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THE IMPACT OF THE COVID-19 PANDEMIC ON SOCIO-ECONOMIC CONDITIONS FOR HOUSEHOLDS IN JAMBI CITY, INDONESIA

Junaidi Junaidi[1], Suandi Suandi[2] and Silvia Mawari Perdana[3]*

[1] Faculty of Economics and Business, Universitas Jambi, Indonesia
[2] Faculty of Agriculture, Universitas Jambi, Indonesia
[3] Faculty of Medicine and Health Science, Universitas Jambi, Indonesia

***Corresponding author:**
Junaidi Junaidi
junaidi@unja.ac.id

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ABSTRACT

The COVID-19 pandemic is the biggest shock the world has experienced, Indonesia in particular. This pandemic has had various negative impacts on both the health and socio-economic sectors. This study analyzes the impact of the COVID-19 pandemic on socio-economic conditions as well as household food security and analyzes families' economic coping strategies during the COVID-19 pandemic in Jambi City. The primary data comes from household surveys in Jambi City. This research uses a quantitative-qualitative approach with descriptive methods. The quantitative approach uses descriptive statistical tools. A qualitative approach is used to analyze the in-depth interview results. The research results found that the COVID-19 pandemic has had a negative impact on various areas of people's lives, including economic, social, cultural, and religious domains, as well as food security. 13.27 percent of the 196 household heads lost their job. Furthermore, 8.67 percent were compelled to change jobs/businesses to lower-paying ones. Almost a third (31.93 percent) of those still working have had their working hours reduced, and nearly three-quarters (74.27 percent) have had their income reduced by 34.48 percent. Regarding socio-cultural and religious aspects, 76.75 percent stated that they try to cut down on numerous daily activities. 68.37 percent of households have an energy consumption deficiency based on food security, while 46.43 percent have a protein consumption shortfall. On the other hand, households mostly cut back expenses rather than generating more income as their economic coping strategy. This strategy decreases the quality of life in the community. As a result, a government policy that provides direct cash assistance to affected households to maintain their quality of life is required. Community groups should handle the assistance to purchase nutritious food items and enhance household food security. Furthermore, the government can provide business capital support to those who have lost their employment, followed by company management assistance so that the established firms can operate effectively.

Keywords: COVID-19 pandemic; socio-economic; food security; coping strategies

1. INTRODUCTION

The world is currently in a severe and acute health emergency due to the COVID-19 pandemic (Walker et al., 2020; Sorbello et al., 2020). Apolone et al. (2020) stated that SARS-CoV-2 antibodies in asymptomatic patients had been discovered in Italy in September 2019 before COVID-19 was identified in Wuhan in December 2019.

The rapid spread of COVID-19 has affected the world, including Asian countries. In high-, middle-, and low-income nations, the COVID-19 pandemic poses a new threat to mental health (mental disorders such as major depressive disorder, PTSD, and suicide) (Xiong et al., 2020). Poland and Pakistan have the highest levels of anxiety, depression, and stress, while Vietnam has had the lowest levels during the pandemic. COVID-19-like physical symptoms worsen mental health problems (Wang et al., 2021).

Indonesia experienced the problem of the COVID-19 pandemic at the beginning of 2020. This pandemic was the biggest shock experienced in Indonesia in decades and has had many negative impacts. Policies that limit public activities to prevent transmission of the virus have resulted in a slowdown in almost all economic sectors. World Bank (2020), Ali et al. (2020), Sorbello et al. (2020), and Metcalfe (2020) state that the economic sectors most affected are trade, tourism, and finance. The pandemic's effects on the trade sector have reduced activity in the financial and real sectors. At a later stage, this will cause many people to lose their jobs and decrease productivity or income.

In 2020, Indonesia's economic growth decreased by 2.07%. Almost all sectors experienced a decline, with the transportation and warehousing industries and the accommodation and food supply industries seeing the largest drops (Badan Pusat Statistik: BPS, 2021a). In August 2020, the number of unemployed people increased by 2.36 million compared to August 2019 (BPS, 2020). In September 2020, the number of poor people rose by 2.76 million people compared to September 2019 (BPS, 2021b).

The rapid spread of COVID-19 and policies to prevent it, such as social distancing, large-scale social restrictions, and lockdown or area quarantine, have impacted the community's economic welfare and various social and psychosocial aspects. Dong and Bouey (2020), Zhang and Ma (2020), and Ferguson et al. (2020) found that the very rapid spread of COVID-19 has weakened the immune system, worsened mental health, decreased security and comfort, increased stress, and reduced social welfare.

Although it has been proven that a partial lockdown in Vietnam slowed the spread of COVID-19, the Vietnamese people's quality of life and economic well-being was negatively affected. Approximately 66.9% of workers lost their jobs. Anxiety and depression were the most frequent mental health problem reported (Tran et al., 2020). Due to the partial lockdown, Vietnam's DASS-21 score (depression, anxiety, and stress scale) was lower than China, Italy, and Iran (Le et al., 2020). During the first lockdown in April 2020, two-thirds of respondents reported a reduction in income, with 28.2 percent reporting an income loss of more than 40% (Dang et al., 2020). Respondents in Singapore experienced a decline in pleasant feelings and an increase in depressive symptoms due to the stay-at-home order (Olszewska-Guizzo et al., 2021). There is a high risk that the virus will spread in Vietnam among industrial workers and individuals who have more severe symptoms after contracting COVID-19. Economic insecurity is why workers are reluctant to take time off work for treatment at a hospital or clinic (Tran et al., 2020).

In other countries, creating good ventilation/air circulation in the workplace and wearing face masks are the most effective psychoneuroimmunity preventive measures. Furthermore, personal measures such as hand hygiene and wearing face masks, as well as company measures such as improving workplace hygiene and focusing on health during the COVID-19 pandemic, may be linked to less severe psychiatric symptoms (Tan et al., 2020).

COVID-19 cases (as of January 16, 2021) have occurred in 223 countries, with 92,506,811 confirmed cases and deaths totaling 2,001,773. Meanwhile, in Indonesia, there were 907,929 positive COVID-19 cases, and 25,987 people died (COVID19.go.id). Jambi Province is one of the areas in Indonesia that has had a relatively rapid spread of COVID-19. As of January 16, 2021, the number of positive COVID-19 cases in Jambi Province has reached 3,894 people, with the most spread in Jambi City. The number of positive COVID-19 cases in Jambi City was 1,262 people. Based on this data, Jambi City has been designated as a COVID-19 red zone area.

Jambi City is one of Indonesia's major cities, with 606,200 people and a population density of 2,951 people per km^2 in 2020 (Indonesian Population Census, 2020). The proportion of the population that is of productive age (15-64 years) reached 69.49 percent of the total population, with a Labor Force Participation Rate of 64.12. The open unemployment rate was 10.49 percent, a significant rise from 6.41 percent (in 2018) before the pandemic.

Jambi City is the administrative and economic hub of Jambi Province. The service sector (77.39 percent) is the community's major center of economic and government activity, followed by the industrial

sector (19 percent) and the agriculture sector (3.61 percent). The wholesale and retail trade sectors and government administration sector were the two service industries that experienced the greatest increase.

The rapid spread of COVID-19 in Jambi City will certainly impact the vulnerability of the people's socio-economic conditions in this area. Based on this, it is necessary to conduct research related to the impact of the COVID-19 pandemic on the community's socio-economic conditions when formulating policies to prevent a decline in the community's welfare.

This study aims to analyze the impact of the COVID-19 pandemic on socio-economic conditions for the people of Jambi City and analyze coping strategies carried out by families during the COVID-19 pandemic conditions. It also aims to analyze the level of household food security in the City of Jambi during COVID-19.

2. LITERATURE REVIEW

2.1 The impact of COVID-19 on socio-economic conditions for the community

Various studies have illustrated the impact of COVID-19 on the socio-economic conditions of the community. Chattu and Yaya (2020) stated that the world is currently experiencing drastic changes due to infectious and chronic diseases that cause morbidity and mortality. Various countries have also become fragile due to COVID-19, impacting the community's social and economic conditions.

The majority of countries implemented quarantine and social isolation to stop the spread of this highly contagious virus. To combat the spread of the virus, the Italian government, for example, enacted several restrictive measures: 1) health checkpoints for passengers coming from China; 2) banning of air traffic from China; 3) mandatory supervised quarantine for 14 days for all individuals who have come into close contact with confirmed cases of disease; 4) enforcing the national red zone by restricting people's mobility; 5) suspension of all public events or events open to the public; and 6) suspension of all commercial activities non-indispensable for production (Signorelli et al., 2020). The government of Malaysia has imposed the Movement Control Order (MCO). In the implementation of the MCO, all Malaysians were instructed to primarily stay indoors (Aziz et al., 2020). At both the provincial and city levels, China has adopted a lockdown strategy. Inter-province and inter-city highways were partially shut down at the provincial level to reduce traffic. Social-distancing measures minimize human contact at the city level (Chen et al., 2020). In Indonesia, various policies have also been implemented, including 1) stay-at-home orders; 2) social distancing; 3) physical distancing; 4) wearing personal protective equipment (face masks); 5) maintaining personal hygiene (washing hands); 6) working and studying from home; 7) postponing any activities that gather large crowds; 8) Large-Scale Social Restrictions (PSBB); and, last but not least, 9) the New Normal policy (Tuwu, 2020).

Restrictions on numerous activities have resulted in a decline in economic activity in the aggregate and the household economy. Rose and Liao (2005) and Groth et al. (2012) state that current human-made disasters significantly impact the economy. According to Keogh-Brown et al. (2010) and Rao et al. (2009), prior infectious diseases epidemics which became pandemics resulted in a decline in GDP of around 0.5-2 percent. Zhang and Ma (2020) stated that the direct impact of the COVID-19 epidemic affects mental health and the community's quality of life. Mental disorders will make a person stressed because of the mental pressure resulting from excessive fear. The negative impact is that some people cut off communication with family and friends for fear of contacting COVID-19.

2.2 Coping strategy

Coping is an attempt or transaction carried out by individuals to overcome various internal and external demands that are burdensome and disrupt their survival (Maryam, 2017). Coping strategies are the active processes of individuals and families managing, adapting, or facing stressful situations (Sunarti 2013). Prior literature divides coping strategies in the household into two types: internal (intrafamilial) and external (extra-familial). Internal strategies consist of seven indicators, including relying on one's abilities and family; humor usage; deliberation, and family discussion; giving rise to optimistic beliefs and positive assessments; solving common problems; role flexibility; and normalization to state how the family can manage the family's response to stress (Belachew et al., 2013; Notenbaert et al., 2013; Damanpour et al., 2018). Meanwhile, Friedman (1998) in Puspitawati (2012) noted that there are four indicators for external coping strategies, including looking for information related to stressors to control situations and reduce feelings of fear; maintaining an active relationship with the community (in this case, family members are family leaders in a group); seek for spiritual support; and looking for social support in the family social work network. Looking for social support is a prominent external family coping strategy. Social support includes, among others, seeking spiritual support and the kinship system of families, professional groups, community leaders, and others based on shared interests.

Sunarti (2013) suggests that a person's personality determines coping strategies and the level of pressure experienced. According to Sunarti and Fitriani (2010), the factors that determine which strategies are used most often depend on a person's personality and stress level. The factors that influence individual coping strategies are physical health, positive beliefs or views, problem-solving skills, social skills, and social support. Apart from these aspects, the chosen coping strategy is also determined by the available resources. Coping resources can be interpreted as everything owned by the family, both physical and non-physical, to build coping behavior (Allen et al., 2014; Hand et al., 2015). Coping resources are subjective. It causes coping behavior to vary from person to person (Maschi et al., 2015).

In particular, the economic coping strategies families used to meet food needs, according to Maxwell (2001), include: 1) reducing favorite foods and buying cheaper food; 2) borrowing food or money to buy food; 3) buying food with debt; 4) asking relatives or friends for help; 5) limiting and dividing food at mealtimes; 6) setting aside a small amount of money for family members to buy food on the street; 7) limiting personal food consumption to ensure children are well fed; 8) reducing the type of food on one day, and 9) going through the day without eating. The various economic coping strategies to meet these food needs can be grouped into two, as Puspitawati (2012) stated: the cutting-back expenses strategy and the income-generating strategy. These two groupings will also be used as the basis for this study.

2.3 Household food security

Food is the most basic of human needs. Therefore, the community's access to food must constantly be ensured. Inability to adequately obtain food will lower the quality of nutrient intake at the household level, leading to lower quality of human resources. Poor quality in human resources causes people to be unable to improve their living conditions, resulting in poverty. According to the World Bank (Suhaimi, 2019), nutrition investment is critical in breaking the vicious cycle of poverty and malnutrition.

Food security can also be interpreted as a guarantee that the entire population will have adequate food and nutrition as the primary condition for achieving a degree of health and welfare (Khomsan, 2002). Hasan (1995) states that food security at the household level is reflected, among others, by the availability of sufficient and balanced food at all times that is affordable to the community, both physically and economically. It also includes the attainment of diverse food consumption that meets nutritional requirements. Meanwhile, the definition of household food security, according to the International Congress of Nutrition (ICN) in Rome in 1992, is the ability of a household to meet the food sufficiency of its members so that they can live healthily and be able to carry out daily activities.

Based on the results of the National Food Security Workshop (Departemen Pertanian RI, 1996), household food security is defined in several ways, namely: 1) the ability to meet the food needs of household members in quantity, quality, and variety according to local culture from time to time to live healthily; 2) the ability of the household to meet the food sufficiency of its members from their production, or buy food from time to time to live; 3) the household's ability to meet the food sufficiency of its members from time to time to live a healthy life.

Classification of household food security into food secure and food insecure can be done by measuring output indicators, namely food consumption or individual nutritional status (especially pregnant women and toddlers). Households are categorized as vulnerable to food insecurity if the energy consumption level is lower than the cut-off point of < 70.0% (Zeitlin and Brown, 1990).

According to Hasan (1995), food security can be identified at the household level by collecting data on consumption and food availability through direct food surveys. The results are compared with predetermined adequacy rates. In addition to measuring food consumption and availability through surveys, socio-economic and demographic data can be used to determine food security risks such as income, education, household structure, food prices, and food expenditure. This data can be used as a risk indicator for food security at the household level (Sukandar, 2007).

Another method of measuring food security, developed by Hardinsyah and Roedjito (1986), is based on consumption quality using a food diversification score. The concept of measuring food security using a food diversification score is relatively straightforward. In addition to the amount of food consumed (quantity aspect) and the five food groups, the 4H5P groups (staple food, side dishes, vegetables, fruits, and milk) and the quantity calculation using the consumer unit are also used to determine the score. Therefore, it is possible to take into account differences in the age and sex of household members.

3. MATERIALS AND METHODS

The primary data in this study are collected from household respondents. The population in this study were all heads of households in Jambi City.

Stratified two-stage sampling was used:

The first stage involved selecting the sample sub-district for the research location. It was conducted by purposive sampling with the following considerations and approaches:

(1) Of the 11 sub-districts in Jambi, the three sub-districts with the highest population density were Jelutung District, Danau Sipin District, and South Jambi Sub-District. By setting the location of the study in the area with the largest population density, a wide range of household socio-economic situations were obtained

(2) From each District, one sub-district with the largest number of families was determined. Based on this, Jelutung Village in Jelutung District, Legok Village in Danau Sipin District, and Thehok Village in Jambi Selatan District were set as research locations.

The second stage involved selecting a sample of 2.5 percent of the target population at the research location. We chose a simple random sampling of families. Random Number Generator (RNG) software was used to conduct random sampling based on the BKKBN's (National Family Planning Coordinating Board) data on households in each sub-district.

The distribution of the number of household samples according to the research location is given in Table 1.

Table 1: Distribution of the Number of Household Samples

District	Sub-district	Population	Household sample
Jelutung	Jelutung	2684	67
Danau Sipin	Legok	2242	56
Jambi Selatan	Thehok	2916	73
Total		7842	196

The instrument for collecting data from the sample was a questionnaire. In addition to the questionnaire, an interview guide was also used for in-depth interviews with selected families to obtain qualitative information to complement the questionnaire's quantitative information.

The approach used in this research is quantitative-qualitative with descriptive methods. The quantitative approach uses descriptive statistical tools supported by single- and cross-frequency tables. A qualitative approach is used to analyze the in-depth interview results.

The measurement and assessment of the main variables in the study were conducted as follows:

Household socio-economic conditions

The household's socio-economic condition was assessed from social relationships, religion and worship, health, psychological conditions, livelihoods, productivity, and income.

Economic coping strategy

An economic coping strategy is an effort made by families to overcome household problems in terms of finances by cutting back expenses and generating additional income. The economic coping strategy was measured through a modified questionnaire from previous research results. All statements and answers per item are scored = 1 (never), = 2 (sometimes), = 3 (often) and = 4 (always).

Food security

Measurement of food consumption in this study used both quantitative and qualitative methods. The quantitative method was intended to determine the amount of food consumed to calculate nutritional consumption. It was measured using household food records. The period for household food record/recall was the last 24 hours.

Qualitative methods are usually used to determine the frequency of eating and frequency of consumption by type of food and to gather information about eating habits. The qualitative method used in this research was the food frequency method. The period for the food frequency method was last month. The food frequency method aims to obtain qualitative food consumption data and descriptive information about consumption patterns. This method is also used to assess food consumption semi-quantitatively by including the portion size of the meal. This method can also assess the frequency of consumption for certain foods or food groups (for example, sources of fat, sources of protein, sources of vitamin A) during a specific period (for example, per day, week, month, year) while estimating the consumption of nutrients.

The 2018 Indonesian Food Composition Data, as the standard database of nutritional content in Indonesian food and beverages, is used to process and analyze data on the nutritional content. A qualified nutritionist was in charge of data processing, analysis, and interpretation.

The standards for adequate daily consumption of calories and protein per capita set at WNPG in 2012 stipulate that the standard for energy and protein needs is 2150 kcal and 57 grams. Meeting food needs can be indicated by meeting energy and protein needs (Adriani and Wirtjatmadi, 2012).

The classification of energy and protein consumption can be divided into four levels, namely:

1. Deficit: if the nutritional adequacy level is less than 70% of the nutritional adequacy rate.

2. Inadequate: if the nutritional adequacy level is 70-80% of the nutritional adequacy rate.
3. Moderate: if the nutritional adequacy level is 80-90% of the nutritional adequacy rate.
4. Good: if the nutritional adequacy level is 90% or more than the nutritional adequacy rate.

4. RESULTS AND DISCUSSION

4.1 Respondent characteristics

Table 2 describes the age characteristics of the head of the household studied. Age directly or indirectly affects the behavior and patterns of individual decision-making. This age effect can be attributed to the experience and maturity of thinking that accompanies an increase in a person's age.

Table 2: Distribution of Respondents Impacted by COVID-19 by Age in Jambi City in 2020

Age Group	Total	%
<= 29	13	6.63
30–39	58	29.59
40–49	51	26.02
50–59	49	25.00
>= 60	25	12.76
Total	196	100.0
Age average	44.94	

The average age of the head of the household is 44.94 years. The frequency distribution shows that almost two-thirds (62.24 percent) are under or equal to 49 years of age, and only about 12.76 percent are 60 years or more. In other words, the age distribution shows that the heads of the sample houses are generally in the productive age groups.

Furthermore, household heads' formal education is still relatively low. Almost half (48.98 percent) of the total households are headed by household heads with only a junior high school education and below, and only 3.57 percent of them have tertiary education (Diploma to Bachelor's Degree) (Table 3).

The higher the head of the household's education is, the higher their ability to utilize various available resources to increase income is. Therefore, the low level of education of the household head impacts the attainment of household resilience.

Table 3: Distribution of Respondents Impacted by COVID-19 According to Education in Jambi City in 2020

Education	Amount	%
Not completed primary school	4	2.04
Elementary school	46	23.47
Junior High school	46	23.47
Senior High school	93	47.45
College	7	3.57
Total	196	100.0

Furthermore, based on their occupation, the largest proportion (nearly a quarter or 23.47 percent) of household heads work as casual daily laborers. Other types of work that also dominate include private employees (14.29 percent), traders (12.24 percent), and self-employed workers or entrepreneurs (11.73 percent). Among the household heads, 13.27 percent of them are currently not working anymore (Table 4).

Table 4: Distribution of Respondents Impacted by COVID-19 by Type of Work in Jambi City in 2020

Type of Work	Amount	%
Casual daily laborer	46	23.47
Employee	28	14.29
Trader	24	12.24
Entrepreneur	23	11.73
Offline transportation driver	14	7.14
Online transportation driver	9	4.59
Household assistants	6	3.06
Civil servant and police	5	2.55
Retired	5	2.55
Garbage man	5	2.55
Others	5	2.55
Unemployed	26	13.27
Total	196	100.0

Based on the number of participants in the sample, the average family size was 3.69 persons. Households with 3-4 family members have the largest share (54.08 percent), followed by families with 5-6 family members (23.98 percent) (Table 5).

Table 5: Distribution of Respondents Impacted by COVID-19 According to Number of Family Members in Jambi City in 2020

Number of Family Members	Amount	%
1–2	35	17.86
3–4	106	54.08
5–6	47	23.98
7–8	8	4.08
Total	196	100.00
Average	3.69	

4.2 Impact of COVID-19 on the socio-economic conditions of the Jambi city community

4.2.1 Impact of COVID-19 on work

The COVID-19 pandemic has reduced community employment opportunities in Jambi City. The results showed that 13.27 percent of people lost their jobs during the COVID-19 pandemic. Further, 8.67 percent were forced to switch jobs/businesses type to ones with lower income. The most affected type of work was those who worked as entrepreneurs, followed by casual daily laborers, private employees, and traders. Table 6 shows the details impact of COVID -19 on jobs in Jambi City.

Table 6: Impact of COVID-19 on Jobs in Jambi City in 2020

Work before COVID-19	Present conditions			Total
	Not change	Change	Loss job	
Casual daily laborer	45 75.00%	5 8.33%	10 16.67%	60 100.00%
Employee	26 78.79%	2 6.06%	5 15.15%	33 100.00%
Trader	19 79.17%	2 8.33%	3 12.50%	24 100.00%
Enterpreneur	22 78.57%	1 3.57%	5 17.86%	28 100.00%
Offline transportation driver	14 70.00%	4 20.00%	2 10.00%	20 100.00%
Online transportation driver	6 66.67%	3 33.33%	0 0.00%	9 100.00%
Household assistant	6 100.00%	0 0.00%	0 0.00%	6 100.00%
Civil servant and police	5 100.00%	0 0.00%	0 0.00%	5 100.00%
Retired	5 100.00%	0 0.00%	0 0.00%	5 100.00%
Garbage man	2 100.00%	0 0.00%	0 0.00%	2 100.00%
Others	3 75.00%	0 0.00%	1 25.00%	4 100.00%
Total	153 78.06%	17 8.67%	26 13.27%	196 100.00%

Beyond job loss and changes in work types, people who are currently still working also experienced a decrease in working hours. In general, this reduction in working hours meant a decrease in the work productivity of the community.

Figure 1 shows that almost one-third (31.93%) of the still working (head of household with an unchanged job or changed job) participants experienced currently reduced working hours. Average working hours before COVID was 45 hours per week, compared to 40 hours per week at the time of data collection (decreased by 11.12 percent).

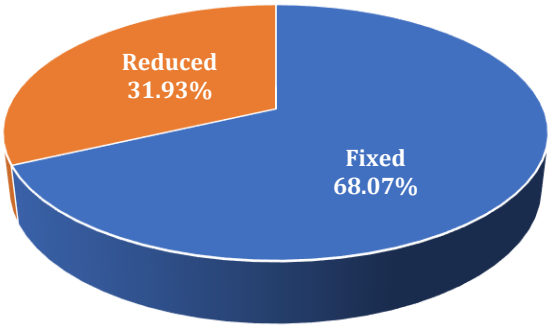

Figure 1: Changes in the Head of Households' Work Hours Before and During the COVID-19 period (N = 170)

The findings of this study are in line with previous estimates and studies. The International Labour Organization (International Labour Organizations: ILO, 2020) estimates that the pandemic caused a decline of 10.5% in working hours (equivalent to 350 million full-time jobs) globally in the second quarter of 2020, compared with the pre-crisis level. Bauza et al. (2021) in India found that 31 percent of respondents' family members lost their jobs, especially day laborers. Hoehn-Velasco et al. (2021) in Mexico found that job losses were more prevalent in states that underwent successive lockdowns. Enriquez and Goldstein (2020) found that 35 percent of SNAP (Supplemental Nutrition Assistance Program) beneficiaries in the United States had lost their jobs.

4.2.2 Impact of COVID-19 on income

Nearly three-quarters (74.27%) of the people who were working at the time of data collection still had income. There was a drop in income among the total respondents who were still employed, from an average of IDR 2,648,070 per month to IDR 1,737,690 per month (decreased by 34.48 percent) (Figure 2).

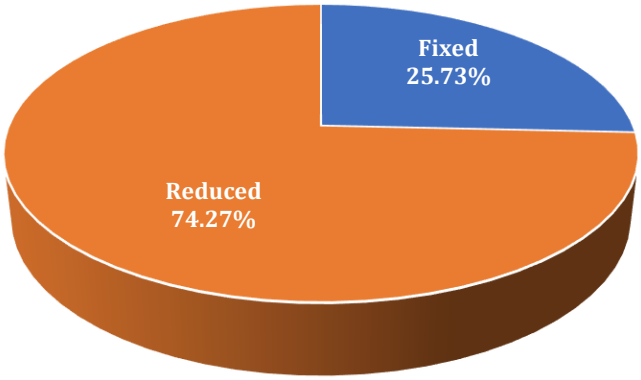

Figure 2: Changes in Household Income Before and During the COVID-19 Period

The results of this study are in line with previous studies. Hirvonen et al. (2020), in Adis Ababa, Ethiopia, found that 58% of respondents stated that their incomes had fallen relative to their standard income at that time of the year. They also found that the most common shock to their household was either unemployment or a loss of income. Amare et al. (2020) in Nigeria found that 72 percent of households reported that their income from farming and agricultural activities had reduced, 83 percent of households reported a reduction in income from non-farm businesses, and about half of households reported reductions in wage-related income. Bukari et al. (2021) in Ghana found that in San Jorge, Samar, Philippines, 60,72 households experienced a decrease in income. Bollido (2020) found that most coconut farmers were completely dependent on cash assistance during the pandemic.

4.2.3 The impact of COVID-19 on social, cultural, and religious activities

COVID-19 has impacted various social, cultural, and religious activities in the community. On average, 76.75 percent of the public stated that they reduced their daily social, cultural, and religious activities (Table 7). The largest proportion of the reduction was in attending wedding invitations, followed by attending community meetings and mutual cooperation (*gotong royong* in Indonesian). Conversely, the lowest proportion of the reduction was the use of online transportation.

Table 7: The Impact of COVID-19 on Social, Cultural and Religious Activities in Jambi City in 2020

No	Activity	Reduced	Fixed
1	Attending wedding invitations	94.90	5.10
2	Attending community meetings	92.35	7.65
3	*Gotong Royong* or mutual cooperation	90.31	9.69
4	Visiting relatives who are sick	86.22	13.78
5	Carry out worship in the congregation	83.16	16.84
6	Visiting family	82.14	17.86
7	Shaking hands/hugging when meeting acquaintances/family	81.12	18.88
8	Visiting neighbors	77.55	22.45
9	Shop at traditional markets	73.47	26.53
10	Shop at the modern market	71.94	28.06
11	Eating/drinking outside (cafe, restaurant, etc.)	68.37	31.63
12	Recreation/visiting tourist attractions	61.73	38.27
13	Use of public transportation	60.71	39.29
14	Online transportation	50.51	49.49
	Average	76.75	23.25

Bollido (2020) also saw a decrease in activity in San Jorge, Samar, Philippines. The majority of the residents in this area are coconut farmers who also grow root crops, bananas, and vegetables for food and money. Farmers could not visit their fields to manage their existing crops or plant new crops due to the pandemic, which aggravated the problem.

4.2.4 Household food security

Of the total respondents *(N* =196), the average household consumption in Jambi City did not reach the minimum standard expected based on energy consumption. The average energy consumption was only 60.06 percent of the standard sufficiency of 2,150 kcal per capita per day. However, the percentage of protein nutrition adequacy level is relatively good (in the medium category). The average protein consumption has reached 84.87 percent of the standard adequacy rate of 57 grams/capita/day (Table 8).

Table 8: Distribution of the Adequacy of Calorie Consumption in Jambi City in 2020

Information	Energy (kcal/capita/day)	Protein (gram/capita/day)
Consumption	1291	48
The recommended nutritional adequacy rate	2150	57
Adequate level of nutrition (%)	60.06	84.87

Based on the standards for adequacy of energy and protein consumption, households are classified based on their food security level, as shown in Table 9. Only 13.78 percent of households achieved a good level of consumption. On the other hand, 68.37 percent are in the deficit category. Protein consumption is relatively good. As many as 35.20 percent of households have reached a good level of consumption. Still, almost half (46.43 percent) are in the deficit category.

Table 9: Distribution of Food Security Category in Jambi City in 2020

Category	Energy		Protein	
	Amount	%	Amount	%
Deficit	134	68.37	91	46.43
Less	22	11.22	14	7.14
Medium	13	6.63	22	11.22
Good	27	13.78	69	35.20
Total	196	100.00	196	100.00

This research supports several previous studies' findings. The hunger scale in Yogyakarta, Indonesia, was 6 percent before the COVID-19 pandemic and climbed to 11 percent during the outbreak (Purnasari et al., 2020). In a cross-sectional survey of American adults, 41% of previously food-secure respondents became newly vulnerable to food insecurity following the pandemic (Lauren et al., 2021). In Nigeria, Amare et al. (2020) discovered that household food insecurity, as measured by the occurrence of skipped meals, running

out of food, and going without eating in the last 30 days, has increased by 47, 32, and 20 percent, respectively. According to Kansiime et al. (2021), the proportion of food insecure respondents increased by 38% in Kenya and 44% in Uganda. Due to income and remittance losses, as well as disruption of food systems associated with the pandemic, the United Nations World Food Program (WFP) estimated that the number of people globally facing acute food insecurity would nearly double by the end of 2020 (from about 135 million people before the crisis) (WFP, 2020a; WFP, 2020b).

4.2.5 Household economic coping strategies during the COVID-19 pandemic

Economic coping strategies can be divided into passive strategies (cutting back expenses) and active strategies (generating income). Families who do not have sufficient income for their daily needs can reduce economic pressure by implementing one or more strategies. The household can reduce needs or demands by saving on consumption and/or increasing household income through job changes.

Households in Jambi City carry out various strategies to fulfill their daily needs, both by generating additional income and cutting back expenses. The strategy analysis in this study was assessed based on a score scaled from 1 to 5. Furthermore, the strategy was categorized as low if the average value was less than 2.33, moderate if it was between 2.33 - 3.66, and high if the average value was above 3.66.

The efforts made by the income-generating strategy were in a low category, with an average score of 2.2762. On the other hand, the cutting back expenses strategy was in the medium category, with an average of 3.5158 (Table 10).

In generating additional income, there are three strategies with low categories: 1) involving children in work; 2) utilizing and developing credit loans at the bank; and 3) utilizing and developing informal credit loans. The other four strategies are categorized as moderate: 1) business/job certification; 2) involving the wife in work; 3) utilizing and developing owned capital; 4) utilizing and developing productive assets owned.

Table 10: Household Economic Coping Strategies in Jambi City in 2020

Coping strategy	Score
Generating additional income	
Business or work diversification	2.8316
Involving the wife in work	2.3316
Involving children in work	2.2143
Utilizing and developing owned capital	2.5204
Utilizing and developing productive assets owned	2.7296
Utilizing and developing credit loans at the bank	1.6378
Make use of and develop informal credit loans	1.6684
Average	**2.2762**
Cutting back expenses	
Reducing expenditure on food needs	3.6990
Reducing spending on clothing needs	3.7194
Reducing spending on educational needs	3.1684
Reducing spending on home improvement needs	3.9592
Reducing expenses for telecommunications needs	3.2143
Reducing spending on transportation needs	3.4796
Reducing spending on social needs	3.4031
Reducing spending on worship needs	3.4643
Reducing spending on children's shopping/snacks	3.6071
Reducing maintenance expenses	3.0663
Reducing spending on recreational needs	3.8929
Average	**3.5158**

There are four strategies in the cutting back expenses strategy that are categorized as high, namely: 1) reducing expenditure on food needs; 2) reducing spending on clothing needs; 3) reducing spending on home improvement needs; and 4) reducing spending on recreational needs. Seven strategies are included in the medium category, namely: 1) reducing spending on educational needs; 2) reducing spending on telecommunications needs; 3) reducing spending on transportation needs; 4) reducing spending on social needs; 5) reducing spending on religious needs; 6) reducing spending on children's shopping/snack needs; 7) reducing maintenance expenses. The “reducing expenditure on food needs” strategy had the highest score, indicating that it is the household’s first choice for coping with the pandemic. As previously stated in Tables 8 and 9, this is an explanatory factor for low family food security.

The economic coping strategies discovered in this study complement prior research. In India, Bauza et al. (2021) discovered that 25% of households had reduced the quantity of food consumed in a day. According to Enriquez and Goldstein (2020), more than half of SNAP benefit recipients in the United States took the following strategies: 1) skipping meals; 2) relying on families/friends for food, and 3) visiting food pantries. In San Jorge, Samar, Philippines, Bollido (2020) discovered that household economic coping strategies include:

1) cutting down on the amount of food consumed; 2) lessening the number of meals a day (three times to twice a day); 3) replacing rice with root crops and vegetables; 4) borrowing money from a sari-sari shop (local convenience store) if they didn't get income; 5) getting financial assistance such as Conditional Cash Transfers and food assistance, and 6) selling assets to get emergency funds for medical expenses.

5. CONCLUSION

The COVID-19 pandemic has negatively impacted various areas of people's lives, including economic, social, cultural, and religious domains, as well as food security. 13.27 percent of the 196 respondents lost their job. Furthermore, 8.67 percent were compelled to change jobs/businesses to lower-paying ones. Almost a third (31.93 percent) of those still working had their working hours reduced, and almost three-quarters (74.27 percent) had their income reduced. The decrease in income from respondents who were still working reached 34.38 percent. In terms of socio-cultural and cultural aspects, 76.75 percent stated that they cut back on numerous daily activities. 68.37 percent of households have an energy consumption deficit based on food security, while 46.43 percent have a protein consumption deficit. Households mostly cut back on expenses rather than generating more income as their primary economic coping strategy. The cutting back expenses strategy had a negative influence on the household's quality of life.

Based on this, a government policy is needed to provide direct cash assistance to affected communities to maintain their quality of life. Direct financial aid should be administered by community organizations so that families may use it to buy nutritious food items, therefore increasing household food security. Furthermore, the government could provide business capital support to those who have lost their employment, followed by company management aid. Thus, the established companies could continue to operate effectively and sustainably.

Indonesian government has implemented its vaccination program for compulsory 1st and 2nd dose of COVID-19 vaccine and for a booster dose. Its vaccination rate for second dose has reached more than 50%. Activities of the population have returned to normal and been implementing health protocols in the era known as the new normal. Therefore, studies on changes in socio-economic and cultural activities in the new normal era that are linked to household income, food security, and economic coping strategies would be relevant for future studies.

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