

The Impact of COVID-19 Pandemic on the Livelihood of Informal Sector Workers in Kerala

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Abstract

The global economy has been facing severe challenges in recent years, primarily due to the sudden outbreak of the COVID-19 pandemic. The COVID-19 pandemic triggered a deeper and more widespread economic and social disaster than any other pandemic since the 1900s, impacting virtually every sector of the economy and its workforce. The situation was particularly alarming for low-paid and semi-skilled informal workers, as the informal sector has become one of the hardest-hit sectors. With the emergence of the pandemic and consequent social distancing norms and containment measures, informal workers were deprived of their livelihood options. In this context, the present study aims to examine the impact of COVID-19 pandemic on the livelihood of informal workers in Kerala. The study employed a descriptive research design. The sample size and study area were determined with the assistance of the E-Shram registration. The present study is based on data collected from 150 informal workers in the Chelakkara Grama Panchayat in Thrissur Kerala. The fifty samples were randomly selected from each category of workers and sample includes three categories of vulnerable informal workers: home-based domestic workers, daily wage construction workers, and workers in small-scale manufacturing establishments. The COVID-19 pandemic has brought significant changes to the lives and livelihoods of workers in the informal sector in Chelakkara. Many workers faced challenges in reaching their workplaces due to the lack of transportation facilities, leading to changes in consumption patterns, income levels, and employment patterns. Strong government intervention is necessary to mitigate the crisis caused by the pandemic.

Keywords: COVID-19 pandemic, Kerala, Informal workers, Livelihood, Vulnerability.

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1. Introduction

The global economy has been facing severe challenges in recent years, primarily due to the sudden outbreak of the COVID-19 pandemic. The disease was first reported in December 2019 in Wuhan, China, and began to impact the global economy (Kesar et al., 2021). In India, the first case of COVID-19 was reported on January 30th, 2020, in Thrissur district of Kerala. In order to control the rapid spread of the coronavirus, the central government enforced a nationwide lockdown (Janatha curfew) as a mass safety measure on March 25th, 2020. Initiatives such as physical distancing, mask-wearing, and hand sanitization were strictly implemented within the country as precautionary measures. The pandemic triggered a deeper and more widespread economic and social disaster than any other pandemic since the 1900s, impacting virtually every sector of the economy and its workforce. Although it started as a health crisis, it turned out to be an economic crisis and humanitarian crisis.

Owing to the containment measures associated with the pandemic, many workers were compelled to work from home, especially those in the formal or organized sectors (Hodder, 2020). However, the situation for informal sector workers was markedly different, with many losing their daily income. In low- and middle-income countries, where a large proportion of these workers, comprising 61% of the global workforce, are employed, social protection or safety nets are inadequate. The situation was particularly alarming for low-paid and semi-skilled informal workers, as the informal sector has become one of the hardest-hit sectors. Nearly 2 million individuals constituting around 62 percent of total workers across the globe are relying on the informal economy. Informal work accounts for 90% of overall employment in low-income nations and 67% in middle-income countries.

According to the National Commission for Enterprises in the Unorganized Sector (2007), "the informal sector consists of those working outside the formal sector or household, excluding regular employment with social security benefits provided by employers and workers in the formal sector without any employment and social security benefits provided by employers." Employment in the informal sector is characterized by low wages, unsafe work environment, lack of social protection and excessive dependence on daily earnings for survival. Self-employed people and casual labourers are some important categories of informal workers. Indian economy's high dependence

on informality and absence of adequate social security net exacerbated the scale and intensity of the crisis. More than 90 percent of working population in India depends on the informal sector for their livelihood.

Any interruption of economic activities in a region instantaneously disrupts employment and earnings of those who are employed in the informal sector. Migrant labourers, particularly those who were unskilled or semi-skilled, were among the worst affected by the pandemic. Since many of these migrants worked in the informal sector, they were at risk of losing their jobs much sooner than their counterparts in the formal sector (Khanna, 2020). Many studies (Desphande and Ramachandran, 2020; Abraham, Basole, and Kesar, 2021) have pointed out the people with pre-existing vulnerabilities were worst affected by the pandemic.

In Kerala, the southernmost state in India, 37.8 percent of total workforces of 127 lakh (GOK, 2022) are self-employed and 27.7 percent were casual workers indicating that 65.5 percent of the total workforce in Kerala still works in the informal sector for their livelihood. As in the case of Indian economy, largest share of workers in the informal economy are self-employed and 90 percent of firms in Kerala come under the category of own account enterprises. Majority of the casual workers are working in small establishments without having adequate facilities. Gig and platform workers constitute an emerging segment of the informal labour market in the state. In comparison with the workforce employed in the formal sector, informal workers enjoy less privileges and protection. The COVID-19 has severely restricted informal workers' mobility from their dwellings. This situation adversely affected the activities of informal workers who worked in long distance places. Kerala lost three times as many manufacturing jobs as the rest of India, and the recovery rate has been the slowest (Kakrapudi, 2022). The lockdown had the most severe impact on self-employed and casual workers across all sectors of the Kerala economy. Due to a curfew-like circumstances, practically all informal sector activity were halted, with the exception of essential trading and agricultural operations. A significant number of people who had regular employment in the private sector lost their jobs (Prakash, 2020). With the emergence of the pandemic and consequent physical distancing norms and containment measures, informal workers were deprived of their livelihood options. The Covid has affected all sections of people, including street vendors, waste pickers, load workers, gig and platform

workers, construction workers, vegetable vendors etc in many ways. COVID has become a threat not only to their jobs but also to their lives and livelihood. People were unable to manage all the important aspects of life, such as children's education and marriage. The social life of the people of Kerala came to a standstill. It's not just the loss of jobs, it's the loss of quality of life. In this context, the present study aims to examine the impact of COVID-19 pandemic on the livelihood of informal workers in Kerala.

2. Objectives and Hypothesis of the Study

The important objectives of the study are as follows:

1. To examine the impact of the COVID-19 pandemic on the lives and livelihoods of informal sector workers.
2. To explore how far the government programmes have been successful in alleviating challenges faced by the informal worker during the pandemic.

The study is based on the following hypotheses:

- There is an association between employment loss during the pandemic and reduction in income.
- There is an association between employment loss during the pandemic and reduction in consumption.
- There are gender-wise differences in the impact of COVID-19 on employment.
- There is an association between the educational qualification of respondents and awareness about government support.

3. Data and Methodology

3.1 Field Survey

The study employed a descriptive research design. The sample size and study area were determined with the assistance of The E-Shram registration, which is the National Database of Unorganized Workers developed by the Ministry of Labour and Employment. Among various districts in Kerala, Thrissur district where COVID appeared for the first time in India was selected for a detailed study. Thrissur ranked 4th in E-Shram registration. Within the district, since around 5000 informal workers are registered in the E-Shram portal from the Chelakkara Grama panchayat, it was selected as the study area. Chelakkara Grama Panchayat is one of the ten most populous panchayats in Thrissur district. Chelakkara, comprising 22 wards, comes second in the

list of panchayats with the highest number of wards. Due to the restrictions imposed to contain the spread of COVID-19 and the lack of travel facilities, the researcher had to choose the nearby Chelakkara Grama Panchayat since it was convenient for the researcher to gather information from the informal workers. Among these 5000 workers a sample of 150 workers constituting 3 percent were selected for an in depth analysis. Hence, the present study is based on data collected from 150 informal workers in the Chelakkara Grama Panchayat.

The sample includes three categories of vulnerable informal workers: home-based domestic workers, daily wage construction workers, and workers in small-scale manufacturing establishments. Field surveys were conducted to gather primary data from respondents, and an interview schedule was developed by the researcher to collect the necessary data from workers. 50 samples were randomly selected from each category of workers. The researcher visited three small scale manufacturing industries in the area and collected information from a randomly selected sample of 50 workers. Relevant information was collected from a randomly selected sample of 50 construction workers from five working sites in Chelakkara Panchayat. In order to identify 50 home based domestic workers for data collection the researcher visited 20 higher income families who were employing home based workers and also approached the agents who assigned the domestic workers for the needy. Thus, the primary data collected from a sample of 150 informal workers belonging to the above mentioned three groups in the study area was used to examine the impact of COVID-19 on their livelihood. The period of field survey is from January to March 2022.

3.2 Model

Descriptive methods, including cross-tabulation, tabular and graphical presentations, were employed to understand the impact of COVID-19 on livelihood of the informal workers. The variables used were meaningfully correlated to infer findings, utilizing frequency distribution and percentage analysis. Analytical methods like Likert scale analysis, chi-square test, Kruskal-Wallis H test, Mann-Whitney U test, and Spearman rank correlation were utilized. These analytical tools were employed to delve deeper into the data and extract meaningful insights regarding the effects of COVID-19 on the livelihoods of informal workers.

Table 1: Ranking of likert scale

Description-1	Description-2	Ranking
Never	Not at all	1
Rarely	A little	2
Sometimes	Moderately	3
Often	Very much	4
Always	Extremely	5

The scale was developed following manner. To determine the minimum and the maximum of the likert scale, the scale range was calculated by $(5-4)/5$. By this method we get the least value of the scale that is $4/5=0.80$. The 0.80 is considered as the minimum value in the scale. By adding one in to this least value on the scale we get the range. Thus the scale structured as follows.

Table 2: Interval class for likert scale

Score	Interval Class	Difference
1	1.00-1.80	0.80
2	1.81-2.60	0.80
3	2.61-3.40	0.80
4	3.41-4.20	0.80
5	4.21-5.00	0.80

4. Limitation of the Study

This study on the impact of COVID-19 on the livelihood of the informal sector workers in Kerala has some limitations. One is the sample comprising 150 respondents is limited due to time constraints. The selected sample is limited only to the rural area because of the survey on Chelakkara Grama Panchayat. The survey could not be carried out in the municipalities or corporations in Thrissur district due to time constraints and restrictions imposed to curb the COVID-19 outbreak. Since the responses and challenges faced by informal sector workers may vary across the regions, we cannot do a general review based on the study conducted in only one Panchayat.

5. Results and Discussion

5.1 Socio-Economic and Demographic Characteristics of the Respondents

The data collected from a sample of 150 workers were used for analysis. In both construction and small-scale manufacturing, the proportion of females is lower, with female participation being lowest among workers in small-scale manufacturing industries (SSMI). Among the age groups, the highest number of individuals, representing 36% of the sample, falls within the age group of 35-45 years. Additionally, fifty-two people, comprising around 34.7% of respondents, are aged between 25 and 35. Interestingly, approximately 70% of the respondents are young people between the ages of 25 and 45, while only 29% of the sample population is above 45 years old. Regarding marital status, out of the total workers (N=150), out of the total respondents 17.33% were single, 73.3% were married, 3.33% were divorced, and 6% were widowers or widows. Among the single workers, 10 were home-based domestic workers, 9 were construction workers, and 7 were workers in small-scale industries. Out of the three groups of workers, 9.3% individuals are informal workers who are living a single life after marriage.

In terms of religious classification, the data show that 58.7% of workers belong to the Hindu religion, 18.7% belong to Christianity, and 22.7% are from the Muslim community. The figure indicates that the highest number of respondents belong to the Hindu religion, followed by the Christian and Muslim religions. The majority of informal workers are from the Hindu religion, with the remaining being from the minority community (41.3%). Regarding educational levels, the data reveals that 16% are illiterate or have not yet attended school, while 38.7% have completed only primary schooling. Additionally, 7.3% of respondents have completed high school, 12.7% have completed upper secondary education, and only 9.3% have attained a bachelor's degree. Approximately 71.3% of the respondents have only upper primary education or lower educational qualifications. In terms of family status, 60.6% of the respondents live in a nuclear family system, while 39.3% live in a joint family system. The nuclear family system is the most common among the informal sector workers surveyed.

5.2 Impact of COVID-19 on the Livelihood of the Informal Sector Workers

The major focus of the present study is on the impact of COVID-19 on variables like employment, consumption, saving, borrowing and wellbeing etc.

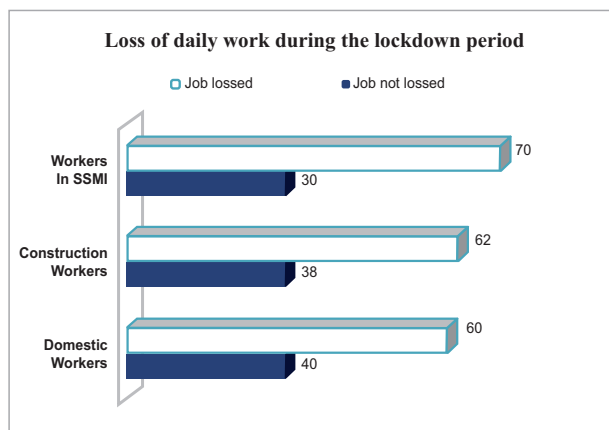


Figure 1: Loss of Daily Work During the Lockdown Period

Source: Field Survey (2022)

According to the survey out of the total workers, 64% respondents had lost their job during the period of the pandemic, and 36% respondents said they had no job loss in the time of the lock down. They revealed that lack of transportation facilities were the major reason for the loss of work during the COVID-19 lockdown. They trapped in the curfew and unable do the daily work and this would again lead to the reduction in income, consumption and their daily savings. Out of the total workers job loss was high in workers in the small scale manufacturing sector (70%) and less in domestic workers. From this, we can understand that there is less job loss among people doing domestic work and there is less job loss among other workers during the pandemic because it less risk of job loss as compared to other works.

Table 3: Association Between Job Loss and Reduction in Income (Cross Tabulation)

Employment loss	Reduction in Income		Total	χ^2 (P value)
	Income not reduced	Income reduced		
No loss of job	30 (20.00)	24 (16.00)	54 (36.00)	12.964 (0.000)
Loss of job	25 (16.70)	71 (47.30)	96 (64.00)	
Total	55 (36.70)	95 (63.30)	150 (100.00)	

$P^* < 0.05$, $P^{**} < 0.01$

Source: Field survey (2022)

The above table shows the impact of employment loss brought by the pandemic and subsequent lock down towards income reduction among the respondents. Around 63 percent of the respondents revealed that their income was reduced due to the lockdown. Rest of the respondents said that there is no income reduction. According to the test result, the p-value is <0.05 , which is statistically significant. Hence, the null hypothesis shows that there is no association between employment loss and reduction in income is rejected. So, there is an association between the employment loss during the pandemic and the reduction in income.

Table 4: Association Between Employment Loss and Reduction in Consumption

Loss of employment	Reduction in Consumption		Total	χ^2 (P value)
	Consumption Not reduced	Consumption reduced		
No loss of job	29 (19.30)	25 (16.70)	54 (36.00)	12.462 (0.00)
Job loss occurred	24 (16.00)	72 (48.00)	96 (64.00)	
Total	53 (35.30)	97 (64.70)	150 (100.00)	

Source: Field Survey (2022)

The association of employment loss due to the pandemic and the consumption of the respondents is depicted in above table 4. According to the test result, the p value is <0.05 which is statistically significant. Therefore, the null hypothesis is rejected. Hence, the results reveal that there is an association between the employment loss during the pandemic and the reduction in consumption of the respondents.

Table 5: Patterns of Income Changes in Lockdown Period

Pattern of Change in income in Lockdown period	Job Type			Total
	Domestic Workers	Construction Workers	Workers In SSMI	
No change	12 (24%)	8 (16%)	10 (20%)	30 (20%)
Increased	9 (18%)	7 (14%)	8 (16%)	24 (16%)
Decreased	29 (58%)	35 (70%)	32 (64%)	96 (64%)
Total	50	50	50	150 (100%)

Source: Field Survey (2022)

The Table 5 depicts the pattern of income changes in the lockdown period. 20% of respondents said they didn't have any change in their income from employment. 64% of the individuals indicated their income declined while the lockdown was in effect. Only 16% participants said they had noticed the increase. Within the group highest income reduction is experienced by construction workers. As compared to other workers low income reduction for domestic workers, explanation that given for this minor increment was they have engaged in additional income generating activities such as animal husbandry and other agricultural-related activities.

Table 6: Frequency of savings before and after lockdown

Frequency of savings before lockdown	Domestic Workers	Construction Workers	Workers in SSMI	Total
Daily	8 (16)	5 (10)	10 (20)	23 (15.3)
Weekly	30 (60)	20 (40)	24 (48)	74 (49.3)
Monthly	12 (8.00)	25 (50)	16 (32)	53 (35.3)
Total	50 (100)	50 (100)	50 (100)	150 (100)
Frequency of savings after lockdown	Domestic Workers	Construction Workers	Workers in SSMI	Total
Daily	0	1 (2)	3 (6)	4 (2.7)
Weekly	10 (20)	11 (22)	13 (26)	34 (22.7)
Monthly	40 (80)	38 (76)	34 (68)	112 (74.7)
Total	50 (100)	50 (100)	50 (100)	150 (100)

Source: Field Survey (2022)

The above table represents the frequency of savings of the respondents. The frequency of savings is categorized into pre-pandemic and post-lockdown periods. Out of 150 respondents in the pre-COVID period, the majority of 74 (49.3 percent) respondents save weekly, followed by 53 (35.3 percent) respondents monthly and 23 (15.3 percent) save daily. In the post-COVID period, the majority of the 112 (74.7 percent) respondents saved monthly, followed by 34 (22.7 percent) weekly, and only four (2.7 percent) daily. It found that savings of the workers declined post lockdown period.

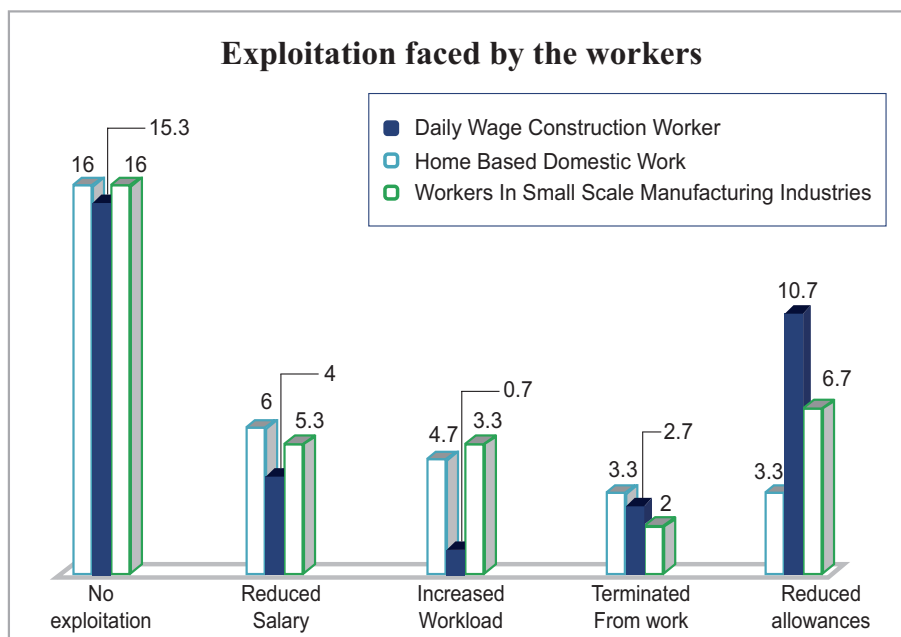


Figure 2: Exploitation Faced by the Workers During Lockdown

Source: Field Survey (2022)

The Figure 2 illustrates the type of exploitation practiced by employers on their employees during the pandemic. For understanding the level of employers' exploitation, several factors are considered (Bogoeski 2022). The employer's exploitation during the pandemic was measured on the basis of four factors - salary reduction, over workload, termination from work, reduction in the employment allowances. As compared to other 2 group of workers, construction workers faced the highest level of exploitation from the employer in terms of low pay and workload increment. Out of the total respondents, 56.7% reported facing various kinds of exploitation from their employer, while 71 individuals (47.30%) stated that they did not experience any form of exploitation from their employer. Specifically, during the pandemic, 15.30% of workers had their salaries reduced, and 8.70% were overworked. Additionally, the employment of 8.00% of workers was terminated by their employer. Moreover, 31 respondents (20.70%) experienced a reduction in the amount paid by their employers during the pandemic.

Table 7: Impacts of pandemic on daily life

Sl. No.	Statements	Responses in percentage					Mean	Description
		NA	AL	M	VM	E		
1	Time spend on watching TV increased	4.0	7.3	16.7	29.3	42.7	3.99	Very much
2	Time spend on social media networks increased	14.0	9.3	10.7	36.0	30.0	3.59	Very much
3	Time spend on sleeping Increased the	6.0	6.7	4.2	31.3	14.0	3.41	Very much
4	Food intake increased	25.3	32.0	24.7	10.7	7.3	2.43	A little
5	Time spend on family increased	9.3	12.0	32.0	33.3	13.3	3.29	Moderately
6	Time spend on child care increased	8.0	9.3	18.0	26.7	38.0	2.19	A little
7	Stress in marital relationships increased	32	34.0	20.7	9.3	4.0	3.28	Moderately
8	Household workload increased	8.7	12.0	10.0	34.7	34.7	3.75	Very much
9	Life style diseases increased	10.7	8.7	39.3	24.7	16.7	3.53	Very much
10	Usage of Alcohol and tobacco products	68.0	18.0	9.3	2.7	2.00	1.53	A little
11	Job insecurity feelings increased	8.6	10.0	26.7	28.0	26.7	4.41	Extremely
12	Financial insecurity feelings increased	8.0	10.0	34.7	27.3	20.0	3.75	Very much
Over all mean score							3.18	Moderately

Note: NA-Not at all, AL-A little, M-Moderately, V-Very much, E-Extremely

Source: Field Survey (2022)

The Table 7 presents the impact of the pandemic on the daily lives of the respondents, analyzed using a five-point Likert scale. The responses are classified using

the following descriptions such as “not at all”, “a little”, “moderately”, “very much”, and “extremely”. Each descriptions are ranked between 1 to 5. To determine the minimum and the maximum of the likert scale, the scale range was calculated by $(5-4)/5$. By this method we got the least value of the scale that is $4/5=0.80$. The 0.80 is considered as the minimum value in the scale. We obtain the range by adding one to this least value on the scale. The mean values of each of the responses were calculated to get the overall opinion of the workers. We can rank the statements on the basis of the mean values. Eleven statements were formulated regarding the daily routines of the respondents. The findings reveal that approximately 96% of respondents believe that the COVID-19 disease and related lockdown have increased their time spent watching television, with a mean score of 3.99. About 86% of the respondents felt that there was an increase in usage of social media networks such as Facebook, WhatsApp, Instagram, etc. ($M = 3.59$). Additionally, around 74.7% responded that their food intake had increased ($M = 2.43$). Spending time with family members increased, reported by 90.6% of respondents ($M = 3.29$).

Moreover, approximately 92% of the respondents ($M = 2.19$) opined that time spent on child care increased during the lockdown period, and 91.4% ($M = 3.75$) revealed that household workload increased during the lockdown period. Around 68% ($M = 3.28$) reported an increase in stress in marital relationships. Increased lifestyle diseases were reported by approximately 89.4% of respondents, with a mean score of 3.53. However, only 32% of those polled predicted an increase in alcohol and tobacco use. Almost 91.4% ($M = 4.41$) believe job insecurity has increased, while 92% ($M = 3.75$) believe financial insecurity has increased. The overall mean score is ($M = 3.1828$), indicating a moderate influence. Therefore, it can be concluded that respondents also believed that COVID-19 and related lockdowns moderately influenced the daily lives of the workers.

Table 8: Financial difficulties during the lock down

Financial difficulties	Domestic Workers	Construction Worker	Workers In SSMI	Total
No	23(46)	22(44)	15(30)	60(40.0)
Yes	27(54)	28(56)	35(70)	90(59.3)
Total	50(100)	50(100)	50(100)	150(100)

Source: Field Survey (2022)

The Table 8 displays the responses regarding the financial difficulties faced by workers during the nationwide lockdown. It indicates that families affected by COVID-19 or those having a member with disability or special needs. Forty percent of respondents reported not encountering any financial difficulties during the COVID-19 outbreak. Conversely, 59.3% of workers disclosed experiencing significant financial distress during the pandemic period.

5.3. Gendered Impact of COVID-19 Pandemic

Table 9: Gender and work during Lockdown

	Financial difficulties in lockdown	Lose of job	Difficulties in work due to social distance	Employer exploitation during lock down
Mann-Whitney U	2708.000	1912.500	2775.000	2325.000
Z	-.131	-4.069	-3.110	-2.119
Asymp. Sig. (2-tailed)	.896	.000	.002	.034
a. Grouping Variable: Gender				

P* < 0.05, P < 0.01**

Source: Field Survey (2022)

The above table 9 shows the impact COVID-19 on employment variable. According to the survey the result shows that the employment situation during COVID-19 is different between men and women. The field survey revealed that loss of job among was higher among men as compared to women. Male workers suffered more job loss as compared to their female counterparts. This result is supported by the study of Kakarlapudi (2022). Their study also found that male employment fell from January to April 2020, whereas female employment fell by only four percentage points. Male employment in Kerala has fallen much more when compared to both low- and high-income states.

Table 10: Gender and Household workload during COVID-19 lock down

Gender	N	Mean Rank	Sum of ranks	U	Sig
Male	75	46.50	3487.50	637.500	0.000
Female	75	104.50	7837.50		
Total	150				

P* < 0.05, P < 0.01**

Source: Field Survey (2022)

The Table 10 depicts the situation of household workload among male and female workers. The result of the U test indicates significance, suggesting that the burden of household workload falls primarily on women. These findings are supported with the works of Aslam & Adam (2022), Chauhan (2022) and Del Boca et.al (2020). With all family members staying together throughout the day in congested living conditions, there is an increase in workload, conflicts, and privacy issues within the household, particularly impacting women. Additionally, the responsibility of caring for children who remain at home all day becomes an added concern for many women. The household responsibilities also increase for women workers in the informal sector. All the women surveyed reported a deterioration in their quality of life, characterized by reduced time available for rest and recreation, as well as decreased social interaction. Leisure activities derived from conversations with friends or neighbors have also diminished, compromising their social life.

Table 11: Reachability of Services among workers provided by the government.

Sl. No.	Services	Responses in percentages					Mean	Description
		N	R	S	O	A		
1	Additional Pension	35.3	0.0	0.7	12.00	52.0	3.46	Often
2	Financial assistance Rs.1000 for BPL families	28.0	0.7	0.7	38.0	32.7	3.47	Often
3	Free food kit	0.0	0.0	0.0	0.0	100.0	5.00	Always
4	Free rice and cereals	7.3	1.3	9.3	38.0	44.0	4.10	Often
5	Free COVID test	12.7	18.0	16.0	26.0	27.3	3.37	Sometimes
6	Tele medical support e sanjeevani	29.3	26.0	18.7	13.3	12.7	2.56	Rarely
7	Free medicine	19.3	14.7	20.0	24.0	22.0	3.14	Sometimes
8	Community kitchen	36.0	31.3	13.3	11.3	8.0	2.60	Sometimes
9	Government quarantine and treatment	24.0	30.0	19.3	15.3	11.3	2.24	Rarely
Overall Mean Score							3.3274	

***Note; N-Never, R-Rarely, S-Sometimes, O-Often, A-Always**

Source: Field survey (2022)

The Table 11 illustrates the accessibility of services among respondents provided by government authorities during the lockdown period due to the spread of the COVID-19 disease. It was analyzed using five point the Likert scale. The responses are classified

using the following descriptions such as “never”, “rarely”, “sometimes”, “often” and “always”. Each descriptions are ranked between 1 to 5. To determine the minimum and the maximum of the Likert scale, the scale range was calculated by $(5-4)/5$. By this method we got the least value of the scale that is $4/5=0.80$. The 0.80 is considered as the minimum value in the scale. By adding one to this least value on the scale, we get the range. The mean values of the each responses were calculated to get the overall responses of the workers. Notably, 52% of respondents reported always using the government's additional pension. The free commodity kit was always available to each respondent in the survey without any restrictions. While 28% of people did not receive financial assistance, 32% reported receiving it every month. Among those who did not receive financial assistance, 28% were in the non-BPL category. Approximately 7.30% of the population did not receive free rice provided by the government through the public distribution system every month. Only 44% of those who received free rice on a regular basis used it every month. It is observed that very few people have access to the telemedical system implemented by the government.

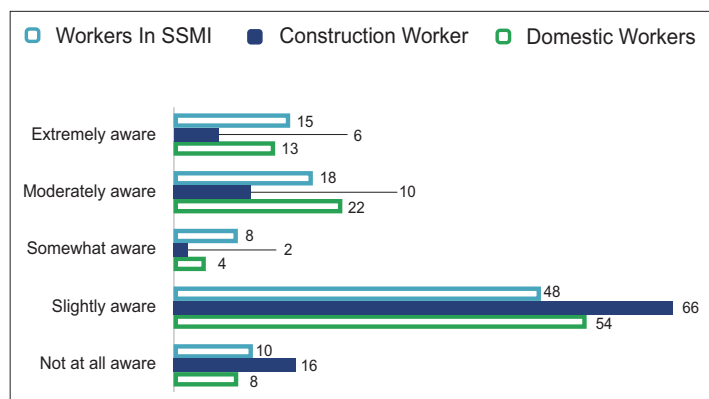


Figure 3: Awareness of government support and services during the period of COVID-19 lockdown

Source: Field Survey (2022)

The Figure 3 depicts the awareness of the respondents regarding government services provided during the pandemic. Government support is crucial in overcoming the effects of the pandemic. Out of the total informal sector workers surveyed, 56 percent of the workers indicated that they were slightly aware of the government initiatives. Specifically, construction workers showed a higher awareness level at

66 percent. Additionally, 16.70 percent revealed that they were moderately aware. Only 11.30 percent expressed being "extremely" or "not at all" aware. About 4.70 percent stated that they were somewhat aware of the services.

Table 12: Spearman rank correlation coefficient between Educational qualification and awareness of the respondents regarding government support and services during the period of Pandemic lockdown

	Educational qualification	Awareness
Educational qualification	1	.769
Awareness	.769	1

Note: Correlation is significant at the 0.01 level (2-tailed)

Source: Field Survey (2022)

The association between educational background and awareness of various government initiatives in lockdown was examined using Spearman rank correlation. The results revealed a strong positive correlation ($r = 0.769$, $N = 150$, $p = 0.01$), indicating a statistically significant relationship. This suggests that individuals with higher educational qualifications tend to have a higher level of awareness regarding government policy initiatives, while those with lower educational qualifications have lower awareness levels. Therefore, it can be concluded that awareness levels increase with higher educational qualifications. These findings are consistent with a study conducted by Sudha & Murugesan (2021), which also found that awareness levels are higher among individuals with higher educational qualifications.

6. Conclusion and Policy Suggestion

In conclusion, the COVID-19 pandemic has brought significant changes to the lives and livelihoods of workers in the informal sector in Chelakkara. Many workers faced challenges in reaching their workplaces due to the lack of transportation facilities during the pandemic, leading to changes in consumption patterns, income levels, and employment patterns. The hypothesis testing suggested that there is an association between employment loss during the pandemic and the reduction in income, savings and consumption of the respondents. So, from this we can come to the preliminary conclusion that the loss of employment due to the lockdown due to COVID-19 diseases

has reduced the income of the workers. This income loss again turned into reduction in consumption and savings. The household workload also increased during the lockdown period among the women workers. It found that there is gender gap in the household workload, the present study revealed that loss of job was higher among men as compared to women. Male workers suffered more job loss as compared to their female counterparts. This result supported by the study of Kakarlapudi (2022). Their study also found that male employment fell from January to April 2020, whereas female employment fell by only four percentage points. Male employment in Kerala has fallen much more than in both low- and high-income states. The household responsibilities are also greater for women workers in the informal sector. All the women surveyed reported deterioration in their quality of life, characterized by reduced time available for rest and recreation, as well as decreased social interaction. Leisure activities such as conversations with friends or neighbors have also diminished, compromising their social life. Women are suffering the double burden of work. Strong government intervention is necessary to mitigate the crisis caused by the pandemic. This study on the impact of COVID-19 on the livelihood of the informal sector workers in Kerala has some limitations. One is the sample comprising 150 respondents is limited due to time constraints. The selected sample is limited only to the rural area because of the survey on Chelakkara Grama Panchayat. The survey could not be carried out in the municipalities or corporations in Thrissur district due to time constraints and restrictions imposed to curb the COVID-19 outbreak. Since the responses and challenges faced by informal sector workers may vary across the regions, we cannot do a general review based on the study conducted in only one Panchayat. The size of the sample is another limitation of the study. It is limited to only 150 workers in the study area because of the restrictions imposed to curb the spread of COVID-19 and lack of available time for field study.

The results of the present study has the following policy implications: Carefully designed policy intervention from state and local governments are essential for mitigating the adverse impact of the crisis caused by the COVID-19 pandemic on the vulnerable sections of the society. Firstly, the government and employer should provide transportation facilities to the labours when there is an outbreak of the pandemic. Loss of employment of informal labour is considered as a financial loss because this group contributes significantly to income generating activities. Secondly, enhancement of income and maintenance of consumption and savings of the workers

are very important. For that, the government should give food vouchers, targeted cash transfers or universal one-time cash payments to informal workers who could not work due to pandemic shock. Assisting the working poor with loan repayment, rent, and utility bills by integrating social protection measures in a package of measures including health and hygiene assistance is desirable. Third, government should adopt the gender sensitive programmes in the informal sector. In order to improve women's labour market outcomes, policymakers have to adopt a comprehensive strategy that includes expanding access to education and training programmes, developing skills, facilitating child care access, maternity protection in worksites, providing safe and accessible transportation, and promoting a pattern of growth that also generates more employment opportunities to women. Ensuring proper basic infrastructure facilities such as clean water, sanitation, healthy food and accommodation for the informal workers is also important. Additionally the work of the informal sector should be recognised via the proper application of social protection and legislation, accelerating and speeding up the steps to formalise the informal sector workers will help their job security in future. Hence, the government should ensure that all workers are registered on the E-shram portal and provide adequate facilities to ease the registration process.

India's informal sector, which comprises approximately 93% of the country's overall employment, has been particularly hard hit by the pandemic. While the formal sector has shown signs of recovery, the informal sector continues to struggle. It is crucial to recognize the efforts of informal sector workers through the proper application of social protection legislation. Every loss of informal labor represents a financial setback, as this group significantly contributes to the economy. Addressing the vulnerabilities and poverty faced by informal workers requires integrated and concerted government efforts. Political disenfranchisement among informal workers must also be addressed to remedy the injustices they faced during the pandemic. Unfortunately, informal workers continue to be an underserved group. The government must prioritize addressing their issues and ensure that the entire policy framework is equitable and justifiable. Only through comprehensive and inclusive policies can the challenges faced by informal sector workers be effectively addressed.

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