

# The Pandemic's Impact on Occupations, Livelihoods, and Well-Being

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## Abstract

*The COVID-19 pandemic, defined by WHO as the global spread of a noble disease, originating in Wuhan, China, in late 2019, disrupting economies and livelihoods worldwide. This paper examines the socioeconomic and health impacts of the pandemic in the Kathmandu District, focusing on three purposively selected municipalities: Kirtipur, Kathmandu Metropolitan, and Gokarneshwor. Adopting a pragmatic approach, the research combines both deductive and inductive reasoning. The majority of respondents were Hindu (79 percent), and 30.6 percent reporting a change in profession, primarily due to job losses and economic hardships caused by the pandemic. Most respondents (89.5 percent) resided in rented housing and 68.6 percent continued to pay rent despite financial difficulties. Food security emerged as a significant concern, with 87.7 percent of respondents emphasizing the need to save food for future use. Health issues were widespread, with 63.6 percent reporting health problems, including contracting COVID-19. Despite these challenges, 76.4 percent of those requiring treatment managed health expenses independently. Organizational support was limited, with only 37.3 percent receiving aid, predominantly in the form of food assistance from government bodies and NGOs. Preventive measures such as hygiene practices, masks wearing, and saving money were widely acknowledged. Significant associations were found between religion, marital status, and economic outcomes, highlighting their role in shaping respondents' pandemic experiences. The findings emphasize the necessity for comprehensive support systems and targeted interventions during health crises.*

**Keywords:** food, health, impact, pandemic, saving.

The COVID-19 pandemic, defined by the WHO as the global spread of a novel disease (WHO, 2020), caused widespread socio-economic disruptions, including in Nepal, where lockdowns and movement restrictions severely impacted the economy, livelihoods, and vulnerable populations. The virus triggered by the SARS-CoV-2 virus, was first identified in Wuhan, China, in late 2019 (Zhu et al., 2020). Nepal confirmed its first case on January 25, 2020, involving a student returning from Wuhan (Gahatraj, 2020). Nearly every sector in Nepal was affected, with the pandemic severely impacting the country's economy and reducing the expected growth rate from 8.5 percent to 2.27 percent (CBS, 2019 & 2020).

The informal sector was particularly affected by the lockdowns at both national and sub-national levels, as well as restrictions on the movement of people, which led to the closure of non-essential businesses and had significant impacts on global labor markets (FAO, 2020).

The primary, secondary, and tertiary sectors all experienced substantial disruptions, including job losses and reduced working hours. These lockdowns also had a negative impact on individual's physical, mental, social, and spiritual well-being of individuals' physical, mental, social, and spiritual well-being, with vulnerable populations being disproportionately affected (Adhikari et al., 2021). The tourism, hospitality, and aviation sectors were especially hard-hit, with Nepal's "Visit Nepal 2020" campaign being canceled and tourist arrivals falling drastically from 70 percent to under 10 percent (Khanal, 2020). The cancellation of mountaineering activities resulted in the loss of approximately 13,000 jobs (The Kathmandu Post, 2019). Manufacturing industries faced difficulties due to shortages of raw materials from China, while a decline in remittances had a significant impact on consumption. The wholesale and retail sectors, which contribute 14.37 percent to Nepal's economy, also experienced setbacks. Inflation risks increased as Nepal was likely to face higher costs for imported goods (World Bank, 2020a). The long-term economic impact of the pandemic remains uncertain (Karn, 2021).

In response to the crisis, the Government of Nepal implemented a nationwide lockdown and activated crisis management mechanisms at the federal, provincial, and local levels. Strengthening the health system, standardizing quarantine facilities, and providing immediate relief to the most affected populations became urgent priorities. Additionally, addressing the socio-economic impacts and preparing for long-term recovery were deemed critical (Raising Nepal Daily, 2020). Nepal's economy heavily reliant on remittances (25 percent of GDP), tourism (8 percent of GDP), agriculture (26 percentage of GDP), and essential imports, making poor households and unskilled workers, particularly returnee migrants, especially vulnerable to income losses. Many of these individuals lack access to social safety nets, increasing their susceptible to the economic downturn (UNDP, 2020).

The pandemic has presented significant economic challenges, particularly for informal workers, small business owners, private sector employees, farmers, and daily wage laborers. In urban areas, self-employed individuals and daily wage workers have seen their livelihoods jeopardized due to disruptions in agricultural supply chains, education, transportation, and wage labor.

Without alternative livelihood strategies, working-class individuals may be forced to work under unsafe conditions, putting themselves and their families at risks of health hazards (FAO, 2020). Informal workers, including wage workers and the self-employed, were particularly vulnerable to job and income losses. These workers often lack secure contracts, social protection, and worker representation, making them especially susceptible in developing countries, where over 90 percent of agricultural workers are informal (ILO, 2018, cited in FAO, 2020). During the first wave of the pandemic, Nepal's revenue collection decreased by 7.45 percent, and the country experienced a trade imbalance (Joshi et al., 2021). Nepal's GDP growth rate also dropped by 0.2 percentage in 2019/20, compared to 7 percent the previous year (Magar et al., 2021). Furthermore, the closure of the service sector resulted in job losses for 31.5 percent of workers (UNDP, 2020), and the pandemic pushed 31.2 percent of the population into poverty (Rasul et al., 2021). Although Nepal's Right to Food and Food Sovereignty Act (2018) aligns with SDG 1 and SDG 2, it did not account for the impact of COVID-19 or similar crises, leading to reduced food availability during the pandemic (Joshi et al., 2021).

During COVID-19 pandemic, both gross domestic savings and gross national savings declined in the years of 2019/20 and 2020/21, compared to earlier years such as 2018/19 and 2017/18. This period saw an increase in food demand, while the production of manufactured goods and, to some extent, agricultural products declined. The economy faced increased prices

due to black marketing, unethical practices, goods shortages, and deregulation (Dangal, 2022). Despite the partial resumption of economic activities in several countries, productive capacities remain underutilized. Additionally, young workers were disproportionately affected, with approximately one-fifth of the total job losses during the COVID-19 lockdowns occurring among individuals aged 18-29. The COVID-19 pandemic has held to significant economic and labor market disruptions, severely affecting informal workers, small business owners, farmers, daily wage laborers, and private sector employees. Urban livelihoods, particularly for self-employed individuals, daily wage earners, small farmers, and private school staff, are at risk due to disruptions in food supply chains, markets, transportation, and education caused by lockdowns (FAO, 2020).

Without alternative livelihood options, many individuals are compelled to work without adequate safety measures, thereby increasing health risks. Informal workers, who lack secure contracts, benefits, and social protection, are particularly vulnerable. Over 90 percent of agricultural workers in developing countries are informally, often under precarious conditions (ILO, 2018, cited by FAO, 2020). The International Labour Organization (ILO) projected a global rise in unemployment of 5.3–24.7 million due to the crisis in 2020, exacerbating challenges in the informal sector as lockdowns and business closures continue to disrupt labor markets worldwide (ILO, 2020).

This study, grounded in Keynesian Employment Theory and the Sustainable Livelihoods Approach, explores the economic impact of COVID-19 on individuals. According to Keynesian theory, unemployment results from insufficient demand, which can be addressed through government intervention to stimulate demand and restore jobs, as demonstrated during the pandemic's effects on the education and informal sectors (Keynes, 1936; Pokhrel & Chhetri, 2021). The COVID-19 pandemic created significant economic and professional challenges, including job losses, reduced income, and business disruptions. While most studies have focused on business, tourism, and industrial sectors, this study specifically examines the impact on working-class individuals. The key issues explored include how individuals adapt to these economic challenges and sustain their livelihoods, the coping mechanisms they employ to maintain income during the crisis, and how support systems- such as government aid and community networks- help individuals navigate and overcome these difficulties.

### **Methodology**

This paper based on pragmatism and deductive reasoning, examines the impact of the COVID-19 pandemic on occupations, livelihoods, and individual well-being, with a focus on economic changes and adaptive strategies in Kathmandu district, Nepal. The term "profession" is defined as working-class individuals and data was collected using semi-structured questionnaire. Kathmandu was purposively selected for this study due to its high population density, significant migration rates, and as a high rate of migration and a large working-class population. Three municipalities: Kirtipur, Kathmandu Metropolitan, and Gokarneshwor were also purposively selected, as they have the majority of the working-class population (CBS, 2011). As the study population was not well-defined, the sample size was determined using Cochran's formula. The target population included private school teachers, small business owners, daily wage workers, farmers, and transport workers. A cluster-stratified sampling design was employed, with a total of 324 respondents, selecting 108 from each cluster. Private school teachers were included as respondents due to their significantly vulnerability to the pandemic's impact compared to other professions. Quantitative data analysis was conducted using SPSS, employing multinomial logistic regression as a key method for understanding the relationships within the data. This approach allowed for a comprehensive exploration and

substantiation of how the pandemic reshaped occupations, livelihoods, and well-being, providing empirical evidence of COVID-19's impact on different sectors.

## Results

### Marital Status

Marital status refers to whether an individual is legally recognized as married according to the laws of the jurisdiction. Religion is defined as a system of faith and worship. is known as religion. The marital status and religion of the respondents are presented below:

**Table 1:**  
**Distribution of Respondents by Marital Status**

Marital Status	Religion				Total
	Buddhist	Christian	Hindu	Kirat	
<b>Married</b>	24 (10.1)	19 (8.0)	185 (77.7)	10 (4.2)	238 (100.0)
<b>Unmarried</b>	4 (4.7)	4 (4.7)	74 (86.0)	4 (4.7)	86 (100.0)
<b>Total</b>	<b>28</b> <b>(8.6)</b>	<b>23</b> <b>(7.1)</b>	<b>259</b> <b>(79.9)</b>	<b>14</b> <b>(4.3)</b>	<b>324</b> <b>(100.0)</b>

**Source:** Field Survey, 2023.

Table 1 shows that, of the total 238 married respondents, the majority identified as “Hindu” (77.7 percent), while the smallest group was “Kirat” (4.2 percent). Among the unmarried respondents, most of them were “Hindu” (86.0 percent), with smaller proportion identifying with other religions (7.4 percent). Overall, the majority of respondents, identified as “Hindu” (79.9 percent) followed by “Buddhist” (8.6 percent), “Christian” (7.1 percent), and “Kirat” (4.3 percent). This finding highlights the strong prevalence of Hinduism among the respondent, both in terms of marital status and religious affiliation, particularly among the unmarried population.

**Source:** Field Survey, 2023.

Table 1 shows that, of the total 238 married respondents, the majority identified as “Hindu” (77.7 percent), while the smallest group was “Kirat” (4.2 percent). Among the unmarried respondents, most of them were “Hindu” (86.0 percent), with smaller proportion identifying with other religions (7.4 percent). Overall, the majority of respondents, identified as “Hindu” (79.9 percent) followed by “Buddhist” (8.6 percent), “Christian” (7.1 percent), and “Kirat” (4.3 percent). This finding highlights the strong prevalence of Hinduism among the respondent, both in terms of marital status and religious affiliation, particularly among the unmarried population.

### Living Arrangement

The respondents were asked about their living arrangements to determine whether they dwelled in their own home. If they did not, they were categorized living in rented accommodations or other arrangements, which could potentially impact their livelihood.

**Table 2:**  
**Distribution of Respondents by living in their own house**

Living in their own house	No.	Percent
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Yes	34	10.5
No	290	89.5
<b>Total</b>	<b>324</b>	<b>100.0</b>
<b>Situation of Living Arrangement</b>	<b>No.</b>	<b>Percent</b>
I am living alone in a relative house	7	2.4
My family & I live in a relative house	21	7.2
I live alone in a rent	12	4.1
My family & I live in a rent	200	69.9
Land is taken in a lease & living with family	45	15.5
I live in my friend's house	5	1.7
Total	290	100.0

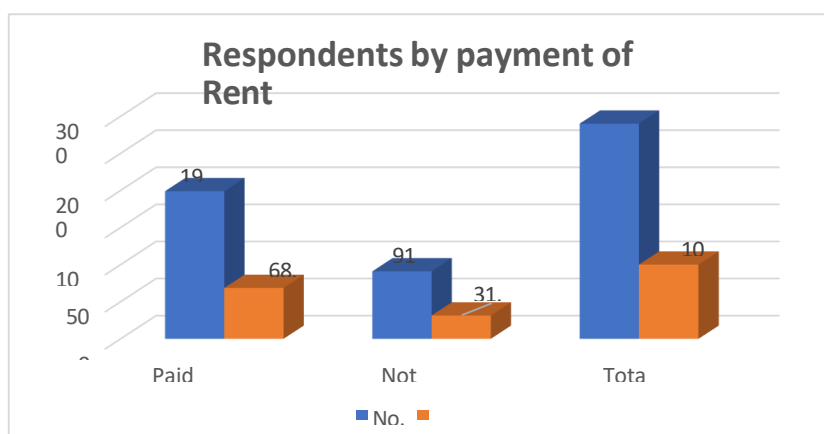
**Source:** Field Survey, 2023.

The majority of the respondents (89.5 percent) reported not living in their own homes, with only a small proportion (10.5 percent) living in their own houses. Among the 290 respondents who indicated they do not own a home, the largest group (69.9 percent) stated, "My family & I live in a rented house" followed by "Land is taken on lease & living with family" (15.5 percentage), "My family & I live in a relative's house" (7.2 percent), "I live alone in a rented house" (4.1 percent), "I am living alone in a relative house" (2.4 percent) and "I live within my friend's house" (1.7 percent) (Table 2). This result shows that financial instability could be a significant concern, particularly during economic difficulties like the COVID-19 pandemic. Those who do not own a home may face increased vulnerability during crises, with the added financial burden of rental payments potentially exacerbating stress.

#### **Payment of the Rent Regularly During Pandemic**

The majority of the respondents (89.5 percent) reported not living in their own homes. They were asked whether they paid rent regularly and, if not, what actions they took regarding their rent payment.

**Figure 1: Respondents by the payment of the Rent regularly during the Pandemic**



**Source:** Field Survey, 2023.

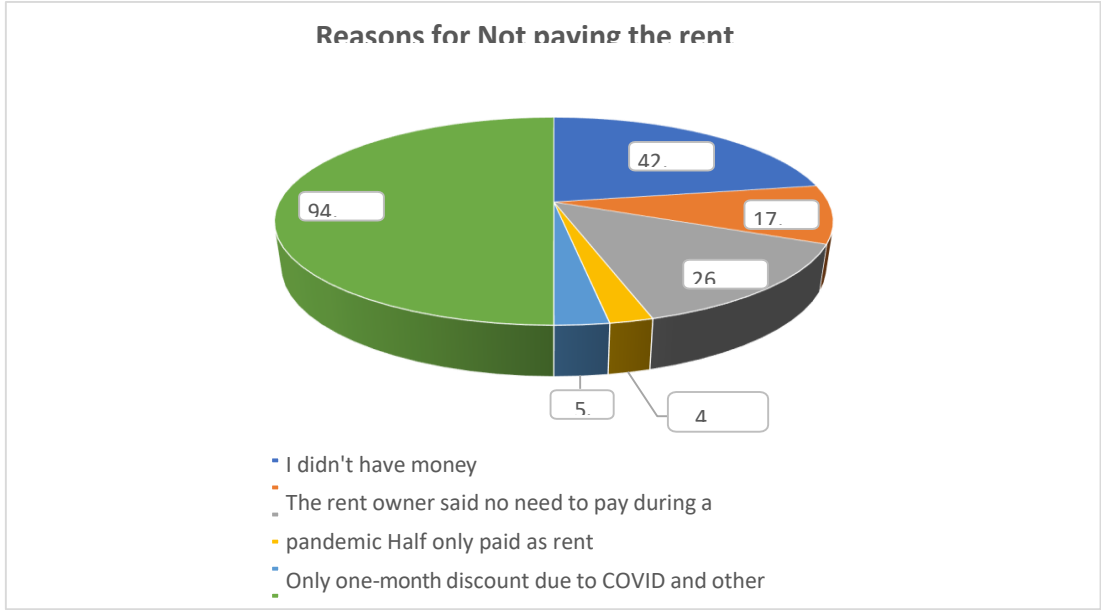
Among the 290 respondents who reported not living in their own homes, they were asked whether they paid rent regularly. Figure 1 shows that the majority of respondents (68.6 percent) paid rent regularly, followed by those who did not paid rent (31.4 percent). This highlights the widespread nature of renting, which can significantly impact financial planning and long-term security. The financial challenges during the pandemic were particularly pronounced, as nearly

a third of respondents struggled to pay rent regularly. This likely contributed to increased economic insecurity, potentially forcing families to make difficult decisions or rely on external support networks.

Reason for not paying the Rent Regularly

It is important to understand the reasons behind respondents' irregular rent payments. Thus, the respondents were asked about the regularity of their rent payments to gain insight into their economic status. The result is presented in the table:

Figure 2:  
Reasons for not paying the rent regularly



Source: Field Survey, 2023.

Figure 2 shows that, of the total 94 respondents who reported not paying rent regularly, the largest group (44.7 percent) cited "I didn't have money" as the primary reason followed by "Half only paid as rent"(27.7 percent), "Rent owner said no need to pay during such pandemic" (18.1 percent), "Due to living in relatives' house" (5.3 percent) and "Only one-month discount due to COVID & other months paid" (4.3 percent). The most common reason for not paying rent was the financial hardship, reflecting the broader economic challenges faced by the respondents during the pandemic. Additionally, the fact that some respondents received rent forgiveness or postponed payments (18.1 percent) suggests a degree of flexibility in landlord-tenant relationships during the crisis, potentially indicating the role of communal support systems in helping individuals navigate economic difficulties.

Professional Status	No.	Percent
Changed	99	30.6
No change/same	225	69.4
Total	324	100.0



Reason for changing profession	No.	Percent
The occupation I had couldn't meet my basic needs.	11	11.1
Due to the COVID pandemic, my work was shut down, and I had no job	53	53.5
No income was generated by the previous occupation	4	4.0
No work was found	30	30.3
I was overseas (out of the country)	1	1.0
Total	99	100.0

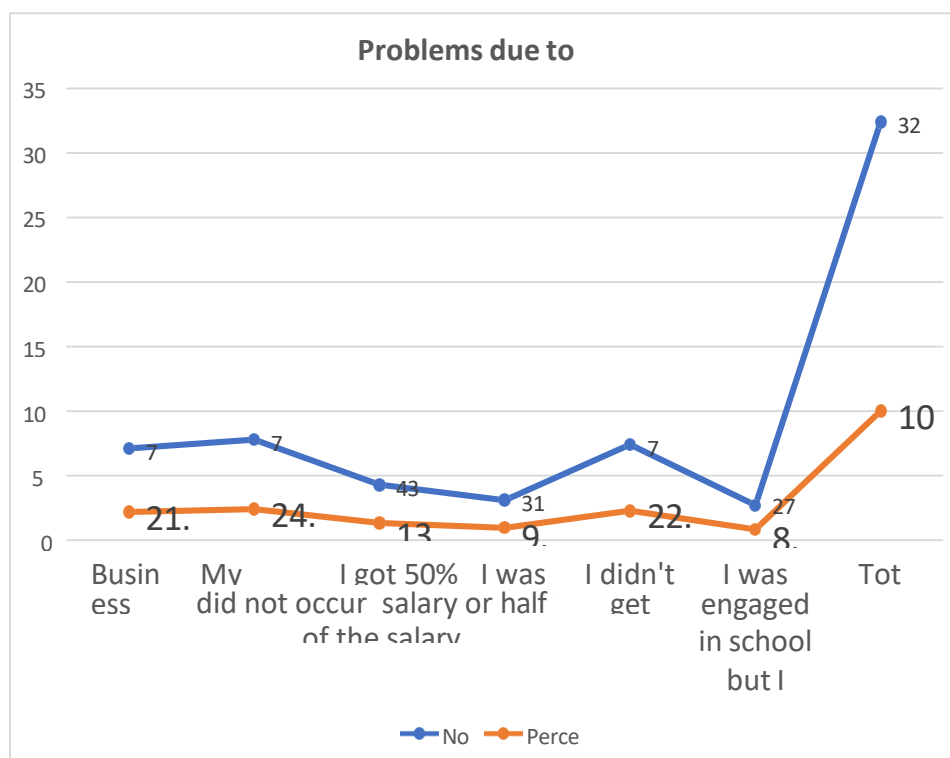
**Source:** Field Survey, 2023.

Most respondents (69.4%) reported that they had not changed their profession, while over one-fifth (30.6 percent) indicated that they had. Among those who reported changing their profession, the most common reason was “Due to the COVID pandemic, my work was shut down, and I had no job” (53.5 percent) followed by “No work was found” (30.3 percent), “The occupation I had couldn't meet my basic needs” (11.1 percent), “No income was generated by the previous occupation” (4.0 percent) and the least “I was overseas (out of the country) (1.0 percent) respectively (Table 3). The significant profession shifts of more than 30 percent highlight the considerable impact of the pandemic on employment. Many respondents were forced to adapt, likely taking on new types of work or part-time jobs due to business closure and disruptions to existing employment. This points to a major shift in labor dynamics during the pandemic.

### **Status of Business, Occupation, Sales of Agricultural Production, Employment**

During the pandemic, the expected disruptions in business transactions, agricultural production, and employment did not occur to the extent anticipate. To gain a deeper understanding of the challenges faced, the respondents were asked about the problems they experienced in their business, agricultural production, employment status, and other related areas. The results are presented below:

**Figure 3:**  
**Problems due to COVID-19**



**Source:** Field Survey, 2023.

Figure 3 shows that of the total respondents, the most common issue reported was “My business did not occur” (24.1 percent) followed by “I didn’t get work” (22.8 percent), “Business lowered” (21.9 percent), “I got 50 percent salary or half of the salary” (13.3 percent), “I was expelled from work” (9.6 percent) and “I was engaged in the school but didn’t get a salary from the school” (8.3 percent). This finding emphasize the widespread disruption of businesses and job markets during the pandemic, presenting significant challenges for respondents. The inability to find work or generate income underscores the severe economic difficulties faced by many, leading to financial distress for individuals during this period.

### Health Problems and its Types during the Pandemic

The respondents were asked whether they experienced any health problems during the pandemic period. Those who reported health problems were further asked about the types of health issues they encountered. The results are presented below:

The respondents were asked whether they experienced any health problems during the pandemic period. Those who reported having health problems were further asked about the types of health issues they encountered. The results are presented below:



**Table 4:**  
**Distribution of Respondents by health problem and its types**

Health Problem	No.	Percent
Yes	206	63.6
No	118	36.4
<b>Total</b>	<b>324</b>	<b>100.0</b>
<b>Types of Health Problems</b>		
I suffered from coronavirus and became very difficult	153	74.3
I suffered from other diseases	51	24.8
My wife suffered from coronavirus and became so difficult	2	1.0
<b>Total</b>	<b>206</b>	<b>100.0</b>

**Source:** Field Survey, 2023.

Table 4 shows that, of the total 324 respondents, the majority (63.6 percent) reported experiencing health problems, while the remaining (36.4 percent) reported no health issues. Among those who reported health problems, the most common issue was "I suffered from coronavirus and became very difficult" (74.3 percent) followed by "I suffered from other diseases" (24.8 percent) and "My wife suffered from coronavirus and become so difficult" (1.0 percent). The overwhelming majority of respondents who suffered from COVID-19 highlights the severe health impact of the pandemic. This suggests that health systems may have been stretched, as most respondents were directly affected by the virus.

#### **Place of Recovery of Health Problem**

The respondents were asked about the health problem they experienced, where they received treatment for these health issues, how they managed the financial aspects of their health healthcare. The results are presented below:

**Table 5: Distribution of Respondents by Place of Recovery of Health Problem and management of money for treatment**

Recovery Place	No.	Percent
Home or room	113	54.9
Hospital/Clinic	93	45.1
<b>Total</b>	<b>206</b>	<b>100.0</b>
<b>Management of money for Treatment</b>		
By self-managing money for health expenditures	71	76.3
Managed by an Organization or institution	9	9.7
Relatives or friends	12	12.9
Half money by self & half money by the government	1	1.1
<b>Total</b>	<b>93</b>	<b>100.0</b>

**Source:** Field Survey, 2023.

Among the respondents who reported experiencing health problems during the pandemic, 54.9 percent stated that they managed their health issues by staying at home or in their rooms, while the remaining 45.1 percent sought treatment at a hospital or clinic. Those who went to a hospital or clinic were further asked how they manage the financial aspect of their healthcare. The majority (76.3 percent) reported that they self-managed their money for health expenditure, followed by support from "Relatives or friends" (12.9 percent), "Managed

by organization or institution' (9.7 percent), and only 1.1 percent reported "Half money by self & half money by government".

### Opinion about Food saving

The respondents were asked for their opinions on whether food items should be saved for future consumption. The responses are presented in the table below:

**Table 6:**  
**Distribution of Respondents by Opinion of Saving Food Items**

<b>Saving Status</b>	<b>No.</b>	<b>Percent</b>
Yes	284	87.7
No	40	12.3
<b>Total</b>	<b>324</b>	<b>100.0</b>
<b>Reasons for Saving Status</b>		
Saved food can be used for future	173	60.9
Sharing food with others to earn purity	33	11.6
Saved food can be used again for the future for ourselves	78	27.5
<b>Total</b>	<b>284</b>	<b>100.0</b>
<b>Reasons for No Saving Status</b>		
I don't have a place to save the consumption of food	14	35.0
What will happen by saving, buying, eating	11	27.5
When needed then at that time I will save the consumption of Food	15	37.5
<b>Total</b>	<b>40</b>	<b>100.0</b>

**Source:** Field Survey, 2023.

The majority of respondents (87.7 percent) believed that food items should be saved for consumption while a small portion (12.3 percent) felt there was no need to save food. Among those who supported saving food, the most common reason given "Save food can be used for future" (60.9 percent) followed by "Saved food can be used again for future for ourselves" (27.5 percent) and 'Sharing food to others for earning purity" (11.6 percent). on the other hand, those who opposed saving food cited reasons such as "When needed then at that time I will save the consumption food" (37.5 percent), "I don't have a place to store the food" (35.0 percent) and "What will happen by saving? Just buy and eat" (27.5 percent). The high percentage of respondents favoring saving may reflect concerns about potential future shortages, possibly exacerbated by the uncertainty caused by the pandemic. However, the responses from those who do not save food highlight practical challenges, such as limited storage space or the immediate need for consumption. The findings suggest that while most respondents are mindful of future shortages, others face logistical or personal constraints in implementing food-saving practices.common during uncertain times like a pandemic. However, those who don't save food likely face practical challenges such as a lack of storage space or the need to consume food immediately.

### Help and Types of Help Done by Organizations

The respondents were asked whether they had received aid from any organizations during the pandemic period. Those who reported receiving assistance were further asked to

identified the organizations that helped them and specify the type of help provided. The results are presented below:

**Table 7:**  
**Distribution of Respondents through the help**

Help Status	No.	Percent
Yes	121	37.3
No	203	62.7
<b>Total</b>	<b>324</b>	<b>100.0</b>
<b>Helping Body</b>		
INGOs/NGOs/Organization	48	39.7
Government bodies	56	46.3
Relatives or friends	17	14.0
<b>Total</b>	<b>121</b>	<b>100.0</b>
<b>Types of Help</b>		
Cash given	8	6.6
Food provided	88	72.7
Clothes and utensils	5	4.1
Providing soap, masks, and sanitizers for the health aspect	19	15.7
Others	1	0.8
<b>Total</b>	<b>121</b>	<b>100.0</b>

**Source:** Field Survey, 2023.

Of a total of 324 respondents, 62.7 percent reported not receiving any assistance from organization, while 37.3 reported receiving aid during the pandemic period. Among those who received help, the majority 46.3 percent identified "Government bodies" as the primary source of aid, followed by "INGOs/NGOs/Organizations" 39.7 percent, and a smaller proportion received help from "Relatives or friends" 14 percent. In terms of the types of assistance provided, most of the respondents (72.7 percent) received "Food" followed by " soap, mask, sanitizers for health aspect" (15.7 percent), "Cash given" (6.6 percent), "Clothes and utensils" (4.1 percent) and a small proportion (0.8%) reported receiving "others" forms of assistance. These findings indicate that food aid was the most common form of support provided, reflecting the importance of addressing basic survival needs during the crisis.

### **Health Problems and its Types during the Pandemic**

The respondents were inquired about any health issues they encountered during the pandemic period. Those who indicated experiencing health problems were subsequently asked to specify the types of health issues they faced. The result is presented below:

**Table 8:**  
**Distribution of Respondents by health problem and its types**

Health Problem	No.	Percent
Yes	206	63.6
No	118	36.4
<b>Total</b>	<b>324</b>	<b>100.0</b>

**Types of Health Problems**

I suffered from coronavirus and became very difficult	153	74.3
I suffered from other diseases	51	24.8
My wife suffered from coronavirus and became so difficult	2	1.0
<b>Total</b>	<b>206</b>	<b>100.0</b>

**Source:** Field Survey, 2023.

Table 8 reveals that of the total 324 respondents, the majority (63.6 percent) reported experiencing health problems, while the remaining (36.4 percent) indicated they had no health issues. Among those who reported health problems, the most common respond was "I suffered from coronavirus, which became very difficult" (74.3 percent) followed by "I suffered from other diseases" (24.8 percent), and "My wife suffered from coronavirus and become so difficult" (1.0 percent).

**Place of Recovery of Health Problem**

The respondents were asked about the health problems they experienced, where they received treatment, and how they managed the financial aspects of their healthcare. The result is presented below:

**Table 9: Distribution of Respondents by Place of Recovery of Health Problem and management of money for treatment**

<b>Recovery Place</b>	<b>No.</b>	<b>Percent</b>
Home or room	113	54.9
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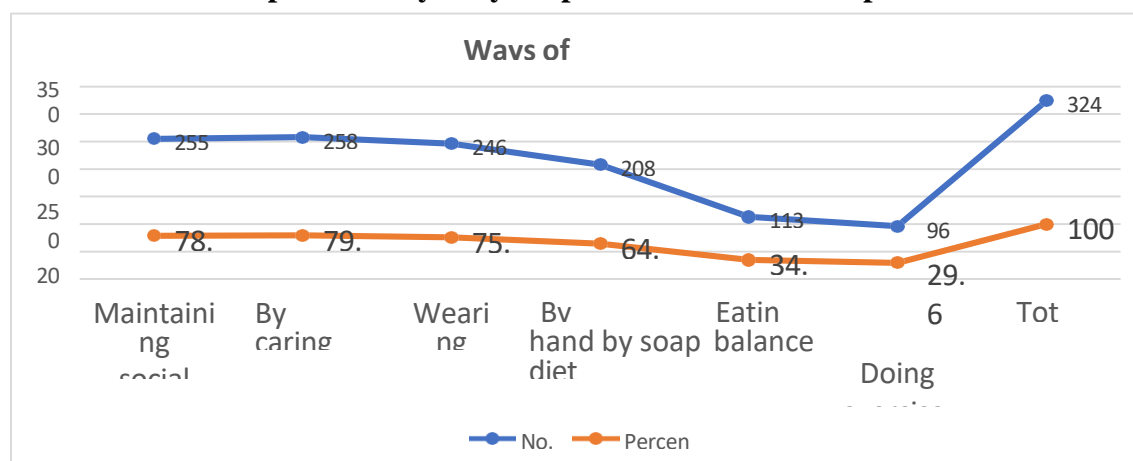
**Source:** Field Survey, 2023.

Among the respondents who reported health problems during the pandemic, 54.9 percent stated that they stayed at home or in a room for their recovery, while the remaining (45.1 percent) sought treatment at a hospital or clinic. Those who visited a clinic or hospital for treatment were further asked how they managed the financial costs of their healthcare. The majority of respondents (76.3 percent) reported that they covered the expense by self-managing their money, followed by support from "relatives or friends" (12.9 percent), 'organization or institutions' (9.7 percent), and a combination of 'self and government funding ' (1.1 percent), respectively.

**Ways to prevent from COVID pandemic**

The respondents were asked about the measures they took to protect themselves from the COVID 19 pandemic. The results are presented below:

**Figure 4:**  
**Distribution of Respondents by Ways to prevent from COVID pandemic**



**Source:** Field Survey, 2023.

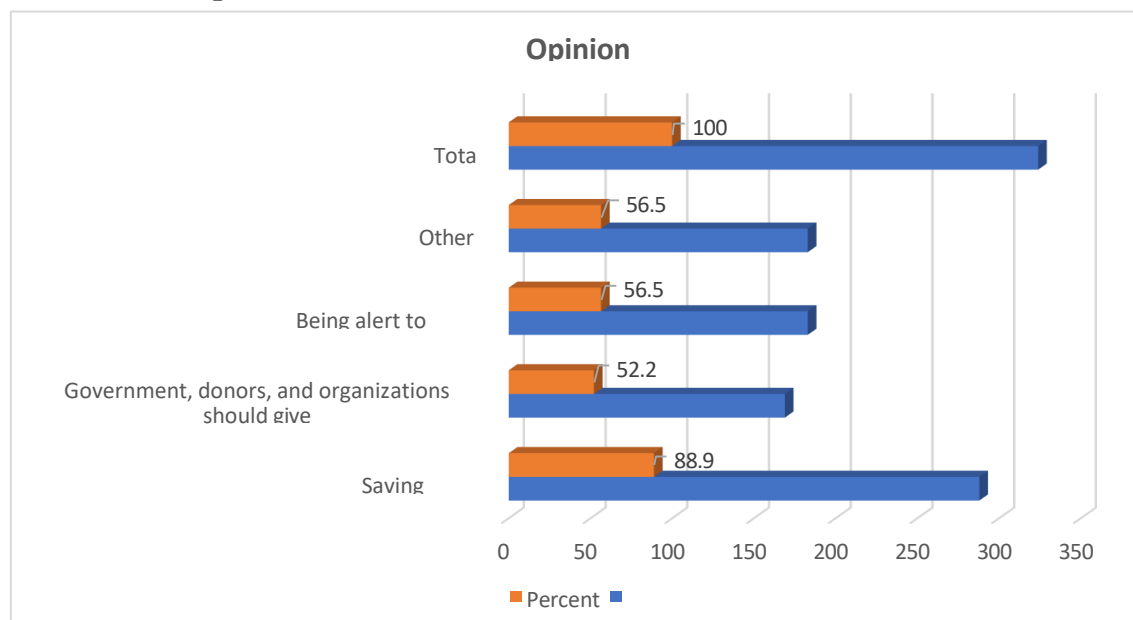
\*Percentage values may exceed 100 due to multiple responses.

Figure 4 shows that the most common measures taken to prevent COVID-19 were 'Caring for one's health' (79.6 percent), followed by 'Maintaining social distance' (78.7 percent), 'Wearing a mask' (75.9 percent), 'Washing hands properly with soap' (64.2 percentage), 'Eating balanced diet' (34.9%), and 'Doing exercise, yoga or meditation' (29.6 percent), ranked from first to sixth respectively.

#### **Opinion to make Economic and Livelihood aspects stronger during a pandemic**

The respondents were asked to provide their opinions on strengthening the economic aspect and coping with livelihood challenges to prevent issues during future pandemic conditions. The result is presented below:

**Figure 5:**  
**Distribution of Respondents by Opinion to strengthening economic and coping problems of livelihood aspect**



**Source:** Field Survey, 2023.

\*Percentage may exceed 100 due to multiple responses.

Figure 5 shows that most respondents emphasized the importance of 'saving money' (88.9 percent), followed by 'being alert with disease' (56.5 percent), 'Others' (56.5 percent), and 'government, donors, and organizations should provide protection and help' (52.2 percent) as strategies for coping with challenges during a pandemic. The majority of respondents believed that saving money would be a key way to strengthen economic resilience and address livelihood issues. The result highlights the widespread view that financial preparedness is crucial for navigating economic disruptions.

### Multinomial Logistic Regression Analysis (MLR)

Multinomial Logistic Regression (MLR) is used to predict outcomes when the dependent variable has more than two categories. It estimates  $k-1$  equations in relation to a reference category. The log odds of being in category  $j$  compared to the reference category are modeled as follows:

$$\ln \left( \frac{P(Y=j)}{P(Y=reference)} \right) = \beta_{j0} + \beta_{j1}X_1 + \beta_{j2}X_2 + \dots + \beta_{jp}X_p$$

Where:  $P(Y=j)$ : Probability of category  $j$ ,  $P(Y=reference)$ : Probability of the reference category,  $\beta_{j0}$ : Intercept for category  $j$  and  $\beta_{j1}, \dots, \beta_{jp}$ : Coefficients for predictors  $X_1, \dots, X_p$ .

Many businesses and workers experienced revenue losses due to lockdowns and decreased consumer spending, making this a crucial indicator of economic disruption. Religion can influence economic activities and resilience through socio-cultural practices, while marital status can impact financial dynamics, with married individuals potentially benefiting from dual incomes or support networks. To assess whether the impact of COVID-19 differed by marital status or religion, these factors were considered as independent variable. The results are presented below:

### Model Summary related to dependent and independent variables

#### Model Fitting Information

Model	Model Fitting Criteria		Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.	
Intercept Only	203.815				
Final	89.538	114.278	20	.000	

The Intercept Only Model has a log-likelihood of 203.815, while the Final Model has a log-likelihood of 89.538, indicating an improved fit. The Chi-Square value of 114.278 with a p-value of 0.000 suggests that the final model significantly enhances the overall fit compared to the Intercept-Only Model.

#### Pseudo R-Square

Cox and Snell	.297
Nagelkerke	.307
McFadden	.103

The pseudo-R-square values reflect the model's explanatory power: Cox and Snell (0.297) account for 29.7 percent of the variation, Nagelkerke (0.307) explains 30.7 percent, and McFadden (0.103) explains 10.3%. In summary, the model explains a moderate amount of variation, with Nagelkerke providing the highest estimate of explanatory power.



### Likelihood Ratio Tests

Effect	Model Fitting Criteria -2 Log Likelihood of Reduced Model	Likelihood Ratio Tests Chi-Square	df	Sig.
Intercept	89.538 <sup>a</sup>	.000	0	.
q8religion	159.966	70.428	15	.000
q5marital	132.123	42.586	5	.000

The Likelihood Ratio Test revealed that the intercept does not improve the model fit (Chi-Square = 89.538,  $p=0.000$ ). However, both religion and marital status significantly enhance the model's fit. Specifically, religion (Chi-Square = 70.428,  $p = 0.000$ ) and marital status (Chi-Square = 42.586,  $p = 0.000$ ) each contribute meaningfully, indicating their importance in explaining the variation in the model.

The problem due to COVID-19 was categorized into three variables: "Deduction in business", "Received 50% salary or half of the salary", and "Expelled from work". These were tested in relation to religion and marital status to examine the effect of each factor on the outcomes.

Problems due to COVID-19	B	df	Sig.	Exp(B)	95% Confidence Interval for Exp(B)	
					Lower Bound	Upper Bound
Deduction in business	Intercept	1	.864			
	Hindu	1	.586	1.518	.338	6.821
	Buddhist	1	.378	3.121	.249	39.108
	Christian	1	.064	.088	.007	1.149
	Kirat(ref)	0	.	.	.	.
	Married	1	.064	2.953	.937	9.310
	Unmarried	0	.	.	.	.
	Unmarried(ref)	0	.	.	.	.
I got 50% salary	Intercept	1	.000			
	Hindu	1	.000	126827578.975	37286933.525	431390658.011
	Buddhist	1	.999	7.877	.000	.c
	Christian	1	.	136751367.538	136751367.538	136751367.538
	Kirat(ref)	0	.	.	.	.
	Married	1	.856	1.111	.357	3.455
	Unmarried(ref)	0	.	.	.	.
	Unmarried(ref)	0	.	.	.	.
I was expelled	Intercept	1	.000			
	Hindu	1	.	105005664.765	105005664.765	105005664.765
	Buddhist	1	.999	9.440	.000	.c
	Christian	1	1.000	.844	.000	.c
	Kirat(ref)	0	.	.	.	.
	Married	1	.002	.158	.048	.517
	Unmarried(ref)	0	.	.	.	.
	Unmarried(ref)	0	.	.	.	.

### **Interpretation Deduction in Business:**

Religion: Hindus ( $\text{Exp(B)} = 1.518$ ), Christians ( $\text{Exp(B)} = 0.088$ ), and Buddhists ( $\text{Exp(B)} = 3.121$ ) show varying likelihoods compared to Kirat, but none are statistically significant.

Marital Status: Married individuals ( $\text{Exp(B)} = 2.953$ ) are nearly 3 times more likely than unmarried individuals to report business deductions, but the result is marginally not significant ( $p = .064$ ).

### **I Got 50% Salary:**

Religion: Hindus ( $\text{Exp(B)} = 126,827,579$ ) and Christians ( $\text{Exp(B)} = 136,751,368$ ) are significantly more likely than Kirat ( $p < .001$ ). Buddhists ( $\text{Exp(B)} = 7.877$ ) show no significant difference.

Marital Status: Married individuals ( $\text{Exp(B)} = 1.111$ ) show no significant difference ( $p = .856$ ).

### **I Was Expelled from Work:**

Religion: Hindus ( $\text{Exp(B)} = 105,005,665$ ) and Buddhists ( $\text{Exp(B)} = 9.440$ ) are more likely, while Christians ( $\text{Exp(B)} = 0.844$ ) are less likely than Kirat, but none are significant.

Married individuals are less likely to be expelled from work compared to unmarried individuals. B value ( $-1.847$ ) shows this negative relationship, meaning being married reduces the likelihood. The odds of expulsion are much lower (about 16% of unmarried individuals, as per  $\text{Exp(B)} = 0.158$ ), and this result is statistically significant ( $p = .002$ ).

### **Discussion**

The COVID-19 pandemic had a significant impact on food utilization in Nepal, mainly due to challenges such as food sanitation, contamination, and food spoilage (Adhikari et al., 2021). The lack of standardized food safety procedures for handling food resulted in contamination from frequent handling by individuals. Furthermore, reduced food availability and access forced people to purchase whatever products were available in the market, which often violated food safety standards (Adhikari et al., 2021). Economically, Nepal experienced a substantial decline in revenue collection by 7.45 percent during the first wave of the pandemic, alongside a growing trade imbalance (Joshi et al., 2021). The country's Gross Domestic Product (GDP) growth rate fell drastically to 0.2 percent in the fiscal year 2019/20, compared to 7 percent in the previous year (Magar et al., 2021). The pandemic pushed 31.2 percent of the population into poverty (Rasul et al., 2021). Despite the introduction of the Right to Food and Food Sovereignty Act in 2018, which aligned with Sustainable Development Goal (SDG) 1 and SDG 2, the policy failed to address crises like the COVID-19 pandemic. The pandemic has exacerbated food insecurity in the country, leading to disruptions in food availability and shortages (Joshi et al., 2021).

The onset of the COVID-19 pandemic severely disrupted food access, particularly for low-income families, daily wage workers, and individuals who lost their jobs, as their financial capacity shrank and food stocks were insufficient (Adhikari et al., 2021). In major cities like Kathmandu, there was a sharp decline in the demand for vegetables, fruits, milk, and meat products due to reduced purchasing power and mobility restrictions (Joshi et al., 2021).

Sohel et al. conducted a qualitative study on COVID-19's impact on informal migrants in Bangladesh. The study revealed that respondents were severely impacted by income and job losses during the lockdown, with many facing starvation and related hardships. Survival strategies included taking loans, cutting expenses, consuming less food, selling assets, seeking support from relatives and neighbors, and relying on government relief.

Sohel et al. conducted a qualitative study on the impact of COVID-19 on informal migrants in Bangladesh. The study highlighted the severe impact of income and job losses during the lockdown, leading many respondents to face starvation and other related hardships. To cope with these challenges, individuals employed various survival strategies, such as taking loans, cutting expenses, consuming less food, selling assets, seeking support from relatives and neighbors, and relying on government relief.

This study revealed that 30.6 percent of individuals were forced to change their professions during the COVID-19 pandemic due to workplace closures and the insufficiency of their previous jobs to meet basic needs. A significant majority of respondents (87.7 percent) recognized the importance of saving food for future use, reflecting a widespread understanding of its necessity. Furthermore, the study found that (62.7 percent) of respondents did not receive help from any organizations, while nearly two-fifths (37.3 percent) reported receiving assistance from entities such as government bodies, INGOs/NGOs, and relatives. The most common form of support was food provision.

A study conducted by Thanh & Duong (2022) involving 91 surveys and 15 interviews titled "The COVID-19 pandemic and the Livelihood of a vulnerable population: Evidence from Women Street Vendors in Urban Vietnam Vendors" revealed significant business losses and limited coping strategies, with efforts focused on basic survival.

This study noted that 24.1 percent of respondents reported no business activity, 22.8 percent faced a lack of work, 21.9 percent experienced reduced business, and 13.3 percent had their salaries halved. Additionally, 63.6 percent of respondents reported experiencing health issues during the pandemic, with 45.9 percent recovering at home. Among those who sought treatment, most (76.3 percent) managed their health expenses independently.

## **Conclusion**

This paper examines the socioeconomic and health impacts of the COVID-19 pandemic on respondents. The majority of participants (79.9 percent) identified as Hindu, and 30.6 percent reported changing their professions due to job losses caused by the pandemic. A significant portion (89.5 percent) lived in rented accommodations, with 68.6 percent managing to pay rent regularly, although financial challenges were apparent. Food security emerged as a concern, with 87.7 percent emphasizing the importance of saving food for future use. Health issues, including COVID-19, affected 63.6 percent of respondents, with most covering treatment costs independently. Organizational assistance was limited, with 37.3% receiving help, primarily in the form of food. Preventive measures, such as hygiene maintenance, mask wearing, and saving money, were widely acknowledged. The multinomial logistic regression analysis showed that the model improved significantly, with marital status and religion as key predictors. Married individuals were less likely to be expelled from work ( $\text{Exp}(B) = 0.158$ ,  $p = .002$ ), while Hindus and Christians were more likely to report receiving 50% of their salary ( $p < .001$ ). Religion did not significantly affect business deductions or job expulsions.

The study recommends that targeted programs be designed to assist married individuals in preserving job security and mitigating business losses. Economic recovery efforts should focus on addressing disparities, ensuring equitable opportunities for underrepresented religious groups. Policies must be implemented to protect vulnerable workers from salary reductions and

job losses, while enhanced social safety nets can offer immediate relief. Additionally, inclusive crisis management strategies should take into account diverse socio-economic profiles to reduce vulnerabilities and strengthen resilience in future emergencies.

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### Competing interests

The authors declare that they have no competing interests.

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