pandemic situation. Some were lost their job, or some were loss in their business. A recent study conducted in Bangladesh found that a large part of the labor force had to find their jobs and had to struggle to control their finances during COVID-19 (Paul et al., 2020).

In order to support socioeconomic situation, government provide many stimulus packages but majority of the respondents report that they do not get any help from government or organization. From this study find that most of the respondents do small business but they do not get any help or small loan from NGO. However, they have tried their best to deal with various economic problems on their own. Most of the respondents drive rickshaw, auto as their off day. Due to closing school respondents' children engage earning activities. Limited economic opportunities, restricted movement, less scope of meeting activities, friends and neighbors from whom they used to seek help in emergencies, fear of being infected by COVID-19 and lack of confirmed support from the government all had made agricultural workers life vulnerable and stressful.



## **6. Conclusions**

The challenges of livelihood mean fear of getting infected by coronavirus, insufficient government assistance etc. Most seasonal, casual or temporary workers do not receive any form of social security or unemployment benefit, holidays with pay, or sickness or maternity leave. Indeed, many full-time waged agricultural earners lack these same benefits. An increasing number of women workers are employed as casual or temporary workers. Furthermore, jobs are often classed as casual or temporary even if there is in reality continuous employment.

This study found that due to pandemic most of the agricultural workers livelihood badly affected and income decreased. The majority of the respondents expressed concern that COVID-19 would make it more difficult to get enough food on a regular basis for their household. The markets where they purchase food will either be closed or significantly disrupted. The market where they sell their produce/livestock will be either closed or significantly disrupted. In response to this variability, agricultural workers use different strategies, including use of savings, sell productive assets, loans from relatives, loans from moneylenders, more family member working outside, child labor.

The government has taken different initiatives to support the agricultural workers, such as food support, open market sale of rice at a lower price, and cash support and also medical support. Government NGOs should provide collateral free loan for their small-scale business.

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