BUKTI KORESPONDENSI ARTIKEL JURNAL SINTA 2

Judul Artikel : Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District Muara Enim Regency Before and During the Pandemic

Penulis : Yunita*, Riswani, Agustina Bidarti

Jurnal : Agrisep: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis, 2023

Volume : 22 No. 01

DOI : https://doi.org/10.31186/jagrisep.22.01.207-226

Link Sinta 2 : https://sinta.kemdikbud.go.id/journals/profile/3470

Piagam Sinta 2 :
https://drive.google.com/file/d/1SxYH17MFTjfJ4eaT_Xq1VTJJYa_A4aUK/view?usp=sharing

No.	Perihal	Tanggal	Link
1.	Artikel yang disubmit	5 September 2022	https://drive.google.com/file/d/1KgCxVSv6g8u779ksf9I-5_OcJWLaFdc6/view?usp=drive_link
2.	Revisi ke-1	21 Desember 2022	https://drive.google.com/file/d/1cKGMADSKqJjk_rubtqddTtzJRI_W2XzF/view?usp=drive_link
3.	Artikel yang telah direvisi ke-1	25 Januari 2023	https://drive.google.com/file/d/1xxxhLNW5enoVFkDzYsMcBxN1hYA7ZZrs/view?usp=drive_link
4.	Hasil Review dari Reviewer A dan B	8 Februari 2023	https://drive.google.com/file/d/1pnF_sUD-swu5ynTZoxVJijCnVg0BXrjm/view?usp=drive_link
5.	Revisi ke-2	8 Februari 2023	https://drive.google.com/file/d/1apXN6EYrPNWcXXw-iWPUd5_vESlKdsgv/view?usp=drive_link
6.	Artikel yang telah direvisi ke-2	10 Februari 2023	https://drive.google.com/file/d/1g1CkKLyTrtfg-hTPkXomMFTFBmh6UzNp/view?usp=drive_link
7.	Hasil Review dari Reviewer A dan B	1 Maret 2023	https://drive.google.com/file/d/1tQHsW40csS7j40VKTt6Zr4bdyEY7S4HR/view?usp=drive_link
8.	Revisi ke-3	1 Maret 2023	https://drive.google.com/file/d/1NV7nX4V9KaztizIVjlm212P5tKP1QZK9/view?usp=drive_link
9.	Artikel yang telah direvisi ke-3	15 Maret 2023	https://drive.google.com/file/d/1VeRDTpeLlBDo9koAMGqATz11lDiMoM_0/view?usp=drive_link

10.	Bukti artikel accepted	20 Maret 2023	https://drive.google.com/file/d/1l9-d4LdlGpS1KUuOKxoTDsoaYALDOIZo/view?usp=drive_link
11.	Bukti artikel masuk ke proses produksi	27 Maret 2023	https://drive.google.com/file/d/13jweF52FEYndtWH9HnubruwlzoO58Z97/view?usp=drive_link
12.	Hasil pubished artikel	28 Maret 2023	https://drive.google.com/file/d/16PTPBOjs53HVEbRXTKn5MM-3idtGVafs/view?usp=drive_link
13.	Artikel yang telah terpublished online	28 Maret 2023	https://drive.google.com/file/d/1Cmd5-4BZ6OwIInNBS-wUIRYBxnRiyVEe/view?usp=drive_link

1. Artikel yang disubmit (5 September 2022)

Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District, Muara Enim Regency before and during the Pandemic

Yunita[1)] Riswani[2)] Agustina Bidarti[3)]

[1),2),3)] *Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya*
Email:
fathursyifa.nita@yahoo.co.id
agustinabidarti@unsri.ac.id

Abstract

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent.

Keywords: Pandemic, Income, Consumption Patterns and Survival Strategies

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society. Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors. In addition, the use of social media and applications is also growing rapidly during the pandemic because many sales transactions are carried out online. Based on a research (Sayuti and Siti, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received, spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

Although the impact of the pandemic has resulted in a weakening of the community's economy, people in rural areas still have various strategies to be able to maintain their family's economy. There are various survival strategies during a pandemic. The strategy carried out by households during the pandemic is to apply a double income pattern which is carried out to meet needs, including food needs. This is done because family income during the pandemic has decreased significantly. So that all needs must be met starting from the needs of food, shelter, clothing and education of children. Second, setting a priority scale, namely that the community is more concerned with the needs that are really prioritized in the household. Third, reducing household expenses or what is called a passive strategy, such as food needs, household needs, educational needs, and clothing needs. This is done so that household spending does not increase.

In the economic activity of a country, consumption has an important role and has a very large influence on economic stability. Consumption is a community activity that can be influenced by factors of income, environment and needs. Household consumption varies from one another due to different incomes and needs. The condition of a person's income will affect the level of consumption. The higher the income, the more goods are consumed. Social groups that have the potential to experience food vulnerability are poor households because of their limited access to adequate, safe and well-nourished food. The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, the household consumption decreases due to decreased purchasing power (Setyorini, 2022).

According to data from the Central Statistics Agency (BPS, 2019) there are up to 49.41% of households with poor jobs or poor households in Indonesia who work as farmers. Apart from economic factors, food supply disruptions are very likely to occur in the context of a pandemic.

Based on a research conducted by Faradina Yomitha and Sukayat Yayat (2021), it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia. This is quite ironic when viewed from the point of view of food crop farmers as producers who have played an important role in maintaining food security in our country.

South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land. The condition of these natural resources, if managed properly, will provide great benefits for the people of South Sumatra in general and farmers in particular. South Sumatra Province is a province that has a lot of swamps consisting of tidal swamp land and lowland swamp land. Tidal swamp land and lowland are divided into potential land and functional land (Kuniawan & Wahyudati, 2015).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on lowland. This study aims to 1) analyze changes in income and household expenditures of lowland rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmers' households in lowland during the pandemic.

RESEARCH METHODS

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the

consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in lowland. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic.

The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study were 80 respondents. This study used primary data and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to Murti Sagoro (2013), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to Murti Sagoro (2013), the formula used to find out whether there are differences in farmer household expenditures before and during the

pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULTS AND DISCUSSION

Changes in Farmer Household Income before and during the Pandemic

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in Table 1 below.

Table 1. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	(Rp) Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	% Decrease
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05
3.	Fisherman	2,000,000	2,000,000	0	0
4.	Labor	3,000,000	3,000,000	0	0
Average		2,336,979	2,205,034	131,945	5.65

Source: Processed by Researchers, 2022

Based on Table 1, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to Rp. 131,945 per month. This result is in line with the research of Junaedi et al (2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20%. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 2. Results of Paired Sample T-test

Paired Differences									
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				Sig.(2-tailed)
		Mean			Lower	Upper	t	Df	
Pair 1	Before the pandemic During the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by Researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of Tcount = 2.422 while the value of Ttable = 1.664. It can be concluded that the value of Tcount > Ttable or 2.422 > 1.664 so that the decisions taken from this study rejects Ho and accepts H1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one

before the pandemic.

Changes in Farmers' Household Expenditures Before and During the Pandemic

Changes in household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Where non-food consists of clothing, housing, education, health, transportation, and communication and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food.

Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 3.

Table 3. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (Rp/month)			Percentage (%) Increase	Percentage (%) Decrease
	Before the Pandemic	During the Pandemic	Difference (Rp)		
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 3, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because during a pandemic, fruits and vegetables are a source of

important nutrients that the body needs to meet the needs of fiber, vitamins, minerals and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively.

The increase and decrease in the amount of household food expenditure during this pandemic is caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that makes households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk and nuts.

In line with the results of this study, Kurniasih's research (2020) shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant. Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 4 below:

Table 4. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (Rp/month)				
	Before the Pandemic (Rp)	During the Pandemic (Rp)	Difference (Rp)	Percentage (%) Increase	Percentage (%) Decrease
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by Researchers, 2022

Based on the data in Table 4, it is found that during the pandemic, the household non-food consumption expenditure experiences two changes, namely an increase and decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs with a percentage of 5.69 percent and health costs with a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs and communication equipment needs. Housing costs increases during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 5 below.

Table 5. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (Rp/Month)

Description	Before	During	Differencs	Percentage Difference (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by Rp. 2,722.90 or as much as 0.24 percent, where this expenditure decreases from an average of Rp. 1,159,488.8 to Rp. 1,156,766.71. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or equivalent to Rp. 13,433.35 during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables and fruit groups, before the pandemic and during the pandemic, but with different amounts.

Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from Rp. 458,433.27 to Rp. 442,277.83 during the pandemic.

Table 6. Results of Paired Sample T-test

Paired Differences									
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				Sig.(2-tailed)
		Mean			Lower	Upper	t	df	
Pair1	Before the pandemic During the pandemic	10275.00000	75996.49809	8496.66679	27187.19220	6637.19220	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of Tcount = 1.209, while the value of Ttable = 1.664. So, it can be concluded that the value of Tcount > Ttable or 1.209 > 1.664, so the decision taken from this study is to reject Ho and accept H1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research (Suryati, 2017), which shows that household consumption patterns vary and are based on the amount of income. The greater the level of income owned; the consumption pattern also changes. Rich Muslim households illustrate that their consumption patterns change along with changes in income levels.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for the households to make efforts to maintain their family life. The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in table 1.7. following.

Table 7. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1.	Doing a side job as a Fisherman	31	41.90
2.	Doing a side job as a merchant	5	6.75
3.	Doing a side job as a Farmer	9	12.16

4.	Doing a side job as a massage service	1	1.35
5.	Doing a side job as a Truck Driver	1	1.35
6.	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 7 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 8. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1.	Applying a frugal lifestyle	10	12.5
2.	Make changes to the food menu	11	13.75
4.	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 8. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

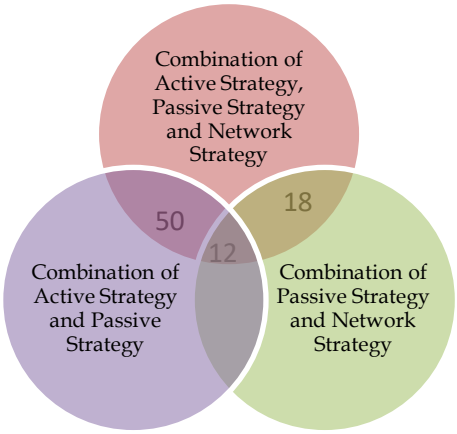


Figure 1. Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies and network strategies are 12 people with a percentage of 15 percent.

CONCLUSION AND SUGGESTIONS

Conclusion

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was Rp. 701,055.53 and during the pandemic is Rp. 714,488.88, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.
3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish

ponds, and livestock as an additional source of livelihood or an effort to reduce household food expenditure.

2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

References

Badan Pusat Statistik. 2019. Survei Angkatan Kerja Nasional (Sakernas). Jakarta Pusat. Badan Pusat Statistik.

Dewi, I.S., 2020. Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. Skripsi : Universitas Muhammadiah Palembang.

Faradina, Y dan Sukayat, Y. 2021. Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). *Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Juli 2021. 7(2):1111-1125.

Hanum, N., 2017. Analisi Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa UniversitasSamudra Di Kota Langsa. *Jurnal samudra ekonomi* [online], 1 (2), 107.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. Reslaj : Religion Education Social Laa Roiba Journal, 3(2), 206-226.

Kurniasih, Erni Panca. 2020. DampakPandemi Covid 19 Terhadap Penurunan Kesejahteraan Masyarakat Kota Pontianak. *Jurnal lmu Ekonomi dan StudiPembangunan.*

Murti Sagoro, 2013. Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. Jurnal Nominal Vol.3 No.1

Sayuti, Rosiady Husaenie dan Siti Aisyah Hidayati. 2020. Dampak Pandemi Covid-19 Terhadap EkonomiMasyarakat di Nusa Tenggara Barat.2(2),133-150.

Suryati, D., 2017. Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. *Jurnal Gane c swara* [online], 11 (1),162.

Setyorini, Noni. 2022. Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. Jurnal Sosial Ekonomi Pertanian. 18(1),15-26.

2. Revisi ke-1
(21 Desember 2022)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.17.2.23-30

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT, MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

Yunita[1)]; Riswani[2)]; Agustina Bidarti3[3)]
[1),2),3)] ***Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, Palembang, Indonesia***
Email: fathursyifa.nita@yahoo.co.id

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the

pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent.

Keyword: pandemic, income, consumption patterns and survival strategies

ABSTRAK

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Kata Kunci: pandemi, pendapatan, pola konsumsi dan strategi bertahan hidup

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society. Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors. In addition, the use of social media and applications is also growing rapidly during the

pandemic because many sales transactions are carried out online. Based on a research (Sayuti and Siti, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received, spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

Although the impact of the pandemic has resulted in a weakening of the community's economy, people in rural areas still have various strategies to be able to maintain their family's economy. There are various survival strategies during a pandemic. The strategy carried out by households during the pandemic is to apply a double income pattern which is carried out to meet needs, including food needs. This is done because family income during the pandemic has decreased significantly. So that all needs must be met starting from the needs of food, shelter, clothing and education of children. Second, setting a priority scale, namely that the community is more concerned with the needs that are really prioritized in the household. Third, reducing household expenses or what is called a passive strategy, such as food needs, household needs, educational needs, and clothing needs. This is done so that household spending does not increase.

In the economic activity of a country, consumption has an important role and has a very large influence on economic stability. Consumption is a community activity that can be influenced by factors of income, environment and needs. Household consumption varies from one another due to different incomes and needs. The condition of a person's income will affect the level of consumption. The higher the income, the more goods are consumed. Social groups that have the potential to experience food vulnerability are poor households because of their limited access to adequate, safe and well-nourished food. The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, the household consumption decreases due to decreased purchasing power (Setyorini, 2022).

According to data from the Central Statistics Agency (BPS, 2019) there are up to 49.41% of households with poor jobs or poor households in Indonesia who work as farmers. Apart from economic factors, food supply disruptions are very likely to occur in the context of a pandemic.

Based on a research conducted by Faradina Yomitha and Sukayat Yayat (2021), it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia. This is quite ironic when viewed from the point of view of food crop farmers as producers who have played an important role in maintaining food security in our country.

South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry

land. The condition of these natural resources, if managed properly, will provide great benefits for the people of South Sumatra in general and farmers in particular. South Sumatra Province is a province that has a lot of swamps consisting of tidal swamp land and lowland swamp land. Tidal swamp land and lowland are divided into potential land and functional land (Kuniawan & Wahyudati, 2015).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on lowland. This study aims to 1) analyze changes in income and household expenditures of lowland rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmers' households in lowland during the pandemic.

Commented [I1]: Introduction until 1000 words

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in lowland. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic.

The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study were 80 respondents. This study used primary data and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to Murti Sagoro (2013), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether

there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to Murti Sagoro (2013), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation

Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Changes in Farmer Household Income before and during the Pandemic

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in Table 1 below.

Table 1. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	(Rp) Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	% Decrease
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05

Fisherman 3.	2,000,000	2,000,000	0	0
Labor 4.	3,000,000	3,000,000	0	0
Average	2,336,979	2,205,034	131,945	5.65

Source: Processed by Researchers, 2022

Based on Table 1, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to Rp. 131,945 per month. This result is in line with the research of Junaedi et al (2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20%. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 2. Results of Paired Sample T-test

Paired Differences									
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	Df	Sig.(2-tailed)
		Mean			Lower	Upper			
Pair1	Before the pandemic During the pandemic	15 6250.00000	5 76950.46186	64 505.02262	27 855.96417	2 84644.03583	2.422	79	.018

Source: Processed by Researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of Tcount = 2.422 while the value of Ttable = 1.664. It can be concluded that the value of Tcount > Ttable or 2.422 > 1.664 so that the decisions taken from this study rejects Ho and accepts H1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic.

Changes in Farmers' Household Expenditures Before and During the Pandemic

Changes in household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Where non-food consists of clothing, housing, education, health, transportation, and communication and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food.

Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 3.

Table 3. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (Rp/month)				
	Before the Pandemic	During the Pandemic	Difference (Rp)	Percentage (%) Increase	Percentage (%) Decrease
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetable	64,2	69,077.	4,833.38	7.00	0.00

s		44.40	78			
	Nuts	26,0		25,444.		2.18
		00.00	40		-555.60	0.00
	Fruits	5,68		7,966.6		0.00
		8.89	7		2,277.78	28.59
	Total	701,		714,48	13,433.3	
		055.53	8.88	5		1.88

Source: Survey Results, 2022

Based on Table 3, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because during a pandemic, fruits and vegetables are a source of important nutrients that the body needs to meet the needs of fiber, vitamins, minerals and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively.

The increase and decrease in the amount of household food expenditure during this pandemic is caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that makes households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk and nuts.

In line with the results of this study, Kurniasih's research (2020) shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant. Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 4 below:

Table 4. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (Rp/month)				
	Before the Pandemic (Rp)	During the Pandemic (Rp)	Difference (Rp)	Percentage (%) Increase	Percentage (%) Decrease
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.1	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by Researchers, 2022

Based on the data in Table 4, it is found that during the pandemic, the household non-food consumption expenditure experiences two changes, namely an increase and decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs with a percentage of 5.69 percent and health costs with a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs and communication equipment needs. Housing costs increases during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of

various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 5 below.

Table 5. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (Rp/Month)

Description	Before	During	Differences	Percentage Difference (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by Rp. 2,722.90 or as much as 0.24 percent, where this expenditure decreases from an average of Rp. 1,159,488.8 to Rp. 1,156,766.71. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or equivalent to Rp. 13,433.35 during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables and fruit groups, before the pandemic and during the pandemic, but with different amounts.

Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from Rp. 458,433.27 to Rp. 442,277.83 during the pandemic.

Table 6. Results of Paired Sample T-test

Paired Differences									
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig.(2-tailed)
		Mean			Lower	Upper			
Pair1	Before the pandemic During the pandemic	10275.00000	75996.49809	8496.66679	27187.19220	6637.19220	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of Tcount = 1.209, while the value of Ttable = 1.664. So, it can be concluded that the value of Tcount > Ttable or 1.209 > 1.664, so the decision taken from this study is to reject Ho and accept H1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research (Suryati, 2017), which shows that household consumption patterns vary and are based on the amount of income. The greater the level of income owned; the consumption pattern also changes. Rich Muslim households illustrate that their consumption patterns change along with changes in income levels.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for the households to make efforts to maintain their family life. The

pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in table 1.7. following.

Table7. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 7 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table8. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 8. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

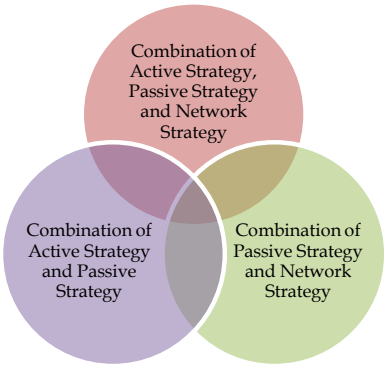


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies and network strategies are 12 people with a percentage of 15 percent.

CONCLUSION AND SUGGESTION

Conclusion

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was Rp. 701,055.53 and during the pandemic is Rp. 714,488.88, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the

pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.

3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household food expenditure.
2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

REFERENCES

Badan Pusat Statistik. 2019. *Survei Angkatan Kerja Nasional (Sakernas)*. Jakarta Pusat. Badan Pusat Statistik

Dewi, I.S., 2020. Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. Skripsi : Universitas Muhammadiah Palembang

Faradina, Y dan Sukayat, Y. 2021. Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). *Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 7(2):1111-1125

Hanum, N., 2017. Analisi Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra Di Kota Langsa. Jurnal samudra ekonomi [online], 1 (2), 107.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. Reslaj : Religion Education Social Laa Roiba Journal, 3(2), 206-226.

Kurniasih, Erni Panca. 2020. Dampak Pandemi Covid 19 Terhadap Penurunan Kesejahteraan Masyarakat Kota Pontianak. Jurnal lmu Ekonomi dan Studi Pembangunan.

Murti Sagoro, 2013. Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. Jurnal Nominal Vol. 3 No.1

Sayuti, Rosiady Husaenie dan Siti Aisyah Hidayati. 2020. Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. 2(2),133-150.

Suryati, D., 2017. Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. Jurnal Gane c swara [online], 11 (1), 162.

Setyorini, Noni. 2022. Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. Jurnal Sosial Ekonomi Pertanian. 18(1),15-26.

Commented [I2]: Please follow
for references written

Commented [I3]: The number
throughout the main manuscript
citations.
And 22 references source from jo

Commented [I4]: (2019). Please
"year" of references

Commented [I5]: Title of refrere
If its journal "the journal title must b

COVER LETTER

ISSN: 1412-8837 e-ISSN :2579-9959

First author*1), Second author 2), etc.

I. First author*:

1. Name : Dr. Yunita, M.Si
2. Affiliation : Univ Sriwijaya
3. E-mail : fathursyifa.nita@yahoo.co.id
4. Orcid ID : https://orcid.org/0000-0002-7767-819X
5. Phone number: +62 813-3872-7665

II. Second author:

1. Name : Dr. Riswani, S.P., M.Si.
2. Affiliation : Universitas Sriwijaya
3. E-mail : riswani@fp.unsri.ac.id
4. Orcid ID : 0000-0001-8335-4696
5. Phone number: 082182660561

III. Third author:

1. Name : Name : Dr. Agustina Bidarti, SP., M.Si
2. Affiliation : Univ. Sriwijaya
3. E-mail : agustinabidarti@unsri.ac.id
4. Orcid ID : https://orcid.org/0000-0001-7120-376X
5. Phone number: +6282380338269

IV. Fourth author:

1. Name :
2. Affiliation :
3. E-mail :
4. Orcid ID :
5. Phone number:

3. Artikel yang telah di revisi ke-1 (25 Januari 2023)

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

Income and Expenditure Analysis and Coping Mechanisms of Rice Farmers Households in Muara Belida District, Muara Enim Regency Before and During the Pandemic

Yunita[1)] Riswani[2)] Agustina Bidarti[3)]

[1),2),3)]*Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya*
Email: yunita@fp.unsri.ac.id

Abstrak

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t-sampel berpasangan (paired-sampel t-test). Hasil penelitian menunjukkan, pertama, terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemic. Kedua, terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemic. Ketiga, strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Kata Kunci: Pandemi, Pendapatan, Pola Konsumsi dan Strategi Bertahan Hidup

PENDAHULUAN

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. (Wardayani et al., 2022; Pujowati & Sufaidi, 2021; Shang et al., 2021) Data Dinas Tenaga Kerja Kota Palembang menunjukkan bahwa terhitung sejak tanggal 5 April 2020 lalu, jumlah pekerja yang dirumahkan atau mengalami Pemutusan Hubungan Kerja mencapai 1.262 pekerja di Palembang (Dewi, 2020).

Walaupun pandemi mengakibatkan ada masyarakat kehilangan pekerjaan,

dirumahkan, berpindah pekerjaan, jam kerja dibatasi, dan upah yang diturunkan, namun di sisi lain juga menimbulkan peluang kerja baru yang mengandalkan kreatifitas di berbagai sektor. (Lippert et al., 2021; Graeber et al., 2021). Selain itu penggunaan media sosial serta aplikasi turut berkembang pesat di masa pandemi karena banyak transaksi penjualan yang dilakukan secara daring. (Dianda & Pandin, 2021, Gu et al., 2021;) Kajian Sayuti & Hidayati (2020), pandemi mempengaruhi pola kehidupan ekonomi masyarakat secara signifikan, mulai dari pendapatan yang diterima, pola pengeluaran untuk kehidupan sehari-hari, lapangan pekerjaan, dan kebiasaan belanja yang didominasi oleh belanja online.

Sektor pertanian mendukung ketahanan pangan dan ketersediaan pangan serta meningkatkan kesejahteraan masyarakat. Kesejahteraan petani memegang peranan penting dalam mempertahankan dan meningkatkan produksi pertanian. Sektor pertanian yang maju dapat mendorong pertumbuhan ekonomi yang lebih cepat dan mengurangi kemiskinan (Wibowo & Suharno, 2022; Abidin, 2021).

Kajian Hernanda et al. (2017) dan Novia & Zulkifli (2021) menyatakan bahwa pengeluaran pangan memiliki hubungan negatif dengan ketahanan pangan. Oleh sebabnya, pengeluaran pangan di tingkat petani pada masa pandemi menjadi bagian substansif dibahas dalam mekanisme koping pada rumah tangga petani. Meskipun dampak dari pandemi mengakibatkan melemahnya ekonomi masyarakat. (Ridwan, 2022) Namun masyarakat di pedesaan yang umumnya bergerak di sektor pertanian masih memiliki berbagai macam strategi untuk dapat mempertahankan ekonomi keluarga mereka. Terdapat berbagai macam strategi bertahan hidup pada masa pandemi.

Strategi yang dilakukan oleh rumah tangga pada masa pandemi tersebut adalah menerapkan pola nafkah ganda yang dilakukan untuk memenuhi kebutuhan termasuk kebutuhan pangan. Hal ini dilakukan karena penghasilan keluarga pada masa pendemi mengalami penurunan yang cukup signifikan. (Hertz et al., 2020; Kansiime et al., 2020) Sehingga segala kebutuhan harus tetap terpenuhi mulai dari kebutuhan pangan, papan, sandang maupun pendidikan anak. Oleh karenanya, menetapkan skala prioritas dalam masyarakat menjadi penting sebagai keperluan yang benar-benar diprioritaskan dalam rumah tangga. Selanjutnya, mengurangi pengeluaraan dalam rumah tangga atau disebut dengan strategi pasif seperti kebutuhan makan, kebutuhan alat rumah tangga, kebutuhan pendidikan, kebutuhan pakaian. Hal tersebut dilakukan agar pengeluaran dalam rumah tangga tidak melonjak.

Dalam aktivitas perekonomian suatu negara, konsumsi mempunyai peran penting dan berpengaruh sangat besar terhadap stabilitas perekonomian. (Sari & Prasetyani, 2021; Kusuma, 2020) Konsumsi merupakan kegiatan masyarakat yang dapat dipengaruhi oleh faktor pendapatan, lingkungan dan kebutuhan. Konsumsi rumah tangga berbeda-beda antara satu dengan lainnya dikarenakan pendapatan dan kebutuhan yang berbeda-beda pula. Kondisi pendapatan seseorang akan mempengaruhi tingkat konsumsinya. Makin tinggi pendapatan makin banyak jumlah barang yang dikonsumsi.

Kelompok sosial yang berpotensi mengalami kerentanan pangan adalah rumah tangga miskin, karena akses mereka yang terbatas dalam hal penyediaan pangan yang cukup, aman dan bergizi baik. Perlambatan ekonomi masyarakat menyebabkan rumah tangga pada lapisan ini kesulitan untuk memenuhi kebutuhan hidup, sehingga konsumsi rumah tangganya pun menurun, karena kemampuan daya beli yang menurun (Setyorini, 2022). Studi Hasanah et al. (2021) menunjukkan bahwa kerawanan pangan keluarga miskin terjadi karea dampak pandemi yang menyebabkan akses terhadap pangan

keluarga miskin semakin terbatas yang dicirikan oleh konsumsi pangan dari sisi kuantitas dan kualitas menurun.

Menurut data dari Badan Pusat Statistik (BPS, 2019) terdapat hingga 49,41% rumah tangga dengan pekerjaan yang buruk atau rumah tangga miskin di Indonesia berprofesi menjadi petani. Rumah tangga petani termasuk kelompok rentan terhadap ketahanan pangan rumah tangganya. Kajian Yunita et al. (2011) menunjukkan bahwa tingkat kapasitas petani terkategori sedang, tingkat ketahanan pangan rumah tangga petani tergolong rendah, dan mekanisme koping rumah tangga petani tergolong tinggi.

Berdasarkan penelitian yang dilakukan oleh Faradina & Sukayat (2021) diketahui bahwa pandemi Covid-19 turut memberikan pengaruh pada sektor pertanian termasuk pada petani tanaman pangan di dunia secara umum dan beberapa wilayah di Indonesia. Hasil penelitian Guampe et al. (2021) menunjukkan bahwa dampak Covid-19 mempengaruhi sektor pertaian pedesaan seperti terjadinya kelangkaan input produksi. Kelangkaan input pertanian tersebut terjadi karena mobilisasi perdagangan yang terbatas akibat pandemi. Studi Bidarti (2020), menunjukkan dampak pandemi di sektor hilir pusat distribusi pangan berakibat juga terhadap sektor hulu produksi pangan di pedesaan Sumatera Selatan. Hal ini cukup ironis bila ditinjau dari sudut pandang petani tanaman pangan selaku produsen yang selama ini memegang peranan penting dalam menjaga ketahanan pangan di negara kita. Selain karena faktor ekonomi, gangguan pasokan makanan sangat mungkin terjadi dalam konteks pandemi.

Sumatera Selatan sebagai salah satu provinsi dengan predikat lumbung pangan, tidak terlepas dari tersedianya potensi sumberdaya lahan yang cukup variatif, mulai dari lahan sawah irigasi, tadah hujan, rawa pasang surut, lebak serta lahan kering. (Defriyanti, 2019) Kondisi sumberdaya alam ini bila dikelolah dengan benar akan memberikan manfaat yang besar bagi masyarakat Sumatera Selatan pada umumnya dan petani khususnya. Provinsi Sumatera Selatan merupakan provinsi yang mempunyai banyak lahan rawa yang terdiri dari lahan rawa pasang surut dan lahan rawa lebak. Lahan rawa pasang surut dan lahan rawa lebak terbagi atas lahan potensial dan lahan fungsional (Kurniawan & Wahyudati, 2015; Syaputra & Inan, 2019).

Kecamatan Muara Belida Kabupaten Muara Enim yang berbatasan dengan Kota Palembang adalah daerah penghasil beras yang merupakan pangan pokok masyarakat Provinsi Sumatera Selatan. Usahatani padi di Kecamatan Muara Belida diusahakan pada Lahan Lebak. Penelitian ini bertujuan untuk menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi lahan lebak sebelum dan pada masa pandemi dan mendeskripsikan mekanisme koping rumah tangga petani padi lahan lebak pada masa pandemi.

METODE PENELITIAN

Penelitian ini dilaksanakan di Kecamatan Muara Belida Kabupaten Muara Enim Provinsi Sumatera Selatan. Penentuan lokasi dilakukan secara sengaja dengan pertimbangan bahwa Kecamatan Muara Belida merupakan penghasil beras yang cukup besar dan sebagian besar penduduknya merupakan petani padi lahan lebak. Penelitian ini dilaksanakan pada bulan Juli 2022.

Penelitian ini menggunakan metode survei dengan berinteraksi langsung dengan kepala rumah tangga yang menjadi responden untuk diwawancarai. Wawancara dipandu dengan bantuan kuisioner terstruktur agar mendapatkan informasi dan data primer tentang pendapatan dan pengeluaran rumah tangga serta mekanisme koping rumah tangga petani padi selama masa pandemi.

Metode penarikan sampel dalam penelitian ini menggunakan teknik *simple random sampling* yaitu teknik pengambilan sampel yang memberikan peluang sama bagi setiap unsur anggota populasi untuk dipilih menjadi anggota sampel. Jumlah sampel dalam penelitian ini sebanyak 80 responden. Penelitian ini menggunakan data primer dan data sekunder. Menjawab tujuan pertama, data diolah secara kuantitatif dan dijelaskan secara deskriptif, yaitu dengan menghitung pendapatan dan pengeluaran rumah tangga petani sebelum dan saat masa pandemi. Data disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (*paired-sampel t test).*

Menurut Sagoro (2013) *paired samples t-test* atau uji t-sampel berpasangan merupakan uji parametrik yang digunakan untuk menguji hipotesis sama atau tidak berbeda di antara dua variabel. Data berasal dari dua pengukuran atau dua periode pengamatan yang berbeda yang diambil dari subjek yang dipasangkan. Uji t-sampel berpasangan pada penelitian ini untuk mengetahui apakah terdapat perbedaan pendapatan dan pengeluaran rumah tangga petani sebelum dan saat pandemi. Rumus yang digunakan untuk mengetahui apakah terdapat perbedaan pendapatan rumah tangga sebelum dan saat pandemi adalah sebagai berikut:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{Dimana}: \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Keterangan:
Xa = Rata-rata pendapatan rumah tangga petani sebelum pandemi
Xb = Rata-rata pendapatan rumah tangga petani saat pandemi
Sp = Standar deviasi gabungan
Sa =Standar deviasi pendapatan rumah tangga petanisebelum pandemi
Sb = Standar deviasi pendapatan rumah tangga petani pada saat pandemi
na = Sampel pendapatan rumah tangga petani sebelum pandemi
nb = Sampel pendapatan rumah tangga petani saat pandemi

Dengan kaidah keputusan sebagai berikut:

1. Nilai signifikansi (2-tailed) < 0.05 menunjukan pendapatan rumah tangga petani pada masa pandemi lebih rendah dibandingkan sebelum adanya pandemi.
2. Nilai signifikansi (2-tailed) > 0.05 menunjukan tidak adanya perbedaan yang signifikan pendapatan rumah tangga petani sebelum dan pada saat Pandemi.

Menurut Sagoro (2013) rumus yang digunakan untuk mengetahui apakah terdapat perbedaan pengeluaran rumah tangga petani sebelum dan saat pandemi adalah sebagai berikut:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{Dimana}: \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Keterangan:

Xa = Rata-rata pengeluaran rumah tangga petani sebelum pandemi
Xb = Rata-rata pengeluaran rumah tangga petani saat pandemi
Sp = Standar deviasi gabungan
Sa = Standar deviasi pengeluaran rumah tangga petani sebelum pandemi
Sb = Standar deviasi pengeluaran rumah tangga petani pada saat pandemi
na = Sampel pengeluaran rumah tangga petani sebelum pandemi
nb = Sampel pengeluaran rumah tangga petani saat pandemi

Dengan kaidah keputusan sebagai berikut:

1. Nilai signifikansi (2-tailed) < 0.05 menunjukan pengeluaran rumah tangga petani saat pandemi lebih rendah dibandingkan sebelum pandemi.
2. Nilai signifikansi (2-tailed) > 0.05 menunjukan tidak adanya perbedaan yang signifikan pengeluaran rumah tangga petani sebelum dan pada saat Pandemi.

Tujuan kedua dijelaskan secara deskriptif dari data dan informasi yang diperoleh melalui wawancara. Analisis deskriptif ini digunakan untuk mengetahui strategi apa saja yang dilakukan rumah tangga petani untuk bertahan hidup selama masa pandemi.

HASIL DAN PEMBAHASAN

Perubahan Pendapatan Rumah Tangga Petani Sebelum dan Saat Pandemi

Pendapatan rumah tangga merupakan sejumlah uang yang diperoleh dari kepala rumah tangga maupun anggotanya yang digunakan untuk memenuhi kebutuhan bersama dalam rumah tangga. Rata-rata pendapatan total rumah tangga sebelum dan saat pandemi di Muara Belida berdasarkan pekerjaan (rp/bulan) dapat dilihat pada Tabel 1 berikut.

Tabel 1. Rata-Rata Pendapatan Total Rumah Tangga Petani Sebelum dan Saat Pandemi berdasarkan Pekerjaan (Rp/Bulan)

No.	Jenis Pekerjaan	Rata-Rata Pendapatan Per Bulan Sebelum Pandemi (Rp)	Rata-Rata Pendapatan Per Bulan Saat Pandemi (Rp)	Selisih (Rp)	% Penurunan
1.	Petani	2.147.916	1.995.138	152,778	7,11
2.	Pedagang	2.200.000	1.825.000	375.000	17,05
3.	Nelayan	2.000.000	2.000.000	0	0
4.	Buruh	3.000.000	3.000.000	0	0
Rata-Rata		2.336.979	2.205.034	131.945	5,65

Sumber: Diolah Peneliti, 2022

Berdasarkan Tabel 1 diperoleh bahwa pada masa pandemi pendapatan rumah tangga di Muara Belida mengalami penurunan dari sebelum pandemi yaitu sebesar 5,65 persen atau setara Rp. 131.945 per bulan. Hasil ini sejalan dengan penelitian Junaedi dkk (2021) yang menyatakan bahwa akibat adanya pandemi menyebabkan sebagian besar masyarakat mengalami penurunan pendapatan bulanan antara 5-20%, pandemi juga membuat masyarakat berupaya mencari tambahan penghasilan lewat usaha kuliner, kerja paruh waktu, kerja serabutan, dan menyediakan jasa konsultasi.

Tabel 2. Hasil Uji *Paired Sampel T-test*

		Paired Differences							Sig.(2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	T	Df	
Pair 1	Sebelum pandemiPada saat pandemi	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Sumber: Diolah Peneliti, 2022

Berdasarkan hasil dari uji *paired sampel T-test* dengan menggunakan SPSS dinyatakan bahwa dengan adanya pandemi menyebabkan rata-rata pendapatan rumah tangga petani di Muara Belida menjadi lebih rendah dibandingkan dengan sebelum adanya pandemi. Hasil uji *paired sampel T-test* diperoleh nilai t-hitung = 2,422 sedangkan nilai t-tabel = 1,664, jadi dapat

disimpulkan bahwa nilai t-hitung > t-tabel atau 2,422 > 1,664 sehingga keputusan yang diambil dari penelitian ini adalah tolak Ho dan terima H1 artinya pendapatan rumah tangga petani di Muara Belida pada saat pandemi lebih rendah dibandingkan sebelum pandemi.

Perubahan Pengeluaran Rumah Tangga Petani Sebelum dan Saat Pandemi

Perubahan pengeluaran rumah tangga petani di Muara Belida sebelum dan saat pandemi dalam penelitian ini terdiri dari pengeluaran pangan dan pengeluaran non pangan**.** Pengeluaran konsumsi rumah tangga petani pada penelitian ini adalah pengeluaran untuk membeli barang dan jasa yang dipergunakan untuk memenuhi kehidupannya. Pengeluaran konsumsi rumah tangga petani merupakan total pengeluaran pangan dan non pangan. Dimana non pangan terdiri dari sandang, perumahan, pendidikan, kesehatan, transportasi, dan komunikasi dan listrik. Secara umumnya, pengeluaran inilah yang dipengaruhi oleh tingkat pendapatan yang diterima rumah tangga petani. Apabila tingkat pendapatan rendah, maka rumah tangga petani akan mendahulukan untuk kebutuhan pangan dibandingkan yang lain. Sebaliknya apabila pendapatan rumah tangga petani tinggi, terjadi pergeseran dari kebutuhan pangan ke kebutuhan selain pangan.

Pengeluaran pangan menjadi salah satu pengeluaran yang terpenting karena makanan merupakan kebutuhan dasar manusia yang harus dipenuhi. Hal ini dijelaskan dalam hasil penelitian Martadona (2022), yang menyatakan bahwa proporsi pengeluaran rumah tangga petani digunakan untuk pengeluaran pangan yaitu padi-padian, dengan rata-rata total pengeluaran sebesar 60.26 persen**.** Selain itu ada banyak pengeluaran rumah tangga yang dianggap sebagai kebutuhan penting untuk mengkokohkan rumah tangga, hal ini tergantung dengan tingkat pendapatan yang diterima. Perbedaan pengeluaran konsumsi rumah tangga petani dipengaruhi oleh berapa banyak tanggungan rumah tangga dan juga kebiasaan setiap rumah tangga dalam memenuhi kebutuhan hidupnya. Untuk rata-rata dan persentase rata-rata pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi (rp/bulan) dapat dilihat pada Tabel 3.

Tabel 3. Rata-Rata Pengeluaran Pangan Per Bulan Rumah Tangga Petani Sebelum dan Saat Pandemi

Kelompok Pangan	Rata-rata Pengeluara Pangan (rp/ bulan)				
	Sebelum Pandemi	Saat Pandemi	Selisih (Rp)	Persentase (%) Kenaikan	Persentase (%) Penurunan
Padi-padian	345.455,56	345.877,78	422,22	0,12	0,00
Umbi-umbian	7.022,22	6.944,44	-777,80	0,00	1,12
Ikan	124.455,56	127.311,11	2.855,55	2,24	0,00
Daging	82.911,10	85.300,00	2.388,90	2,80	16,85
Telur dan susu	45.277,80	46.566,70	1.288,90	2,77	0,00
Sayur-sayuran	64.244,40	69.077,78	4.833,38	7,00	0,00
Kacang-kacangan	26.000,00	25.444,40	-555,60	0,00	2,18
Buah-buahan	5.688,89	7.966,67	2.277,78	28,59	0,00
Jumlah	701.055,53	714.488,88	13.433,35	1,88	

Sumber: Hasil Survey , 2022

Berdasarkan Tabel 3 didapatkan bahwa persentase rata-rata pengeluaran konsumsi pangan rumah tangga petani yang terbesar baik sebelum maupun selama pandemi yaitu pada kelompok pangan buah-buahan dan sayur-sayuran. Hal ini karena saat pandemi buah dan sayur merupakan sumber nutrisi penting yang dibutuhkan tubuh untuk memenuhi kebutuhan serat, vitamin, mineral dan beberapa enzim yang bermanfaat untuk fungsi pencernaan. Sayur dan buah memberi kontribusi tehadap pemenuhan zat gizi yang penting bagi tubuh. Kenaikan rata-rata pengeluaran konsumsi buah-buahan dan sayur pada saat pandemi ini juga diikuti oleh kelompok pangan lainnya seperti ikan, daging, telur dan susu dengan persentase kenaikan pengeluaran rata-rata secara berurutan yaitu sebanyak 2,24 persen, 2,80 persen, 2,77 persen. Sedangkan untuk kelompok pangan yang mengalami penurunan selama pandemi, yaitu kelompok pangan umbi-umbian dan kacang-kacangan dengan persentase penurunan sebanyak 22,18 persen dan 1,12 persen. Hasil penelitian yang berbeda terdapat pada pengeluaran konsumsi pangan pada rumah tangga petani saat tidak pandemi. Pengeluaran pangan terbesar adalah pengeluaran tembakau (225), padi-padian (21%), dan ikan/udang/cumi/kerang (11%) dari total pengeluaran pangan (Fatimah & Syamsiah, 2018; Gorahe et al., 2021).

Kenaikan dan penurunan jumlah pengeluaran pangan rumah tangga pada saat pandemi ini disebabkan oleh kenaikan harga pada jenis-jenis pangan tersebut, hal ini juga selaras dengan informasi yang disampaikan oleh ketua umum IKAPPI bahwa pada tahun 2020 hampir semua bahan pangan rumah tangga mengalami kenaikan harga sehingga membuat rumah tangga mengubah pola konsumsinya, diantaranya seperti rumah tangga yang mempunyai pendapatan rendah, mereka akan menggurangi pengeluaran untuk mengkonsumsi daging serta menganti konsumsinya tersebut dengan memperbanyak mengkonsumsi telur, susu dan kacang-kacangan.

Sejalan dengan hasil penelitian ini, penelitian Kurniasih (2020) menunjukkan bahwa terjadinya penurunan pendapatan yang sangat tajam antara 30%-70% akibat pandemi sementara pengeluaran cenderung tetap. Sejak pandemi masyarakat melakukan perubahan pola konsumsi makanan secara drastis. Masyarakat hanya merubah pola konsumsi makanan dengan mengganti jenis lauknya saja dan lebih memilih mencari penghasilan tambahan untuk menutupi pengeluaran keluarga guna untuk mempertahankan hidup.

Jody et al. (2020) dalam kajiannya yang dilakukan di empat negara bagian India mengemukakan bahwa dampak pandemi terlihat pada gangguan pada sistem pangan dan berdampak pada mata pencaharian dan pola makan. Diketahui bahwa dampak awal pandemi dan tanggapan kebijakan terhadap rumah tangga petani, mayoritas petani melaporkan dampak negatif pada produksi, penjualan, harga, dan pendapatan.

Rata-rata pengeluaran non-pangan per bulan rumah tangga petani sebelum dan saat pandemi dapat dilihat pada Tabel 4 berikut:

Tabel 4. Rata-Rata Pengeluaran Non-Pangan Per Bulan Rumah Tangga Petani Sebelum dan Saat Pandemi

Kelompok Non Pangan	Rata-Rata Pengeluaran (Rp/ bulan)				
	Sebelum Pandemi (Rp)	Saat Pandemi (Rp)	Selisih (Rp)	Persentase (%) Kenaikan	Persentase (%) Penurunan
Perumahan	212.733,30	225.577,78	12.844,48	5,69	0,00

Barang dan jasa	193.933,30	183.877,78	-10.055,52	0,00	5,47
Biaya pendidikan	32.777,78	14.000,00	-18.777,78	0,00	134,13
Biaya kesehatan	10.388,89	11.555,60	1.166,71	10,10	0,00
Sandang	111,11	111,111	0	0,00	0,00
Barang tahan lama	2.444,44	1.888,89	-555,55	0,00	29,41
Pajak dan asuransi	4.266,67	4.266,67	0	0,00	0,00
Keperluan sosial	1.777,78	0	-1777,78	0,00	0,00
Jumlah	458.433,27	442.277,83	16.155,44		3,65

Sumber: Diolah Peneliti,2022

Berdasarkan data pada Tabel 4 diperoleh bahwa pada saat pandemi pengeluaran konsumsi non pangan rumah tangga mengalami dua perubahan yaitu kenaikan dan penurunan persentase rata-rata pengeluaran. Dimana untuk jenis non pangan yang mengalami kenaikan yaitu biaya perumahan dengan persentase sebesar 5,69 persen dan biaya kesehatan dengan persentase sebesar 10,10 persen. Biaya perumahan dalam penelitian ini terdiri dari kebutuhan listrik, kebutuhan air dan kebutuhan alat komunikasi. Biaya perumahan meningkat saat pandemi dikarenakan adanya penerapan PSBB saat pandemi menyebabkan masyarakat lebih banyak menggunakan listrik saat dirumah.

Lain halnya untuk jenis non pangan yang mengalami penurunan persentase rata-rata pengeluaran pada saat pandemi antara lain biaya aneka barang dan jasa, biaya pendidikan, biaya barang tahan lama dengan penurunan persentase secara berturut-turut yaitu 5,47 persen, 134,13 persen, 29, 41 persen. Penurunan pengeluaran ini terjadi karena pada saat pandemi pendapatan rumah tangga mengalami penurunan sehingga rumah tangga mengurangi konsumsinya untuk membeli pakaian dan barang-barang elektronik ataupun barang-barang keperluan tambahan rumah tangga. Adapun rata-rata pengeluaran keseluruhan konsumsi rumah tangga di Muara Belida sebelum dan selama pandemi dapat dilihat pada Tabel 5 berikut ini.

Tabel 5. Rata-rata dan Persentase Selisih Rata-rata Pengeluaran Konsumsi Rumah Tangga di Muara Belida Sebelum dan Selama Pandemi (Rp/Bulan)

Uraian	Sebelum	Selama	Selisih	Persentase Selisih (%)
Pengeluaran Konsumsi Pangan Rumah Tangga	701.055,53	714.488,88	13.433,35	1,88
Pengeluaran Konsumsi Non Pangan Rumah Tangga	458.433,27	442.277,83	16.155,44	3,65
Jumlah	1.159.488,8	1.156.766,71	2.722,90	0,24

Sumber: Diolah Peneliti,2022

Pengeluaran rumah tangga di Muara Belida mengalami penurunan jumlah pengeluaran rata-rata selama pandemi sebesar Rp. 2.722,90 atau sebanyak 0,24 persen, dimana

pengeluaran ini turun dari rata-rata Rp. 1.159.488,8 menjadi Rp. 1.156.766,71. Namun jika dilihat dari kelompok konsumsinya didapatkan bahwa untuk rata-rata pengeluaran konsumsi pangan rumah tangga di Muara Belida mengalami kenaikan sebanyak 1,88 atau setara dengan Rp. 13.433,35 selama pandemi. Hasil yang didapatkan bahwa masyarakat di Muara Belida tetap mengkonsumsi bahan pangan kelompok padi-padian terutama beras sebagai bahan pangan utama atau pokok, tetap mengkonsumsi bahan pangan kelompok umbi- umbian, kelompok kacang-kacangan, kelompok pangan hewani, maupun kelompok sayur dan buah, baik sebelum pandemi maupun pada saat pandemi, namun dengan jumlah yang berbeda.

Namun berbanding terbalik dengan rata-rata pengeluaran konsumsi non pangan rumah tangganya yaitu mengalami penurunan sebanyak 3,65 persen atau turun dari Rp. 458.433,27 menjadi Rp. 442.277,83 selama pandemi.

Tabel 5 juga menunjukkan bahwa persentase pengeluaran konsumsi pangan rumah tangga petani padi di Muara Belida lebih dari 60% total pengeluaran rumah tangga. Hal ini menunjukkan bahwa rumah tangga petani padi di lokasi ini tergolong rawan pangan jika dilihat dari proporsi pengeluarannya. Hasil penelitian ini berbeda dengan hasil penelitian yang dilakukan Pradnyadewi et al. (2021) terhadap rumah tangga petani di Subak Sembung pada saat pandemi covid-19, dimana hasil penelitiannya menunjukkan bahwa pengeluaran konsumsi pangan kurang dari 60% pengeluaran total rumah tangga.

Tabel 6. Hasil Uji *Paired Sampel T-test*

		Paired Differences							Sig.(2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair1	Sebelum pandemiPada saat pandemi	10275.00000	75996.49809	8496.66679	27187.19220	6637.19220	1.209	79	.000

Sumber: Diolah Peneliti, 2022

Hasil uji *paired sampel T-test* dengan menggunakan SPSS terhadap pengeluaran konsumsi rumah tangga petani di Muara Belida sebelum pandemi dan saat pandemi dapat dilihat pada Tabel 6, dimana diperoleh nilai T_{hitung} = 1,209 sedangkan nilai T_{tabel} = 1,664, jadi dapat disimpulkan bahwa nilai $T_{hitung} > T_{tabel}$ atau 1,209 > 1,664 sehingga keputusan yang diambil dari penelitian ini adalah tolak Ho dan terima H1 artinya pengeluaran konsumsi rumah tangga petani di Muara Belida saat pandemi lebih rendah dibandingkan pandemi.

Terjadinya perubahan pola pengeluaran konsumsi rumah tangga dalam penelitian ini sejalan dengan hasil penelitian (Suryati, 2017) yang menunjukkan bahwa pola konsumsi rumah tangga bervariasi dan berdasarkan besaran pendapatannya. Semakin besar tingkat pendapatan yang dimiliki maka pola konsumsinya juga akan ikut berubah. Bagi rumah tangga muslim yang kaya menggambarkan bahwa pola konsumsinya ikut berubah seiring dengan adanya perubahan tingkat pendapatan.

Strategi Bertahan Hidup yang dilakukan Rumah Tangga Petani saat Pandemi

Pandemi yang menyebabkan perubahan pendapatan rumah tangga sehingga menjadi faktor utama rumah tangga harus melakukan upaya dalam mempertahankan hidup keluarganya. Umumnya rumah tangga petani akan menyesuaikan aktifitas usahatani mereka pada saat pandemi. Hasil penelitian yang dilakukan A'dani et al. (2020) menjelaskan bahwa terdapat pendapat yang berbeda terkait aktifitas usahatani saat pandemi. Sebagian rumah tangga petani berpendapat bahwa pandemi berpengaruh terhadap aktifitas usahatani mereka, dan sebalinya ada yang berpendapat bahwa pandemi tidak perpengaruh terhadap aktifitas usahatani mereka. Pandemi mengharuskan rumah tangga untuk menerapkan strategi bertahan hidup yakni dengan mencari pekerjaan sampingan untuk menambah pendapatan, menghemat pengeluaran keluarga, serta menerapkan strategi jaringan sosial dengan meminjam sejumlah uang untuk sementara dapat memenuhi kebutuhan keluarganya. Dalam penelitian ini terdapat 3 jenis strategi bertahan hidup yang dilakukan rumah tangga yaitu strategi aktif, strategi pasif, dan strategi jaringan.

Strategi Aktif

Strategi aktif yaitu strategi yang mengoptimalkan segala potensi yang ada untuk mendapatkan tambahan penghasilan. Sebanyak 92,50 persen petani di Muara Belida melakukan strategi aktif yang berbeda-beda, tergantung dari kemampuan dan potensi yang dimiliki oleh tiap-tiap responden. Untuk bentuk strategi aktif yang dilakukan responden dapat dilihat pada tabel 1.7. berikut.

Tabel 7. Bentuk Strategi Aktif yang dilakukan Rumah Tangga di Muara Belida Saat Pandemi

No.	Bentuk Strategi Aktif yang dilakukan Responden Akibat Pandemi	Jumlah Orang	Persentase (%)
1.	Melakukan pekerjaan sampingan sebagai Nelayan	31	41,90
2.	Melakukan pekerjaan sampingan sebagai Pedagang	5	6,75
3.	Melakukan pekerjaan sampingan sebagai Buruh Tani	9	12,16
4.	Melakukan pekerjaan sampingan sebagai Jasa Urut	1	1,35
5.	Melakukan pekerjaan sampingan sebagai Supir Truk	1	1,35
6.	Ada anggota keluarga yang ikut bekerja	27	36,48
	Jumlah	74	100,00

Sumber: Diolah Peneliti, 2022

Rumah tangga dengan pekerjaan utama bertani memiliki cara bertahan hidup mereka pada saat gagal panen atau terjadi penurunan produksi biasanya mencari pekerjaan sampingan seperti berdagang, nelayan, buruh tani, jasa urut, karyawan batu bara, supir truk. Tabel 7 menunjukan bahwa sebesar 41,90 persen melakukan pekerjaan sampingan sebagai nelayan. Sebesar 6,75 persen melakukan pekerjaan sampingan sebagai pedagang. Sebesar 12,16 persen melakukan pekerjaan sampingan sebagai buruh tani. Untuk pekerjaan sampingan sebagai jasa urut, karyawan dan supir truk masing-masing hanya sebebesar 1,35 persen. Sebanyak 36,48 persen rumah tangga petani padi mengizinkan istri dan anaknya ikut bekerja di luar sektor pertanian karena mereka tidak bisa mengandalkan hasil usahatani untuk menanbah pendapatan.

Strategi Pasif

Strategi pasif merupakan strategi bertahan hidup yang dilakukan dengan cara meminimalisir pengeluaran keluarga. Strategi pasif adalah strategi bertahan hidup dengan cara mengurangi pengeluaran rumah tangga.

Tabel 8. Bentuk Strategi Pasif yang dilakukan Rumah Tangga Petani di Muara Belida Saat Pandemi

No.	Bentuk Strategi Pasif yang dilakukan Responden Akibat Pandemi	Jumlah	Persentase (%)
1.	Menerapkan pola hidup hemat	10	12,5
2.	Melakukan perubahan menu makanan	11	13,75
4.	Memprioritaskan kebutuhan pangan pokok	59	73,35
	Jumlah	80	100,00

Sumber: Diolah Peneliti, 2022

Tabel 8. menunjukan bahwa sebesar 12,5 persen menerapkan strategi pasif dengan cara melakukan perubahan terhadap menu makanan keluarganya yang sebelum pandemi ia dan istrinya bisa cukup sering makan ikan, kini mereka hanya bisa menyantapnya sehari seminggu, itupun tak setiap minggu. Selebihnya mereka makan dengan tahu, tempe, sayur atau telur. Sebesar 73,35 persen menerapkan strategi dengan cara memprioritaskan kebutuhan pangan pokok, melalui strategi ini rumah tangga petani dituntut untuk menyusun kebutuhan berdasarkan skala prioritasnya.

Kemudian sebesar 12,5 persen mengatakan bahwa strategi pasif yang dilakukan dengan cara melakukan penghematan di semua aspek pengeluaran dalam hidupnya demi menghidupi keluarganya. Misalnya dengan mengurangi frekuensi makan di luar rumah (warung/restoran) dengan makan di rumah dengan menu seadanya, hanya membeli barang yang betul-betul dibutuhkan dan sebagainya. Berdasarkan fakta di atas dapat disimpulkan bahwa rumah tangga petani lebih memprioritaskan pengeluarannya untuk kebutuhan pangan dan meminimalisir pengeluaran untuk kebutuhan pokok. Hasil penelitian ini sejalan dengan penelitian Faradina & Sukayat (2021) yang menunjukkan bahwa rumah tangga petani melakukan beberapa adaptasi sehingga dapat terus bertahan hidup selama pandemi. Adaptasi yang dilakukan yaitu melakukan pengurangan tenaga kerja buruh menjadi tenaga kerja keluarga, pengurangan penjualan gabah, dan melakukan berbagai pekerjaan sampingan. Demikian juga halnya dengan hasil penelitian Zaeni et al. (2022) yang menunjukkan strategi bertahan hidup yang dilakukan rumah tangga petani bunga potong pada saat pandemi COVID-19 agar dapat mencukupi kebutuhan rumah tangganya adalah dengan melakukan pekerjaan sampingan, meningkatkan jam atau intensitas pekerjaan, menerapkan pola nafkah ganda, menjual aset yang dimiliki, mengurangi pengeluaran rumah tangga, meminjam uang kepada lembaga keuangan, dan memanfaatkan jaringan sosial yang dimiliki oleh rumah tangga tersebut. Hasil penelitian Sabariman & Susanti (2021) menjelaskan hal yang sama. Strategi adaptasi yang dilakaukan keluarga petani miskin di pedesaan, yaitu: membangun solidaritaskelompok sesuai nilai dan norma yang berkembang, memanfaatkan ikatan keluarga yang sangat kuat, dan meminimalkan pengeluaran rumah tangga dan memanfaatkan jaringan sosial untuk pengembangan usaha.

Gambar 1. Kombinasi Strategi Rumah Tangga Petani

Hasil penelitian juga menunjukkan bahwa rumah tangga petani tidak hanya menerapkan satu strategi untuk bertahan hidup saat pandemi, namun rumah tangga mengkombinasikan dari 3 strategi tersebut. Rumah tangga petani yang menerapkan kombinasi strategi aktif dan strategi pasif sebanyak 50 rumah tangga dengan persentase sebesar 62,5 persen. Yang menerapkan kombinasi strategi pasif dan strategi jaringan sebanyak 18 orang dengan persentase sebesar 36 persen. Sedangkan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebanyak 12 orang dengan persentase sebesar 15 persen.

KESIMPULAN DAN SARAN

Kesimpulan

Pendapatan rumah tangga saat pandemi lebih rendah dibandingkan sebelum pandemi dengan persentase penurunan 5,65 %. Berdasarkan hasil *Uji Paired Samples T-test* terdapat perbedaan yang signifikan antara pendapatan rumah tangga petani padi sebelum dan saat pandemi.

Terdapat pergeseran pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi dimana rata-rata pengeluaran pangan sebelum pandemi sebesar Rp. 701.055,53 dan saat pandemi sebesar Rp. 714.488,88 artinya terdapat peningkatan sebesar 1,88 persen. Sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, hal ini dikarenakan saat pandemi rumah tangga petani lebih mementingkan pengeluaran pangan dibandingkan pengeluaran non pangan.

Strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen. Kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Saran

Mekanisme koping rumah tangga petani dalam masa pendemi: (a). Rumah tangga petani diharapkan mampu memaksimalkan pemanfaatan lahan pekarangan, kolam ikan, dan ternak yang dimiliki sebagai sumber mata pencaharian tambahan ataupun upaya mengurangi pengeluaran pangan rumah tangga. (b) Diharapkan bagi peneliti selanjutnya untuk dapat menganalisis faktor-faktor lain selain pendapatan yang mempengaruhi perubahan konsumsi pangan rumah tangga.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

Daftar Pustaka

Abidin, M. Z. (2021). Pemulihan Ekonomi Nasional pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik, 6(2), 117-138. https://doi.org/10.33105/itrev.v6i2.292.

A'dani, F., Sukayat, Y., Setiawan I., Judawinata, G. M. (2021). Pandemi Covid-19: Keterpurukan dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Petani Pada Masa Pandemi Covid-19. Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis, 7(1), 309-319. doi: 10.25157/ma.v7i1.4529

Badan Pusat Statistik. 2019. Survei Angkatan Kerja Nasional (Sakernas). Jakarta: Badan Pusat Statistik.

Bidarti, A. (2020). Survive of The Indonesia Farmers in During The Covid-19 Pandemic: Findings of The South Sumatra. *Agricultural Economic Journal.* 232(01), 1-13. doi: https://doi.org/10.1051/e3sconf/202123201019

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah dan Luas Tanam Terhadap Produksi Padi di Sumatera Selatan melalui Analisis Regresi. Publikasi Penelitian Terapan Kebijakan , 2(2), 122-124. doi:10.46774/pptk.v2i2.94

Dewi, I. S., (2020). Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. Skripsi. Universitas Muhammadiah Palembang. Tidak dipublikasikan

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce in Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. Jurnal Ekonomi dan Bisnis Jagaditha, 8(2), 179-186. doi: https://doi.org/10.22225/jj.8.2.2021.179-186

Fatimah, N., & Syamsiah, N. (2018). Proporsi Pengeluaran Rumah Tanah Petani Padi di Desa Patimban, Kecamatan Pusakanagara, Kabupaten Subang, Jawa Barat. Jurnal Ilmiah Mahasiswa. Agriinfo Galuh, 4(3). doi: 10.25157/jimag.v4i3.1651.

Faradina, Y., & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis, 7(2):1111-1125. doi: 10.25157/ma.v7i2.5062

Graeber, D., Kritikos, A.S., & Seebauer, J. (2021). Covid-19: a Crisis of the Female Self-employed. Journal of Population Economics, 34(4), 1141-1187.

Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021) Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. Journal Theoretical and Application Electronic Commerce Research, 16(6), 2263-2281. doi: 10.3390/jtaer16060125

Guampe, A.F., Pasambaka, Y., Hengkeng J., Ponagadi, T. S. (2021). Analisis Pendapatan Petani Jagung di Masa Pandemi Covid-19. Jurnal Sosial Ekonomi Pertanian, 17(2), 85-95. doi: https://doi.org/10.20956/jsep.v17i2.14630

Hanum, N. (2017). Analisis Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra di Kota Langsa. Jurnal Samudra Ekonomi, 1(2), 107-117. doi: https://doi.org/10.1234/jse.v1i2.325

Hasanah, A.E., Heryanto, A.M., Hapsari, H., Noor, I.T. (2021). Dampak Pandemi Covid-19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin Perkotaan: Study Kasus Kelurahan Ciroyom, Kecamatan Andir, Kota Bandung. Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis, 7(2): 1560-1571. doi:10.25157/ma.v7i2.5492

Hernanda, E. N. P., Indriani, Y., dan Kalsum, U. (2017). Pendapatan dan Ketahanan Pangan Rumah Tangga Petani Padi di Desa Rawan Pangan. Jurnal Ilmu-Ilmu Agribisnis. 3(5): 283-291. doi: http://dx.doi.org/10.23960/jiia.v5i3.1641

Hertz, R., Mattes, J., & Shook, A. (2020). When Paid Work Invades the Family: Single Mother in the Covid-19 Pandemic. Journal Family Issues, 42(2), 2019-2045. Doi:10.1177/0192513X20961420

Jody, H., Llutz, D., Arshad, A.P., Ramakrishnan, M.N, & Srinivisan, R. (2020). Food Sistem Disrupsion: Initial Livelihood and Dietery effects of Covid-19 on Vegetable Producers in India. Food Security Journal, 12, 841-851.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. Reslaj : Religion Education Social Laa Roiba Journal, 3(2), 206-226. doi: https://doi.org/10.47467/reslaj.v3i2.283

Kansiime, M.K., Tambo, J.A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2020). Covid-19 Implications on Household Income and Food Security in Kenya and Uganda: Findings from a Rapid Assessment. World Development, 137(1), 105-129. Doi: 10.1016/j.worlddev.2020.105129.

Kurniasih, E. P. (2020). Dampak Pandemi Covid 19 Terhadap Penurunan Kesejahteraan Masyarakat Kota Pontianak. Prosiding Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan. Fakultas Ekonomi Pembangunan Universitas Tanjung Pura, Pontianak, 2020.

Gorahe, L.V., Waani, F., & Tasik, F. (2021). Dampak Pandemi Covid 19 Terhadap Kesejahteraan Masyarakat di Desa Dalako Bembanehe Kecamatan Tatoareng Kabupaten Kepulauan Sangihe. Jurnal Eksekutif, 1(1), 1-9.

Kurniawan, R., & Wahyudati, D. (2015). Analysis of the comparisons of farmers benefit that used Rice Thresher Machine and without used Rice Thresher Machine at Pulokerto Subdistrict Gandus District Palembang City. Jurnal Societa, 4(2), 74-78. Doi: https://doi.org/10.32502/jsct.v4i2.237

Kusuma, R. (2020). The Impact of Financial Inclusion on Economic Growth, Poverty, Income Inequality, and Financial Stability in Asia. The Journal of Asian Finance, Economics and Business, 7(10), 73-85. doi: 10.13106/jafeb.2020.vol7.no10.073.

Lippert, J.F., Furnari, M.B., & Kriebel, C.W. (2021). The Impact of the COVID-19 Pandemic on Occupational Stress in Restaurant Work: A Qualitative Study. International Journal of Environmental Research and Public Health, 18(19). 1-15. doi:103390/ijerph181910378.

Martadona, I. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan di Kota Padang. Jurnal Pangan, 30(3). doi: https://doi.org/10.33964/jp.v30i3.544

Novia, R.A., & Zulkifli, L. (2021). Dampak Kegagalan Panen terhadap Ketahanan Pangan Rumah Tangga Tani Padi di Kabupaten Banyumas. Journal Agrisep, 20(02), 239-250. doi:10.31186/jagrisep.20.2.239-250.

Ridwan, M. (2022). Poverty Reduction through Strengthening the Role of Cooperative Institutions: Case Study of Rural Rice Farming Communities. Journal Agrisep, 21(1), 55-68. doi:10.31186/jagrisep.21.1.55-68.

Sagoro, E. M. (2013). Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. Jurnal Nominal, 3(1), 120-137. doi: 10.21831/nominal.v3i1.2158

Sari, K. V., & Prasetyani, D. (2021). The Impact of the Institution on Economic Growth: An Evidence from ASEAN. Jurnal Ekonomi Pembangunan, 19(1), 19-28. doi: 10.29259/jep.v19i1.12793.

Syaputra, F., & Inan, I.Y. (2019). Prospek Lahan Sawah Lebak untuk Pertanian Berkelanjutan di Kabupaten Banyuasin Provinsi Sumatera Selatan. Indonesian Journal of Socio-Economics, 1(2), 109-114.

Pradnyadewi, R.P.N., Darmawan, P.D., & Arisena, A.M.G.K. (2021). Ketahanan Pangan Rumah Tangga di Subak Sembung Pada Saat Pandemi Covid-19. Jurnal Manajemen Agribisnis, 9(1), 346-356. doi: https://doi.org/10.24843/JMA.2021.v09.i01.p10

Pujowati, Y., & Sufaidi, A. (2021) The COVID-19 Pandemic: Analysis of Large-Scale Social Restrictions (PSBB) Policies for the Community in Various Prevention Efforts. Jurnal Magister Administrasi Publik, 01(02), 102-111. doi: 10.31629/jmap.v1i2.3655

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi dan Strategi Adaptasi Keluarga Petani Miskin Selama Pandemi Covid-19: Kasus dari Madura. Brawijaya Journal of Social Science, 1(1), 1-13. doi:https://doi.org/10.21776/ub.bjss.2021.001.01.1

Sayuti, R.H., & Hidayati, S.A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. Resiprokal: Jurnal Riset Sosiologi Progresif Aktual, 2(2), 133-150. doi:https://doi.org/10.29303/resiprokal.v2i2.46

Shang, Y., Li H., & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. Frontiers in Public Health, 9, 1-12. doi: 10.3389/fpubh.2021.632043

Suryati, D. (2017). Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. Jurnal Gane C-Swara, 11 (1),162-167.

Setyorini, N., Sumastuti, E., & Utami, R.H. (2022). Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. Jurnal Sosial Ekonomi Pertanian. 18(1), 15-26.

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption of Expenditure Local Apparatus Organization Prabumulih City Government During the Covid-19 Period. International Journal of Economics, Business and Accounting Research (IJEBAR), 6(3), 2622-4771. doi:10.29040/ijebar.v6i3.6205

Wibowo, A. A., & Suharno. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. Journal Agrisep, 21(1), 161-172. doi:10.31186/jagrisep.21.1.161-172.

Yunita, Ginting, B.S., Asngari, P., Susanto, D., Amanah, S. (2011). Ketahanan Pangan dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. Jurnal Ilmu Keluarga dan Konsumen, 4(1), 21-29. Doi: https://doi.org/10.24156/jikk.2011.4.1.21

Zaeni, A.N.S., Kusumo, B.R.A., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong Pada Saat Pandemi Covid-19 (Studi Kasus di Desa Pasirlangu, Kecamatan Cisarua, Kabupaten Bandung Barat, Jawa Barat). Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis, 8(2), 710-724.

4. Hasil Review dari Reviewer A dan B (8 Februari 2023)

[jagrisep] Editor Decision

Dari: Anggita Dwi Oktaviani (ejournal_postmaster@unib.ac.id)

Kepada: bidarti2019@gmail.com; fathursyifa.nita@yahoo.co.id

Tanggal: Rabu, 8 Februari 2023 pukul 15.10 WIB

Agustina Bidarti, Yunita, Riswani:

We have reached a decision regarding your submission to Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis, "Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District, Muara Enim Regency before and during the Pandemic".

Our decision is: Resubmit

Reviewer B:
Recommendation: Revisions Required

Jenis naskah :

artikel

Kode Naskah :

23762

1. Apakah judul menggambarkan isi naskah dengan jelas?

YA

2. Apakah judul sudah ditulis secara ringkas/efisien?

YA

3. Apakah abstrak sudah menggambarkan seluruh bagian naskah?

YA

4. Apakah abstrak sudah ditulis secara ringkas/efisien?

YA

5. Apakah bahasa inggris yang dipergunakan sudah benar?

YA

6. Apakah kata kunci menggambarkan ranah masalah penelitian atau istilah yang menjadi dasar pemikiran penelitian?

YA

7. Apakah bagian pendahuluan menguraikan secara jelas mengenai urgensi, masalah, dan ruang lingkup penelitian?

YA

8. Apakah bagian pendahuluan menunjukkan kemutakhiran topik penelitian?

YA

9. Apakah bagian pendahuluan menguraikan dengan jelas tentang pendekatan dalam pemecahan masalah penelitian?

YA

10. Apakah bagian pendahuluan menguraikan secara jelas mengenai hasil yang diharapkan?

YA

11. Apakah bagian pendahuluan sudah mengindikasikan *state of the art* dalam bidang yang diteliti?

YA

12. Apakah metode penelitian sudah menggambarkan rancangan penelitian secara memadai?

YA

13. Apakah metode penelitian sudah menunjukkan keutuhan cara yang dipergunakan sehingga memungkinkan penelitian dapat diulangi atau diverifikasi oleh peneliti lain?

YA

14. Apakah metode penelitian memuat pendekatan teori yang dipergunakan dalam menganalisis data?

YA

15. Apakah hasil penelitian berupa pembahasan disusun secara rinci mulai dari data yang disajikan telah diolah, dituangkan dalam tabel atau gambar, serta diberi keterangan yang mudah dipahami?

YA

16. Apakah simpulan mengandung implikasi dari temuan penelitian baik teoretis maupun praktis?

- YA

17. Apakah saran disusun berdasarkan temuan penelitian secara konsisten?

- YA

18. Apakah saran memungkinkan dapat dilakukan oleh pihak-pihak yang dimaksud?

- YA

19. Apakah daftar pustaka sudah ditulis dengan benar dan taat azas?

- YA

20. Apakah daftar pustaka memuat pustaka yang mutakhir (5 tahun terakhir)?

- YA

22. Apakah pustaka primer yang digunakan lebih banyak daripada pustaka sekunder?

- YA

23. Apakah lampiran yang digunakan menunjang uraian temuan dan pembahasan?

- YA

Bila ada komentar silahkan diidikan dibawah ini :

Revision

REKOMENDASI:

Berdasarkan penilaian tersebut maka direkomendasikan :

- Diterbitkan dengan perbaikan kecil (penulisan)

PENILAIAN UMUM

a. Orisinalitas (Substansi dan materi tulisan merupakan gagasan asli penulis) :

- Baik

b. Kebaruan (*novelty*)

Substansi dan materi tulisan mengandung hal-hal yang baru

- Baik

c. Signifikansi :

Relevansi dan pentingnya tulisan

- Baik

d. Sistematika naskah

- Baik

B-Review 1
151kB

5. Revisi ke-2
(10 Februari 2023)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.17.2.23-30

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT, MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent.

ISSN: 1412-8837 e-ISSN :2579-9959

Keyword: pandemic, income, consumption patterns and survival strategies

ABSTRAK

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Kata Kunci: pandemi, pendapatan, pola konsumsi dan strategi bertahan hidup

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society (Wardayani et al., 2022; Pujowati & Sufaidi, 2021; Shang et al., 2021). Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors (Lippert et al., 2021; Graeber et al., 2021). In addition, the use of social media and applications is also growing rapidly during the pandemic because many sales transactions are carried out online (Dianda & Pandin, 2021, Gu et al., 2021). Based on a research (Sayuti and Hidayati, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received,

spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

The agricultural sector supports food security and food availability and improves people's welfare. Welfare of farmers plays an important role in maintaining and increasing agricultural production. An advanced agricultural sector can encourage faster economic growth and reduce poverty (Wibowo & Suharno, 2022; Abidin, 2021).

The study by Hernanda et al. (2017) and Novia & Zulkifli (2021) state that food expenditure has a negative relationship with food security. Even though the impact of the pandemic resulted in a weakening of the community's economy (Ridwan, 2022), people in rural areas who are generally engaged in the agricultural sector still have various strategies to be able to maintain their family's economy. This is done because family income during the pandemic has decreased significantly (Hertz et al., 2020; Kansiime et al., 2020). In the economic activity of a country, consumption has an important role and has a very large influence on economic stability (Sari & Prasetyani, 2021; Kusuma, 2020). The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, the household consumption decreases due to decreased purchasing power (Setyorini, 2022).

The results of Hasanah et al. (2021) show that food insecurity for poor families occurs due to the impact of the pandemic which has caused access to food for poor families to become increasingly limited which is characterized by decreased food consumption in terms of quantity and quality. Yunita et al. (2011) research results show that the capacity level of farmers is in the moderate category, the food security level of farmer households is classified as low, and the coping mechanisms of farmer households are classified as high.

Based on a research conducted by Faradina & Sukayat (2021), it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia. The research results of Guampe et al. (2021) show that the impact of Covid-19 has affected the rural agriculture sector, such as a scarcity of production inputs. The scarcity of agricultural inputs occurs due to limited trade mobilization due to the pandemic. According to Bidarti et al (2020) research, the impact of the pandemic on the downstream sector of food distribution centers has also had an impact on the upstream sector of food production in rural South Sumatra. South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land kering (Defriyanti, 2019). Tidal swamp land and lowland are divided into potential land and functional land (Kuniawan & Wahyudati, 2015; Syaputra & Inan, 2019).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on lowland. This study aims to analyze changes in income and household expenditures of lowland rice farmers before and during the pandemic and describe the coping mechanisms of rice farmers' households in lowland during the pandemic.

Commented [RR1]: 1. in this se problem in detail and how the resea out?

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in lowland. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic.

The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study were 80 respondents. This study used primary data and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

Commented [RR2]: how to get as 80 ?

According to Murti Sagoro (2013), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

In which : $Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:
1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to Murti Sagoro (2013), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:
1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Changes in Farmer Household Income before and during the Pandemic

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in table 1 below.

Table 1. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	Decrease (%)
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05
3.	Fisherman	2,000,000	2,000,000	0	0
4.	Labor	3,000,000	3,000,000	0	0
Average		2,336,979	2,205,034	131,945	5.65

Source: Processed by researchers, 2022

Based on Table 1, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to 131.945 IDR per month. This result is in line with the research of Junaedi et al (2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20 percent. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Commented [RR3]: what are th amount of monthly income is very s

Table 2. Results of Paired Sample T-test

Paired Difference								
Mean	Std. Dev.	Std. Error Mean	95% Conf.Int. of the Diff.		T	Df	Sig. (2-tailed)
			Low	Upp			

Pair 1	Before the pandemic during the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of t-count = 2.422 while the value of t-table = 1.664. It can be concluded that the value of t-count > t-table or 2.422 > 1.664 so that the decisions taken from this study rejects H_0 and accepts H_1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic.

Commented [RR4]: Give an exp
accordance with the incident at the

Changes in Farmer's Household Expenditures Before and During the Pandemic

Changes in household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Where non-food consists of clothing, housing, education, health, transportation, and communication and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food. Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. This is explained in the results of Martadona (2022) research, which states that the proportion of farm household expenditure is used for food expenditure, namely grains, with an average total expenditure of 60.26 percent.

In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 3.

Table 3. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Diff. (Rp)	Perc. (%) Incr.	Perc. (%) Decr.
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 3, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because during a pandemic, fruits and vegetables are a source of important nutrients that the body needs to meet the needs of fiber, vitamins, minerals and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively. Different research results are found in food consumption expenditure in farmer households when there is no pandemic. The largest food expenditures are tobacco (225), grains (21%), and fish/shrimp/squid/scallops (11%) of total food expenditure (Fatimah and Syamsiah, 2018)

The increase and decrease in the amount of household food expenditure during this pandemic is caused by the increase in prices for these types of food.

This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that makes households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk and nuts.

In line with the results of this study, Kurniasih's research (2020) shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant. Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life. Jody, H., et al (2020) in his research conducted in four Indian states suggested that the impact of the pandemic was seen in disruptions to the food system and impacted livelihoods and diets. It is known that the initial impact of the pandemic and the policy response on farming households, the majority of farmers reported a negative impact on production, sales, prices and income.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 4 below:

Table 4. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (IDR/month)				
	Before the Pandemic (IDR)	During the Pandemic (IDR)	Difference (IDR)	Perc. (%) Incr.	Perc. (%) Decr.
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by researchers, 2022

Based on the data in Table 4, it is found that during the pandemic, the household non-food consumption expenditure experiences two changes, namely an increase and decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs with a percentage of 5.69 percent and health costs with a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs and

communication equipment needs. Housing costs increases during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 5 below.

Table 5. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (IDR/Month)

Description	Before	During	Differences	Perc. Diff. (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by 2.722,90 IDR or as much as 0.24 percent, where this expenditure decreases from an average of 1.159.488,8 IDR to 1.156.766,71 IDR. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or equivalent to 13.433,35 IDR during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables and fruit groups, before the pandemic and during the pandemic, but with different amounts. Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from 458.433,27 IDR to 442.277,83 IDR during the pandemic.

Table 5 also shows that the percentage of household food consumption expenditure for rice farmers in Muara Belida is more than 60 percent of total

household expenditure. This indicates that rice farming households in this location are classified as food insecure when viewed from the proportion of expenditure. The results of this study are different from the results of research conducted by Pradnyadewi, et al (2021) on farming households in Subak Sembung during the Covid-19 pandemic, where the results of his research showed that food consumption expenditure was less than 60 percent of total household expenditure.

Table 6. Results of Paired Sample T-test

		Paired Differences					t	df	Sig.(2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Conf. Int. of the Diff.				
					Low	Upp			
Pair1	Before the pandemic During the pandemic	10,275.00	75,996.49	8,496.66	2,7187.19	6,637.19	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of t-count = 1.209, while the value of t-table = 1.664. So, it can be concluded that the value of t-count > t-table or 1.209 > 1.664, so the decision taken from this study is to reject H_0 and accept H_1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research (Suryati, 2017), which shows that household consumption patterns vary and are based on the amount of income. The greater the level of income owned; the consumption pattern also changes.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for the households to make efforts to maintain their family life. In general, farming households will adjust their farming activities during a pandemic. The results of research conducted by A'dani, et al (2020) explain that there are different opinions regarding farming activities during a pandemic. Some farmer households think that the pandemic has affected their farming

activities, and on the other hand, there are those who think that the pandemic has not affected their farming activities.

The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in table 1.7. following.

Table7. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 7 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 8. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 8. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

The results of this study are in line with the research of Faradina, et al (2021) which shows that farming households make several adaptations so they can continue to survive during the pandemic. The adaptations that have been made are reducing the workforce to become family workers, reducing grain sales, and doing various side jobs. This is also the case with the research results of Zaeni, et al (2022) which showed that the survival strategy adopted by cut flower farming households during the COVID-19 pandemic in order to be able to meet their household needs was by doing side jobs, increasing hours or work intensity, implementing patterns double income, selling assets owned, reducing

household expenses, borrowing money from financial institutions, and utilizing social networks owned by these households. The results of research by Sabariman and Susanti (2021) explain the same thing. Adaptation strategies carried out by poor farming families in rural areas, namely: building group solidarity according to developing values and norms, utilizing very strong family ties, and minimizing household expenses and utilizing social networks for business development.

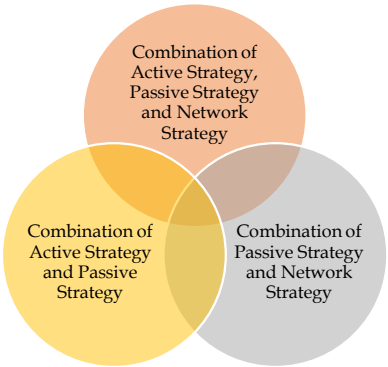


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies and network strategies are 12 people with a percentage of 15 percent.

Commented [RR5]: In this secti
strategy more clearly and in detail a
out from that strategy

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include:

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.

2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was 701.055,53 IDR and during the pandemic is 714.488,88 IDR, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.
3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household food expenditure.
2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

REFERENCES

Abidin, M.Z. (2021). Pemulihan Ekonomi Nasional pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. Treasury Review: *Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, 6(2), 117-138. https://doi.org/10.33105/itrev.v6i2.292.

A'dani, F, Sukayat, Y, Setiawan I, Judawinata, G.M. (2021). Pandemi Covid-19: Keterpurukan dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Petani Pada Masa Pandemi Covid-19. Mimbar Agribisnis: *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Januari 2011. 7(1): 309-319. doi: 10.25157/ma.v7i1.4529

Badan Pusat Statistik. (2019). *Survei Angkatan Kerja Nasional (Sakernas)*. (Jakarta Pusat: Badan Pusat Statistik).

Bidarti, A. (2020). Survive of The Indonesia Farmers in During The Covid-19 Pandemic: Findings of The South Sumaterra. *Agricultural Economic*

Journal. Volume 232 (01019). Number 0f Page(s):13. doi: https://doi.org/10.1051/e3sconf/202123201019

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah dan Luas Tanam Terhadap Produksi Padi di Sumatera Selatan melalui Analisis Regresi. *Publikasi Penelitian Terapan Kebijakan , 2(2), 122-124.* doi:10.46774/pptk.v2i2.94

Dewi, I. S., (2020). Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. *Skripsi*. Universitas Muhammadiah Palembang. Tidak dipublikasikan

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce in Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. *Jurnal Ekonomi dan Bisnis Jagaditha, 8(2), 179-186*. doi: https://doi.org/10.22225/jj.8.2.2021.179-186

Fatimah, N., & Syamsiah, N. (2018). Proporsi Pengeluaran Rumah Tanah Petani Padi di Desa Patimban, Kecamatan Pusakanagara, Kabupaten Subang, Jawa Barat. *Jurnal Ilmiah Mahasiswa. AGRIINFO GALUH.* Volume 4 Nomor 3. DOI: 10.25157/jimag.v4i3.1651.

Faradina, Y. & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). *Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Juli 2021. 7(2):1111-1125. doi: 10.25157/ma.v7i2.5062

Graeber, D., Kritikos, A.S., & Seebauer, J. (2021). Covid-19: a Crisis of the Female Self-employed. *Journal of Population Economics*, 34(4), 1141-1187.

Guampe, A.F., Pasambaka, Y., Hengkeng J., & Ponagadi T.S. (2021). Analisis Pendapatan Petani Jagung Di Masa Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 17(2), 85-95. doi: 10.3390/jtaer16060125

Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021) Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *Journal Theoretical and Application Electronic Commerce Research, 16*(6), 2263-2281. doi: 10.3390/jtaer16060125

Hanum, N., (2017). Analisis Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra Di Kota Langsa. *Jurnal samudra ekonomi* [online], 1 (2), 107-117. doi: https://doi.org/10.1234/jse.v1i2.325

Hasanah, A.E., Heryanto, A.M., Hapsari, H., & Noor, I.T. (2021). Dampak Pandemi Covid-19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin Perkotaan: Study Kasus Kelurahan Ciroyom, Kecamatan Andir, Kota Bandung. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 7(2): 1560-1571. doi:10.25157/ma.v7i2.5492

Hernanda, E. N. P., Indriani, Y., dan Kalsum, U. (2017). Pendapatan dan Ketahanan Pangan Rumah Tangga Petani Padi di Desa Rawan Pangan.

Jurnal Ilmu-Ilmu Agribisnis, 3(5): 283-291. doi: http://dx.doi.org/10.23960/jiia.v5i3.1641

Hertz, R., Mattes, J., & Shook, A. (2020). When Paid Work Invades the Family: Single Mother in the Covid-19 Pandemic. *Journal Family Issues*, 42(2), 2019-2045. Doi:10.1177/0192513X20961420

Jody, H., Llutz, D., Arshad, A.P., Ramakrishnan, M.N, & Srinivisan, R. (2020). Food Sistem Disrupsion: Initial Livelihood and Dietery effects of Covid-19 on Vegetable Producers in India. *Food Security Journal*, 12, 841-851.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. *Reslaj : Religion Education Social Laa Roiba Journal*, 3(2), 206-226. doi: https://doi.org/10.47467/reslaj.v3i2.283

Kansiime, M.K., Tambo, J.A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2020). Covid-19 Implications on Household Income and Food Security in Kenya and Uganda: Findings from a Rapid Assessment. *World Development*, 137(1), 105-129. Doi: 10.1016/j.worlddev.2020.105129

Kurniasih, E. P. (2020). Dampak Pandemi Covid 19 Terhadap Penurunan KesejahteraanMasyarakat Kota Pontianak. *Prosiding*. Prosiding Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan. Fakultas Ekonomi Pembangunan Universitas Tanjung Pura, Pontianak, 2020.

Gorahe, L.V., Waani, F., & Tasik, F. (2021). Dampak Pandemi Covid 19 Terhadap Kesejahteraan Masyarakat di Desa Dalako Bembanehe Kecamatan Tatoareng Kabupaten Kepulauan Sangihe. *Jurnal Eksekutif*, 1(1), 1-9.

Kurniawan, R., & Wahyudati, D. (2015). Analysis of the Comparisons of Farmers Benefit that used Rice Thresher Machine and without used Rice Thresher Machine at Pulokerto Subdistrict Gandus District Palembang City. *Jurnal Societa*, 4(2), 74-78. Doi: https://doi.org/10.32502/jsct.v4i2.237

Kusuma, R. (2020). The Impact of Financial Inclusion on Economic Growth, Poverty, Income Inequality, and Financial Stability in Asia. *The Journal of Asian Finance, Economics and Business*, 7(10), 73-85. doi: 10.13106/jafeb.2020.vol7.no10.073

Lippert, J.F., Furnari, M.B., & Kriebel, C.W. (2021). The Impact of the COVID-19 Pandemic on Occupational Stress in Restaurant Work: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 18(19). 1-15. doi:103390/ijerph181910378

Martadona, I. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan di Kota Padang. *Jurnal Pangan*, 30(3), 1-13. doi: https://doi.org/10.33964/jp.v30i3.544

Novia, R.A., & Zulkifli, L. (2021). Dampak Kegagalan Panen terhadap Ketahanan Pangan Rumah Tangga Tani Padi di Kabupaten Banyumas. *Journal Agrisep*, 20(02), 239-250. doi:10.31186/jagrisep.20.2.239-250

Ridwan, M. (2022). Poverty Reduction through Strengthening the Role of Cooperative Institutions: Case Study of Rural Rice Farming Communities. *Journal Agrisep*, 21(1), 55-68. doi:10.31186/jagrisep.21.1.55-68.

Sagoro, E. M. (2013). Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. *Jurnal Nominal*, 3(1), 120-137. doi: 10.21831/nominal.v3i1.2158

Sari, K. V., & Prasetyani, D. (2021). The Impact of the Institution on Economic Growth: An Evidence from ASEAN. *Jurnal Ekonomi Pembangunan*, 19(1), 19-28. doi: 10.29259/jep.v19i1.12793

Syaputra, F., & Inan, I.Y. (2019). Prospek Lahan Sawah Lebak untuk Pertanian Berkelanjutan di Kabupaten Banyuasin Provinsi Sumatera Selatan. *Indonesian Journal of Socio-Economics*, 1(2), 109-114.

Pradnyadewi, R.P.N., Darmawan, P.D., & Arisena, A.M.G.K. (2021). Ketahanan Pangan Rumah Tangga di Subak Sembung Pada Saat Pandemi Covid-19. *Jurnal Manajemen Agribisnis*, 9(1), 346-356. doi: https://doi.org/10.24843/JMA.2021.v09.i01.p10

Pujowati, Y., & Sufaidi, A. (2021) The COVID-19 Pandemic: Analysis of Large-Scale Social Restrictions (PSBB) Policies for the Community in Various Prevention Efforts. *Jurnal Magister Administrasi Publik*, 01(02), 102-111. doi: 10.31629/jmap.v1i2.3655

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi dan Strategi Adaptasi Keluarga Petani Miskin Selama Pandemi Covid-19: Kasus dari Madura. *Brawijaya Journal of Social Science*, 1(1), 1-13. doi:https://doi.org/10.21776/ub.bjss.2021.001.01.1

Sayuti, R.H., & Hidayati, S.A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. *Resiprokal: Jurnal Riset Sosiologi Progresif Aktual*, 2(2), 133-150. doi:https://doi.org/10.29303/resiprokal.v2i2.46

Shang, Y., Li H., & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. *Frontiers in Public Health*, 9(1), 1-12. doi: 10.3389/fpubh.2021.632043

Suryati, D. (2017). Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. *Jurnal Gane C-Swara*, 11 (1),162-167.

Setyorini, N., Sumastuti, E., & Utami, R.H. (2022). Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 18(1), 15-26.

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption of Expenditure Local Apparatus Organization Prabumulih City Government During the Covid-19 Period. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(3), 2622-4771. doi:10.29040/ijebar.v6i3.6205

Wibowo, A. A., & Suharno. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. *Journal Agrisep*, 21(1), 161-172. doi:10.31186/jagrisep.21.1.161-172.

Yunita, Ginting, B.S., Asngari, P., Susanto, D., Amanah, S. (2011). Ketahanan Pangan dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. *Jurnal Ilmu Keluarga dan Konsumen*, 4(1), 21-29. Doi: https://doi.org/10.24156/jikk.2011.4.1.21

Zaeni, A.N.S., Kusumo, B.R.A., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong Pada Saat Pandemi Covid-19 (Studi Kasus di Desa Pasirlangu, Kecamatan Cisarua, Kabupaten Bandung Barat, Jawa Barat). *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 8(2), 710-724.

ISSN: 1412-8837 e-ISSN :2579-9959

6. Artikel yang telah direvisi ke-2 (10 Februari 2023)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.17.2.23-30

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT, MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

Yunita[1)]; Riswani[2)]; Agustina Bidarti3[3)]
[1),2),3)] Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, Palembang, Indonesia
Email: fathursyifa.nita@yahoo.co.id

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent.

Keyword: pandemic, income, consumption patterns and survival strategies

ABSTRAK

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Kata Kunci: pandemi, pendapatan, pola konsumsi dan strategi bertahan hidup

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society (Wardayani et al., 2022; Pujowati & Sufaidi, 2021; Shang et al., 2021). Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors (Lippert et al., 2021; Graeber et al., 2021). In addition, the use of social media and applications is also growing rapidly during the pandemic because many sales transactions are carried out online (Dianda & Pandin, 2021, Gu et al., 2021). Based on a research (Sayuti and Hidayati, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received,

spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

The agricultural sector supports food security and food availability and improves people's welfare. Welfare of farmers plays an important role in maintaining and increasing agricultural production. An advanced agricultural sector can encourage faster economic growth and reduce poverty (Wibowo & Suharno, 2022; Abidin, 2021).

The study by Hernanda et al. (2017) and Novia & Zulkifli (2021) state that food expenditure has a negative relationship with food security. Even though the impact of the pandemic resulted in a weakening of the community's economy (Ridwan, 2022), people in rural areas who are generally engaged in the agricultural sector still have various strategies to be able to maintain their family's economy. This is done because family income during the pandemic has decreased significantly (Hertz et al., 2020; Kansiime et al., 2020). In the economic activity of a country, consumption has an important role and has a very large influence on economic stability (Sari & Prasetyani, 2021; Kusuma, 2020). The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, the household consumption decreases due to decreased purchasing power (Setyorini, 2022).

The results of Hasanah et al. (2021) show that food insecurity for poor families occurs due to the impact of the pandemic which has caused access to food for poor families to become increasingly limited which is characterized by decreased food consumption in terms of quantity and quality. Yunita et al. (2011) research results show that the capacity level of farmers is in the moderate category, the food security level of farmer households is classified as low, and the coping mechanisms of farmer households are classified as high.

Based on a research conducted by Faradina & Sukayat (2021), it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia. The research results of Guampe et al. (2021) show that the impact of Covid-19 has affected the rural agriculture sector, such as a scarcity of production inputs. The scarcity of agricultural inputs occurs due to limited trade mobilization due to the pandemic. According to Bidarti et al (2020) research, the impact of the pandemic on the downstream sector of food distribution centers has also had an impact on the upstream sector of food production in rural South Sumatra. South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land kering (Defriyanti, 2019). Tidal swamp land and lowland are divided into potential land and functional land (Kuniawan & Wahyudati, 2015; Syaputra & Inan, 2019).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on lowland. This study aims to analyze changes in income and household expenditures of lowland rice farmers before and during the pandemic and describe the coping mechanisms of rice farmers' households in lowland during the pandemic.

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in lowland. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic.

The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study were 80 respondents. This study used primary data and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to Murti Sagoro (2013), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:
1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to Murti Sagoro (2013), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which : } \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:
1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Changes in Farmer Household Income before and during the Pandemic

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in table 1 below.

Table 1. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	Decrease (%)
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05
3.	Fisherman	2,000,000	2,000,000	0	0
4.	Labor	3,000,000	3,000,000	0	0
Average		2,336,979	2,205,034	131,945	5.65

Source: Processed by researchers, 2022

Based on Table 1, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to 131.945 IDR per month. This result is in line with the research of Junaedi et al (2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20 percent. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 2. Results of Paired Sample T-test

Paired Difference								
	Mean	Std. Dev.	Std. Error Mean	95% Conf.Int. of the Diff. Low	Upp	T	Df	Sig. (2-tailed)

Pair 1	Before the pandemic during the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of t-count = 2.422 while the value of t-table = 1.664. It can be concluded that the value of t-count > t-table or 2.422 > 1.664 so that the decisions taken from this study rejects H_0 and accepts H_1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic.

Changes in Farmer's Household Expenditures Before and During the Pandemic

Changes in household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Where non-food consists of clothing, housing, education, health, transportation, and communication and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food. Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. This is explained in the results of Martadona (2022) research, which states that the proportion of farm household expenditure is used for food expenditure, namely grains, with an average total expenditure of 60.26 percent.

In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 3.

Table 3. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Diff. (Rp)	Perc. (%) Incr.	Perc. (%) Decr.
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 3, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because during a pandemic, fruits and vegetables are a source of important nutrients that the body needs to meet the needs of fiber, vitamins, minerals and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively. Different research results are found in food consumption expenditure in farmer households when there is no pandemic. The largest food expenditures are tobacco (225), grains (21%), and fish/shrimp/squid/scallops (11%) of total food expenditure (Fatimah and Syamsiah, 2018)

The increase and decrease in the amount of household food expenditure during this pandemic is caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that makes households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk and nuts.

In line with the results of this study, Kurniasih's research (2020) shows that there has been a very sharp decline in income between 30%-70% due to the

pandemic while spending tends to remain constant. Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life. Jody, H., et al (2020) in his research conducted in four Indian states suggested that the impact of the pandemic was seen in disruptions to the food system and impacted livelihoods and diets. It is known that the initial impact of the pandemic and the policy response on farming households, the majority of farmers reported a negative impact on production, sales, prices and income.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 4 below:

Table 4. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (IDR/month)				
	Before the Pandemic (IDR)	During the Pandemic (IDR)	Difference (IDR)	Perc. (%) Incr.	Perc. (%) Decr.
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by researchers, 2022

Based on the data in Table 4, it is found that during the pandemic, the household non-food consumption expenditure experiences two changes, namely an increase and decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs with a percentage of 5.69 percent and health costs with a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs and communication equipment needs. Housing costs increases during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent,

respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 5 below.

Table 5. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (IDR/Month)

Description	Before	During	Differences	Perc. Diff. (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by 2.722,90 IDR or as much as 0.24 percent, where this expenditure decreases from an average of 1.159.488,8 IDR to 1.156.766,71 IDR. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or equivalent to 13.433,35 IDR during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables and fruit groups, before the pandemic and during the pandemic, but with different amounts. Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from 458.433,27 IDR to 442.277,83 IDR during the pandemic.

Table 5 also shows that the percentage of household food consumption expenditure for rice farmers in Muara Belida is more than 60 percent of total household expenditure. This indicates that rice farming households in this location are classified as food insecure when viewed from the proportion of expenditure. The results of this study are different from the results of research conducted by Pradnyadewi, et al (2021) on farming households in Subak Sembung during the Covid-19 pandemic, where the results of his research showed that food consumption expenditure was less than 60 percent of total household expenditure.

Table 6. Results of Paired Sample T-test

		Paired Differences					t	df	Sig.(2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Conf. Int. of the Diff.				
					Low	Upp			
Pair1	Before the pandemic During the pandemic	10,275.00	75,996.49	8,496.66	2,7187.19	6,637.19	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of t-count = 1.209, while the value of t-table = 1.664. So, it can be concluded that the value of t-count > t-table or 1.209 > 1.664, so the decision taken from this study is to reject H_0 and accept H_1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research (Suryati, 2017), which shows that household consumption patterns vary and are based on the amount of income. The greater the level of income owned; the consumption pattern also changes.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for the households to make efforts to maintain their family life. In general, farming households will adjust their farming activities during a pandemic. The results of research conducted by A'dani, et al (2020) explain that there are different opinions regarding farming activities during a pandemic. Some farmer households think that the pandemic has affected their farming activities, and on the other hand, there are those who think that the pandemic has not affected their farming activities.

The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in table 1.7. following.

Table7. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 7 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 8. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 8. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

The results of this study are in line with the research of Faradina, et al (2021) which shows that farming households make several adaptations so they can continue to survive during the pandemic. The adaptations that have been made are reducing the workforce to become family workers, reducing grain sales, and doing various side jobs. This is also the case with the research results of Zaeni, et al (2022) which showed that the survival strategy adopted by cut flower farming households during the COVID-19 pandemic in order to be able to meet their household needs was by doing side jobs, increasing hours or work intensity, implementing patterns double income, selling assets owned, reducing household expenses, borrowing money from financial institutions, and utilizing social networks owned by these households. The results of research by Sabariman and Susanti (2021) explain the same thing. Adaptation strategies carried out by poor farming families in rural areas, namely: building group solidarity according to developing values and norms, utilizing very strong family ties, and minimizing household expenses and utilizing social networks for business development.

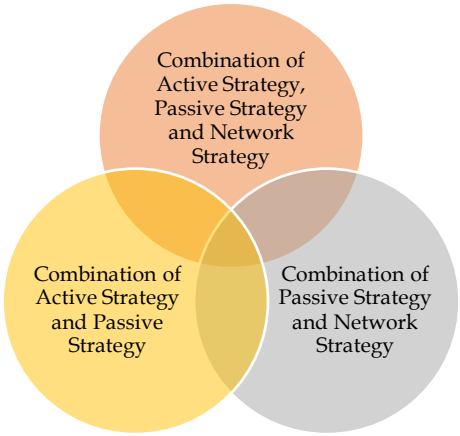


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies and network strategies are 12 people with a percentage of 15 percent.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include:

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was 701.055,53 IDR and during the pandemic is 714.488,88 IDR, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.

3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household food expenditure.
2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

REFERENCES

Abidin, M.Z. (2021). Pemulihan Ekonomi Nasional pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. Treasury Review: *Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, 6(2), 117-138. https://doi.org/10.33105/itrev.v6i2.292.

A'dani, F, Sukayat, Y, Setiawan I, Judawinata, G.M. (2021). Pandemi Covid-19: Keterpurukan dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Petani Pada Masa Pandemi Covid-19. Mimbar Agribisnis: *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Januari 2011. 7(1): 309-319. doi: 10.25157/ma.v7i1.4529

Badan Pusat Statistik. (2019). *Survei Angkatan Kerja Nasional (Sakernas)*. (Jakarta Pusat: Badan Pusat Statistik).

Bidarti, A. (2020). Survive of The Indonesia Farmers in During The Covid-19 Pandemic: Findings of The South Sumaterra. *Agricultural Economic Journal.* Volume 232 (01019). Number 0f Page(s):13. doi: https://doi.org/10.1051/e3sconf/202123201019

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah dan Luas Tanam Terhadap Produksi Padi di Sumatera Selatan melalui Analisis Regresi. *Publikasi Penelitian Terapan Kebijakan , 2(2), 122-124.* doi:10.46774/pptk.v2i2.94

Dewi, I. S., (2020). Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. *Skripsi*. Universitas Muhammadiah Palembang. Tidak dipublikasikan

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce in Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. *Jurnal Ekonomi dan Bisnis Jagaditha, 8(2), 179-186.* doi: https://doi.org/10.22225/jj.8.2.2021.179-186

Fatimah, N., & Syamsiah, N. (2018). Proporsi Pengeluaran Rumah Tanah Petani Padi di Desa Patimban, Kecamatan Pusakanagara, Kabupaten Subang, Jawa Barat. *Jurnal Ilmiah Mahasiswa. AGRIINFO GALUH.* Volume 4 Nomor 3. DOI: 10.25157/jimag.v4i3.1651.

Faradina, Y. & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). *Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Juli 2021. 7(2):1111-1125. doi: 10.25157/ma.v7i2.5062

Graeber, D., Kritikos, A.S., & Seebauer, J. (2021). Covid-19: a Crisis of the Female Self-employed. *Journal of Population Economics*, 34(4), 1141-1187.

Guampe, A.F., Pasambaka, Y., Hengkeng J., & Ponagadi T.S. (2021). Analisis Pendapatan Petani Jagung Di Masa Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 17(2), 85-95. doi: 10.3390/jtaer16060125

Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021) Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *Journal Theoretical and Application Electronic Commerce Research, 16*(6), 2263-2281. doi: 10.3390/jtaer16060125

Hanum, N., (2017). Analisis Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra Di Kota Langsa. *Jurnal samudra ekonomi* [online], 1 (2), 107-117. doi: https://doi.org/10.1234/jse.v1i2.325

Hasanah, A.E., Heryanto, A.M., Hapsari, H., & Noor, I.T. (2021). Dampak Pandemi Covid-19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin Perkotaan: Study Kasus Kelurahan Ciroyom, Kecamatan Andir, Kota Bandung. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 7(2): 1560-1571. doi:10.25157/ma.v7i2.5492

Hernanda, E. N. P., Indriani, Y., dan Kalsum, U. (2017). Pendapatan dan Ketahanan Pangan Rumah Tangga Petani Padi di Desa Rawan Pangan. *Jurnal Ilmu-Ilmu Agribisnis*, 3(5): 283-291. doi: http://dx.doi.org/10.23960/jiia.v5i3.1641

Hertz, R., Mattes, J., & Shook, A. (2020). When Paid Work Invades the Family: Single Mother in the Covid-19 Pandemic. *Journal Family Issues*, 42(2), 2019-2045. Doi:10.1177/0192513X20961420

Jody, H., Llutz, D., Arshad, A.P., Ramakrishnan, M.N, & Srinivisan, R. (2020). Food Sistem Disrupsion: Initial Livelihood and Dietery effects of Covid-19 on Vegetable Producers in India. *Food Security Journal*, 12, 841-851.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. *Reslaj : Religion Education Social Laa Roiba Journal*, 3(2), 206-226. doi: https://doi.org/10.47467/reslaj.v3i2.283

Kansiime, M.K., Tambo, J.A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2020). Covid-19 Implications on Household Income and Food Security in Kenya and Uganda: Findings from a Rapid Assessment. *World Development*, 137(1), 105-129. Doi: 10.1016/j.worlddev.2020.105129

Kurniasih, E. P. (2020). Dampak Pandemi Covid 19 Terhadap Penurunan KesejahteraanMasyarakat Kota Pontianak. *Prosiding*. Prosiding Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan. Fakultas Ekonomi Pembangunan Universitas Tanjung Pura, Pontianak, 2020.

Gorahe, L.V., Waani, F., & Tasik, F. (2021). Dampak Pandemi Covid 19 Terhadap Kesejahteraan Masyarakat di Desa Dalako Bembanehe Kecamatan Tatoareng Kabupaten Kepulauan Sangihe. *Jurnal Eksekutif*, 1(1), 1-9.

Kurniawan, R., & Wahyudati, D. (2015). Analysis of the Comparisons of Farmers Benefit that used Rice Thresher Machine and without used Rice Thresher Machine at Pulokerto Subdistrict Gandus District Palembang City. *Jurnal Societa*, 4(2), 74-78. Doi: https://doi.org/10.32502/jsct.v4i2.237

Kusuma, R. (2020). The Impact of Financial Inclusion on Economic Growth, Poverty, Income Inequality, and Financial Stability in Asia. *The Journal of Asian Finance, Economics and Business*, 7(10), 73-85. doi: 10.13106/jafeb.2020.vol7.no10.073

Lippert, J.F., Furnari, M.B., & Kriebel, C.W. (2021). The Impact of the COVID-19 Pandemic on Occupational Stress in Restaurant Work: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 18(19). 1-15. doi:103390/ijerph181910378

Martadona, I. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan di Kota Padang. *Jurnal Pangan*, 30(3), 1-13. doi: https://doi.org/10.33964/jp.v30i3.544

Novia, R.A., & Zulkifli, L. (2021). Dampak Kegagalan Panen terhadap Ketahanan Pangan Rumah Tangga Tani Padi di Kabupaten Banyumas. *Journal Agrisep*, 20(02), 239-250. doi:10.31186/jagrisep.20.2.239-250

Ridwan, M. (2022). Poverty Reduction through Strengthening the Role of Cooperative Institutions: Case Study of Rural Rice Farming Communities. *Journal Agrisep*, 21(1), 55-68. doi:10.31186/jagrisep.21.1.55-68.

Sagoro, E. M. (2013). Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. *Jurnal Nominal*, 3(1), 120-137. doi: 10.21831/nominal.v3i1.2158

Sari, K. V., & Prasetyani, D. (2021). The Impact of the Institution on Economic Growth: An Evidence from ASEAN. *Jurnal Ekonomi Pembangunan*, 19(1), 19-28. doi: 10.29259/jep.v19i1.12793

Syaputra, F., & Inan, I.Y. (2019). Prospek Lahan Sawah Lebak untuk Pertanian Berkelanjutan di Kabupaten Banyuasin Provinsi Sumatera Selatan. *Indonesian Journal of Socio-Economics*, 1(2), 109-114.

Pradnyadewi, R.P.N., Darmawan, P.D., & Arisena, A.M.G.K. (2021). Ketahanan Pangan Rumah Tangga di Subak Sembung Pada Saat Pandemi Covid-19. *Jurnal Manajemen Agribisnis*, 9(1), 346-356. doi: https://doi.org/10.24843/JMA.2021.v09.i01.p10

Pujowati, Y., & Sufaidi, A. (2021) The COVID-19 Pandemic: Analysis of Large-Scale Social Restrictions (PSBB) Policies for the Community in Various Prevention Efforts. *Jurnal Magister Administrasi Publik*, 01(02), 102-111. doi: 10.31629/jmap.v1i2.3655

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi dan Strategi Adaptasi Keluarga Petani Miskin Selama Pandemi Covid-19: Kasus dari Madura. *Brawijaya Journal of Social Science*, 1(1), 1-13. doi:https://doi.org/10.21776/ub.bjss.2021.001.01.1

Sayuti, R.H., & Hidayati, S.A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. *Resiprokal: Jurnal Riset Sosiologi Progresif Aktual*, 2(2), 133-150. doi:https://doi.org/10.29303/resiprokal.v2i2.46

Shang, Y., Li H., & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. *Frontiers in Public Health*, 9(1), 1-12. doi: 10.3389/fpubh.2021.632043

Suryati, D. (2017). Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. *Jurnal Gane C-Swara*, 11 (1),162-167.

Setyorini, N., Sumastuti, E., & Utami, R.H. (2022). Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 18(1), 15-26.

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption of Expenditure Local Apparatus Organization Prabumulih City Government During the Covid-19 Period.

International Journal of Economics, Business and Accounting Research (IJEBAR), 6(3), 2622-4771. doi:10.29040/ijebar.v6i3.6205

Wibowo, A. A., & Suharno. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. *Journal Agrisep*, 21(1), 161-172. doi:10.31186/jagrisep.21.1.161-172.

Yunita, Ginting, B.S., Asngari, P., Susanto, D., Amanah, S. (2011). Ketahanan Pangan dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. *Jurnal Ilmu Keluarga dan Konsumen*, 4(1), 21-29. Doi: https://doi.org/10.24156/jikk.2011.4.1.21

Zaeni, A.N.S., Kusumo, B.R.A., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong Pada Saat Pandemi Covid-19 (Studi Kasus di Desa Pasirlangu, Kecamatan Cisarua, Kabupaten Bandung Barat, Jawa Barat). *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 8(2), 710-724.

ISSN: 1412-8837 e-ISSN :2579-9959

COVER LETTER

First author*1), Second author 2), etc.

I. First author*:

1. Name : Dr. Yunita, M.Si
2. Affiliation : Univ Sriwijaya
3. E-mail : fathursyifa.nita@yahoo.co.id
4. Orcid ID : https://orcid.org/0000-0002-7767-819X
5. Phone number: +62 813-3872-7665

II. Second author:

1. Name : Dr. Riswani, S.P., M.Si.
2. Affiliation : Universitas Sriwijaya
3. E-mail : riswani@fp.unsri.ac.id
4. Orcid ID : 0000-0001-8335-4696
5. Phone number: 082182660561

III. Third author:

1. Name : Name : Dr. Agustina Bidarti, SP., M.Si
2. Affiliation : Univ. Sriwijaya
3. E-mail : agustinabidarti@unsri.ac.id
4. Orcid ID : https://orcid.org/0000-0001-7120-376X
5. Phone number: +6282380338269

7. Hasil Review dari Reviewer A dan B (1 Maret 2023)

[jagrisep] Editor Decision

Dari: Anggita Dwi Oktaviani (ejournal_postmaster@unib.ac.id)

Kepada: bidarti2019@gmail.com; fathursyifa.nita@yahoo.co.id

Tanggal: Rabu, 1 Maret 2023 pukul 12.33 WIB

Agustina Bidarti, Yunita, Riswani:

We have reached a decision regarding your submission to Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis, "Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District, Muara Enim Regency before and during the Pandemic".

Our decision is: Resubmit

Reviewer A:
Recommendation: Revisions Required

Jenis naskah :

article

Kode Naskah :

23762

1. Apakah judul menggambarkan isi naskah dengan jelas?

YA

2. Apakah judul sudah ditulis secara ringkas/efisien?

YA

3. Apakah abstrak sudah menggambarkan seluruh bagian naskah?

YA

4. Apakah abstrak sudah ditulis secara ringkas/efisien?

YA

5. Apakah bahasa inggris yang dipergunakan sudah benar?

YA

6. Apakah kata kunci menggambarkan ranah masalah penelitian atau istilah yang menjadi dasar pemikiran penelitian?

YA

7. Apakah bagian pendahuluan menguraikan secara jelas mengenai urgensi, masalah, dan ruang lingkup penelitian?

YA

8. Apakah bagian pendahuluan menunjukkan kemutakhiran topik penelitian?

YA

9. Apakah bagian pendahuluan menguraikan dengan jelas tentang pendekatan dalam pemecahan masalah penelitian?

YA

10. Apakah bagian pendahuluan menguraikan secara jelas mengenai hasil yang diharapkan?

YA

11. Apakah bagian pendahuluan sudah mengindikasikan *state of the art* dalam bidang yang diteliti?

YA

12. Apakah metode penelitian sudah menggambarkan rancangan penelitian secara memadai?

YA

13. Apakah metode penelitian sudah menunjukkan keutuhan cara yang dipergunakan sehingga memungkinkan penelitian dapat diulangi atau diverifikasi oleh peneliti lain?

YA

14. Apakah metode penelitian memuat pendekatan teori yang dipergunakan dalam menganalisis data?

YA

15. Apakah hasil penelitian berupa pembahasan disusun secara rinci mulai dari data yang disajikan telah diolah, dituangkan dalam tabel atau gambar, serta diberi keterangan yang mudah dipahami?

YA

16. Apakah simpulan mengandung implikasi dari temuan penelitian baik teoretis maupun praktis?

- YA

17. Apakah saran disusun berdasarkan temuan penelitian secara konsisten?

- YA

18. Apakah saran memungkinkan dapat dilakukan oleh pihak-pihak yang dimaksud?

- YA

19. Apakah daftar pustaka sudah ditulis dengan benar dan taat azas?

- YA

20. Apakah daftar pustaka memuat pustaka yang mutakhir (5 tahun terakhir)?

- YA

22. Apakah pustaka primer yang digunakan lebih banyak daripada pustaka sekunder?

- YA

23. Apakah lampiran yang digunakan menunjang uraian temuan dan pembahasan?

- YA

Bila ada komentar silahkan diidikan dibawah ini :

Revision

REKOMENDASI:

Berdasarkan penilaian tersebut maka direkomendasikan :

- Diterbitkan dengan perbaikan kecil (penulisan)

PENILAIAN UMUM

a. Orisinalitas (Substansi dan materi tulisan merupakan gagasan asli penulis) :

- Baik

b. Kebaruan (*novelty*)

Substansi dan materi tulisan mengandung hal-hal yang baru

- Baik

c. Signifikansi :

Relevansi dan pentingnya tulisan

- Baik

d. Sistematika naskah

- Baik

A-Review 2.docx
150.1kB

8. Revisi ke-3
(1 Maret 2023)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.17.2.23-30

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT, MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Commented [A1]: Your manusc
1. Add a description of the general c (discussion stage)
2. Check your grammatical error
3. Use mendeley for referencess

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent.

Keyword: pandemic, income, consumption patterns and survival strategies

ISSN: 1412-8837 e-ISSN :2579-9959

ABSTRAK

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling, dengan cara pengundian. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen.

Kata Kunci: pandemi, pendapatan, pola konsumsi dan strategi bertahan hidup

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society (Wardayani et al., 2022; Pujowati & Sufaidi, 2021; Shang et al., 2021). Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors (Lippert et al., 2021; Graeber et al., 2021). In addition, the use of social media and applications is also growing rapidly during the pandemic because many sales transactions are carried out online (Dianda & Pandin, 2021, Gu et al., 2021). Based on a research (Sayuti and Hidayati, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received,

spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

The agricultural sector supports food security and food availability and improves people's welfare. Welfare of farmers plays an important role in maintaining and increasing agricultural production. An advanced agricultural sector can encourage faster economic growth and reduce poverty (Wibowo & Suharno, 2022; Abidin, 2021).

The study by Hernanda et al. (2017) and Novia & Zulkifli (2021) state that food expenditure has a negative relationship with food security. Even though the impact of the pandemic resulted in a weakening of the community's economy (Ridwan, 2022), people in rural areas who are generally engaged in the agricultural sector still have various strategies to be able to maintain their family's economy. This is done because family income during the pandemic has decreased significantly (Hertz et al., 2020; Kansiime et al., 2020). In the economic activity of a country, consumption has an important role and has a very large influence on economic stability (Sari & Prasetyani, 2021; Kusuma, 2020). The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, the household consumption decreases due to decreased purchasing power (Setyorini, 2022).

The results of Hasanah et al. (2021) show that food insecurity for poor families occurs due to the impact of the pandemic which has caused access to food for poor families to become increasingly limited which is characterized by decreased food consumption in terms of quantity and quality. Yunita et al. (2011) research results show that the capacity level of farmers is in the moderate category, the food security level of farmer households is classified as low, and the coping mechanisms of farmer households are classified as high.

Based on a research conducted by Faradina & Sukayat (2021), it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia. The research results of Guampe et al. (2021) show that the impact of Covid-19 has affected the rural agriculture sector, such as a scarcity of production inputs. The scarcity of agricultural inputs occurs due to limited trade mobilization due to the pandemic. According to Bidarti et al (2020) research, the impact of the pandemic on the downstream sector of food distribution centers has also had an impact on the upstream sector of food production in rural South Sumatra. South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land kering (Defriyanti, 2019). Tidal swamp land and lowland are divided into potential land and functional land (Kuniawan & Wahyudati, 2015; Syaputra & Inan, 2019).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on tidal lowland. Farmer households in tidal lowland are classified as poor households with low incomes and limited access to household food. A pandemic can have an impact on the production process of rice farming, such as the distribution of agricultural production inputs (production facilities; seeds, pesticides, labor and access to marketing). Restrictions on human movement and mobility and the distribution of agricultural inputs and outputs can lead to scarcity, which in turn will increase the price of production inputs. In addition, limited access to marketing for the output of rice farming will also depress prices at the farm level and in turn have an impact on farmer income. Several research results show a decline in farm household income during the pandemic. As a rational person, farmers will try to find other sources of income or regulate their household spending patterns. Because of this, it is important to conduct research related to changes in rice farming household income before and during the pandemic and how these farmer households implemented coping mechanisms for their food needs.

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in lowland. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic. The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study were 80 respondents, by using the lottery method. A lottery is made by giving a number, then respondents will be selected according to a predetermined lottery number.

. This study used primary data and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before

and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to Murti Sagoro (2013), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to Murti Sagoro (2013), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:

Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Changes in Farmer Household Income before and during the Pandemic

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in table 1 below.

Table 1. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	Decrease (%)
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05
3.	Fisherman	2,000,000	2,000,000	0	0
4.	Labor	3,000,000	3,000,000	0	0

Average	2,336,979	2,205,034	131,945	5.65

Source: Processed by researchers, 2022

Based on Table 1, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to 131.945 IDR per month. This situation causes household members to look for side jobs to supplement income, save on family expenses, and borrow some money from other family or friends so they can meet their family's needs.This result is in line with the research of Junaedi et al (2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20 percent. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 2. Results of Paired Sample T-test

		Paired Difference					T	Df	Sig. (2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Conf.Int. of the Diff. Low	Upp			
Pair 1	Before the pandemic during the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of t-count = 2.422 while the value of t-table = 1.664. It can be concluded that the value of t-count > t-table or 2.422 > 1.664 so that the decisions taken from this study rejects H_0 and accepts H_1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic. During a pandemic, farming households minimize household expenses by prioritizing staple food needs.

Changes in Farmer's Household Expenditures Before and During the Pandemic

Changes in household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food

expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Where non-food consists of clothing, housing, education, health, transportation, and communication and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food. Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. This is explained in the results of Martadona (2022) research, which states that the proportion of farm household expenditure is used for food expenditure, namely grains, with an average total expenditure of 60.26 percent.

In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 3.

Table 3. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Diff. (Rp)	Perc. (%) Incr.	Perc. (%) Decr.
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 3, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because during a pandemic, fruits and vegetables are a source of important nutrients that the

body needs to meet the needs of fiber, vitamins, minerals and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively. Different research results are found in food consumption expenditure in farmer households when there is no pandemic. The largest food expenditures are tobacco (225), grains (21%), and fish/shrimp/squid/scallops (11%) of total food expenditure (Fatimah and Syamsiah, 2018)

The increase and decrease in the amount of household food expenditure during this pandemic is caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that makes households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk and nuts.

In line with the results of this study, Kurniasih's research (2020) shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant. Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life. Jody, H., et al (2020) in his research conducted in four Indian states suggested that the impact of the pandemic was seen in disruptions to the food system and impacted livelihoods and diets. It is known that the initial impact of the pandemic and the policy response on farming households, the majority of farmers reported a negative impact on production, sales, prices and income.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 4 below:

Table 4. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (IDR/month)				
	Before the Pandemic (IDR)	During the Pandemic (IDR)	Difference (IDR)	Perc. (%) Incr.	Perc. (%) Decr.
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47

Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by researchers, 2022

Based on the data in Table 4, it is found that during the pandemic, the household non-food consumption expenditure experiences two changes, namely an increase and decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs with a percentage of 5.69 percent and health costs with a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs and communication equipment needs. Housing costs increases during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 5 below.

Table 5. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (IDR/Month)

Description	Before	During	Differences	Perc. Diff. (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by 2.722,90 IDR or as much as 0.24 percent, where this expenditure decreases from an average of 1.159.488,8 IDR to 1.156.766,71 IDR. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or equivalent to 13.433,35 IDR during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables and fruit groups, before the pandemic and during the pandemic, but with different amounts. Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from 458.433,27 IDR to 442.277,83 IDR during the pandemic.

Table 5 also shows that the percentage of household food consumption expenditure for rice farmers in Muara Belida is more than 60 percent of total household expenditure. This indicates that rice farming households in this location are classified as food insecure when viewed from the proportion of expenditure. The results of this study are different from the results of research conducted by Pradnyadewi, et al (2021) on farming households in Subak Sembung during the Covid-19 pandemic, where the results of his research showed that food consumption expenditure was less than 60 percent of total household expenditure.

Table 6. Results of Paired Sample T-test

		Paired Differences					t	df	Sig.(2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Conf. Int. of the Diff.				
					Low	Upp			
Pair1	Before the pandemic During the pandemic	10,275.00	75,996.49	8,496.66	2,7187.19	6,637.19	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of t-count = 1.209, while the value of t-table = 1.664. So, it can be concluded that the value of t-count > t-table or 1.209 > 1.664, so the decision taken from this study is to reject

H_0 and accept H_1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research (Suryati, 2017), which shows that household consumption patterns vary and are based on the amount of income. The greater the level of income owned; the consumption pattern also changes.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for the households to make efforts to maintain their family life. In general, farming households will adjust their farming activities during a pandemic. The results of research conducted by A'dani, et al (2020) explain that there are different opinions regarding farming activities during a pandemic. Some farmer households think that the pandemic has affected their farming activities, and on the other hand, there are those who think that the pandemic has not affected their farming activities.

The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in table 1.7. following.

Table7. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 7 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 8. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 8. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so

on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

The results of this study are in line with the research of Faradina, et al (2021) which shows that farming households make several adaptations so they can continue to survive during the pandemic. The adaptations that have been made are reducing the workforce to become family workers, reducing grain sales, and doing various side jobs. This is also the case with the research results of Zaeni, et al (2022) which showed that the survival strategy adopted by cut flower farming households during the COVID-19 pandemic in order to be able to meet their household needs was by doing side jobs, increasing hours or work intensity, implementing patterns double income, selling assets owned, reducing household expenses, borrowing money from financial institutions, and utilizing social networks owned by these households. The results of research by Sabariman and Susanti (2021) explain the same thing. Adaptation strategies carried out by poor farming families in rural areas, namely: building group solidarity according to developing values and norms, utilizing very strong family ties, and minimizing household expenses and utilizing social networks for business development.

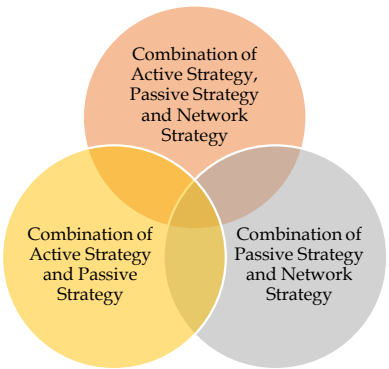


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies and network strategies are 12 people with a percentage of 15 percent.

The combination of active and passive strategies used is to work as a fisherman as well as to make savings, or change the food menu by choosing cheaper ingredients. Or looking for additional income as a farm laborer and prioritizing expenses to meet basic food needs compared to other expenses. Farming households that apply a combination of passive strategies and network strategies make savings and also borrow money from family, neighbors or other friends. In addition, there are also households that take advantage of various assistance from the government and reduce non-food purchases. Meanwhile, households that apply a combination of active, passive and network strategies try to find side jobs by working as farm laborers or construction workers, while their wives make savings by utilizing food that is around the house. In addition, if the supply of money or food is not sufficient, they try to borrow from family or neighbors.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include:

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was 701.055,53 IDR and during the pandemic is 714.488,88 IDR, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.
3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household food expenditure.

2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

REFERENCES

Abidin, M.Z. (2021). Pemulihan Ekonomi Nasional pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. Treasury Review: *Jurnal Perbendaharaan, Keuangan Negara dan Kebijakan Publik*, 6(2), 117-138. https://doi.org/10.33105/itrev.v6i2.292.

A'dani, F, Sukayat, Y, Setiawan I, Judawinata, G.M. (2021). Pandemi Covid-19: Keterpurukan dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Petani Pada Masa Pandemi Covid-19. Mimbar Agribisnis: *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Januari 2011. 7(1): 309-319. doi: 10.25157/ma.v7i1.4529

Badan Pusat Statistik. (2019). *Survei Angkatan Kerja Nasional (Sakernas)*. (Jakarta Pusat: Badan Pusat Statistik).

Bidarti, A. (2020). Survive of The Indonesia Farmers in During The Covid-19 Pandemic: Findings of The South Sumaterra. *Agricultural Economic Journal.* Volume 232 (01019). Number 0f Page(s):13. doi: https://doi.org/10.1051/e3sconf/202123201019

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah dan Luas Tanam Terhadap Produksi Padi di Sumatera Selatan melalui Analisis Regresi. *Publikasi Penelitian Terapan Kebijakan , 2(2), 122-124.* doi:10.46774/pptk.v2i2.94

Dewi, I. S., (2020). Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid-19. *Skripsi*. Universitas Muhammadiah Palembang. Tidak dipublikasikan

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce in Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. *Jurnal Ekonomi dan Bisnis Jagaditha, 8(2), 179-186.* doi: https://doi.org/10.22225/jj.8.2.2021.179-186

Fatimah, N., & Syamsiah, N. (2018). Proporsi Pengeluaran Rumah Tanah Petani Padi di Desa Patimban, Kecamatan Pusakanagara, Kabupaten Subang, Jawa Barat. *Jurnal Ilmiah Mahasiswa. AGRIINFO GALUH.* Volume 4 Nomor 3. DOI: 10.25157/jimag.v4i3.1651.

Faradina, Y. & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid-19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti, Kecamatan Tambelang, Kabupaten Bekasi). *Mimbar Agribisnis, Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.* Juli 2021. 7(2):1111-1125. doi: 10.25157/ma.v7i2.5062

Graeber, D., Kritikos, A.S., & Seebauer, J. (2021). Covid-19: a Crisis of the Female Self-employed. *Journal of Population Economics*, 34(4), 1141-1187.

Guampe, A.F., Pasambaka, Y., Hengkeng J., & Ponagadi T.S. (2021). Analisis Pendapatan Petani Jagung Di Masa Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 17(2), 85-95. doi: 10.3390/jtaer16060125

Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021) Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *Journal Theoretical and Application Electronic Commerce Research, 16*(6), 2263-2281. doi: 10.3390/jtaer16060125

Hanum, N., (2017). Analisis Pengaruh Pendapatan Terhadap Perilaku Konsumsi Mahasiswa Universitas Samudra Di Kota Langsa. *Jurnal samudra ekonomi* [online], 1 (2), 107-117. doi: https://doi.org/10.1234/jse.v1i2.325

Hasanah, A.E., Heryanto, A.M., Hapsari, H., & Noor, I.T. (2021). Dampak Pandemi Covid-19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin Perkotaan: Study Kasus Kelurahan Ciroyom, Kecamatan Andir, Kota Bandung. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 7(2): 1560-1571. doi:10.25157/ma.v7i2.5492

Hernanda, E. N. P., Indriani, Y., dan Kalsum, U. (2017). Pendapatan dan Ketahanan Pangan Rumah Tangga Petani Padi di Desa Rawan Pangan. *Jurnal Ilmu-Ilmu Agribisnis*, 3(5): 283-291. doi: http://dx.doi.org/10.23960/jiia.v5i3.1641

Hertz, R., Mattes, J., & Shook, A. (2020). When Paid Work Invades the Family: Single Mother in the Covid-19 Pandemic. *Journal Family Issues*, 42(2), 2019-2045. Doi:10.1177/0192513X20961420

Jody, H., Llutz, D., Arshad, A.P., Ramakrishnan, M.N, & Srinivisan, R. (2020). Food Sistem Disrupsion: Initial Livelihood and Dietery effects of Covid-19 on Vegetable Producers in India. *Food Security Journal*, 12, 841-851.

Junaedi, D., Arsyad, M., Salistia, F., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. *Reslaj : Religion Education Social Laa Roiba Journal*, 3(2), 206-226. doi: https://doi.org/10.47467/reslaj.v3i2.283

Kansiime, M.K., Tambo, J.A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2020). Covid-19 Implications on Household Income and Food Security in Kenya and Uganda: Findings from a Rapid Assessment. *World Development*, 137(1), 105-129. Doi: 10.1016/j.worlddev.2020.105129

Kurniasih, E. P. (2020). Dampak Pandemi Covid 19 Terhadap Penurunan KesejahteraanMasyarakat Kota Pontianak. *Prosiding*. Prosiding Seminar Akademik Tahunan Ilmu Ekonomi dan Studi Pembangunan. Fakultas Ekonomi Pembangunan Universitas Tanjung Pura, Pontianak, 2020.

Gorahe, L.V., Waani, F., & Tasik, F. (2021). Dampak Pandemi Covid 19 Terhadap Kesejahteraan Masyarakat di Desa Dalako Bembanehe Kecamatan Tatoareng Kabupaten Kepulauan Sangihe. *Jurnal Eksekutif*, 1(1), 1-9.

Kurniawan, R., & Wahyudati, D. (2015). Analysis of the Comparisons of Farmers Benefit that used Rice Thresher Machine and without used Rice Thresher Machine at Pulokerto Subdistrict Gandus District Palembang City. *Jurnal Societa*, 4(2), 74-78. Doi: https://doi.org/10.32502/jsct.v4i2.237

Kusuma, R. (2020). The Impact of Financial Inclusion on Economic Growth, Poverty, Income Inequality, and Financial Stability in Asia. *The Journal of Asian Finance, Economics and Business*, 7(10), 73-85. doi: 10.13106/jafeb.2020.vol7.no10.073

Lippert, J.F., Furnari, M.B., & Kriebel, C.W. (2021). The Impact of the COVID-19 Pandemic on Occupational Stress in Restaurant Work: A Qualitative Study. *International Journal of Environmental Research and Public Health*, 18(19). 1-15. doi:103390/ijerph181910378

Martadona, I. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan di Kota Padang. *Jurnal Pangan*, 30(3), 1-13. doi: https://doi.org/10.33964/jp.v30i3.544

Novia, R.A., & Zulkifli, L. (2021). Dampak Kegagalan Panen terhadap Ketahanan Pangan Rumah Tangga Tani Padi di Kabupaten Banyumas. *Journal Agrisep*, 20(02), 239-250. doi:10.31186/jagrisep.20.2.239-250

Ridwan, M. (2022). Poverty Reduction through Strengthening the Role of Cooperative Institutions: Case Study of Rural Rice Farming Communities. *Journal Agrisep*, 21(1), 55-68. doi:10.31186/jagrisep.21.1.55-68.

Sagoro, E. M. (2013). Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca Acfta dan Aifta. *Jurnal Nominal*, 3(1), 120-137. doi: 10.21831/nominal.v3i1.2158

Sari, K. V., & Prasetyani, D. (2021). The Impact of the Institution on Economic Growth: An Evidence from ASEAN. *Jurnal Ekonomi Pembangunan*, 19(1), 19-28. doi: 10.29259/jep.v19i1.12793

Syaputra, F., & Inan, I.Y. (2019). Prospek Lahan Sawah Lebak untuk Pertanian Berkelanjutan di Kabupaten Banyuasin Provinsi Sumatera Selatan. *Indonesian Journal of Socio-Economics*, 1(2), 109-114.

Pradnyadewi, R.P.N., Darmawan, P.D., & Arisena, A.M.G.K. (2021). Ketahanan Pangan Rumah Tangga di Subak Sembung Pada Saat

Pandemi Covid-19. *Jurnal Manajemen Agribisnis*, 9(1), 346-356. doi: https://doi.org/10.24843/JMA.2021.v09.i01.p10

Pujowati, Y., & Sufaidi, A. (2021) The COVID-19 Pandemic: Analysis of Large-Scale Social Restrictions (PSBB) Policies for the Community in Various Prevention Efforts. *Jurnal Magister Administrasi Publik*, 01(02), 102-111. doi: 10.31629/jmap.v1i2.3655

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi dan Strategi Adaptasi Keluarga Petani Miskin Selama Pandemi Covid-19: Kasus dari Madura. *Brawijaya Journal of Social Science*, 1(1), 1-13. doi:https://doi.org/10.21776/ub.bjss.2021.001.01.1

Sayuti, R.H., & Hidayati, S.A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. *Resiprokal: Jurnal Riset Sosiologi Progresif Aktual*, 2(2), 133-150. doi:https://doi.org/10.29303/resiprokal.v2i2.46

Shang, Y., Li H., & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. *Frontiers in Public Health*, 9(1), 1-12. doi: 10.3389/fpubh.2021.632043

Suryati, D. (2017). Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. *Jurnal Gane C-Swara*, 11 (1),162-167.

Setyorini, N., Sumastuti, E., & Utami, R.H. (2022). Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid-19. *Jurnal Sosial Ekonomi Pertanian*, 18(1), 15-26.

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption of Expenditure Local Apparatus Organization Prabumulih City Government During the Covid-19 Period. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 6(3), 2622-4771. doi:10.29040/ijebar.v6i3.6205

Wibowo, A. A., & Suharno. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. *Journal Agrisep*, 21(1), 161-172. doi:10.31186/jagrisep.21.1.161-172.

Yunita, Ginting, B.S., Asngari, P., Susanto, D., Amanah, S. (2011). Ketahanan Pangan dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. *Jurnal Ilmu Keluarga dan Konsumen*, 4(1), 21-29. Doi: https://doi.org/10.24156/jikk.2011.4.1.21

Zaeni, A.N.S., Kusumo, B.R.A., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong Pada Saat Pandemi Covid-19 (Studi Kasus di Desa Pasirlangu, Kecamatan Cisarua, Kabupaten Bandung Barat, Jawa Barat). *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, 8(2), 710-724.

ISSN: 1412-8837 e-ISSN :2579-9959

9. Artikel yang telah direvisi ke-3 (15 Maret 2023)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.17.2.23-30

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Analisis Pendapatan dan Pengeluaran serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65 percent during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65 percent during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent, a combination of passive strategies and network strategies by 36 percent and those applying a combination of active strategies, passive strategies and network strategies by 15 percent. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household non-food expenditure.

Keyword: pandemic, income, consumption patterns and survival strategies

ABSTRAK

1. *Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling, dengan cara pengundian. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65 persen saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65 persen pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5 persen, kombinasi strategi pasif dan strategi jaringan sebesar 36 persen dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15 persen. Rumah tangga petani diharapkan mampu memaksimalkan pemanfaatan lahan pekarangan, kolam ikan, dan ternak yang dimiliki sebagai sumber mata pencaharian tambahan ataupun upaya mengurangi pengeluaran non pangan rumah tangga.*

Kata Kunci: pandemi, pendapatan, pola konsumsi dan strategi bertahan hidup

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society (Pujowati & Sufaidi, 2021; Shang, Li, & Zhang, 2021; Wardayani, Dewata, & Jauhari, 2022). Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates

new job opportunities that rely on creativity in various sectors (Graeber, Kritikos, & Seebauer, 2021; Lippert, Furnari, & Kriebel, 2021). In addition, the use of social media and applications is also growing rapidly during the pandemic because many sales transactions are carried out online (Dianda & Pandin, 2021; Gu, Ślusarczyk, Hajizada, Kovalyova, & Sakhbieva, 2021) . Based on a research (Sayuti & Hidayati, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received, spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

The agricultural sector supports food security and food availability and improves people's welfare. Welfare of farmers plays an important role in maintaining and increasing agricultural production. An advanced agricultural sector can encourage faster economic growth and reduce poverty (Abidin, 2021; Wibowo & Suharno, 2022).

The study by (Hernanda, Indriani, & Kalsum, 2017; Novia & Zulkifli, 2021) state that food expenditure has a negative relationship with food security. Even though the impact of the pandemic resulted in a weakening of the community's economy (Ridwan, 2022), people in rural areas who are generally engaged in the agricultural sector still have various strategies to be able to maintain their family's economy. This is done because family income during the pandemic has decreased significantly (Hertz, Mattes, & Shook, 2021; Kansiime et al., 2021). In the economic activity of a country, consumption has an important role and has a very large influence on economic stability (Ratnawati, 2020; Sari & Prastyani, 2021). The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, household consumption decreases due to decreased purchasing power (Setyorini, Sumastuti, & Utami, 2022).

The results of (Hasanah, Heryanto, Hapsari, & Noor, 2021) show that food insecurity for poor families occurs due to the impact of the pandemic which has caused access to food for poor families to become increasingly limited which is characterized by decreased food consumption in terms of quantity and quality. The capacity level of farmers is in the moderate category, the food security level of farmer households is classified as low, and the coping mechanisms of farmer households are classified as high (Yunita, Ginting, Asngari, Susanto, & Amanah, 2011).

Based on a research it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia (Faradina & Sukayat, 2021). The research results of (Bidarti, 2021; Guampe, Pasambaka, Hengkeng, & Ponagadi, 2021) show that the impact of Covid-19 has affected the rural agriculture sector, such as a scarcity of production inputs. The scarcity of agricultural inputs occurs due to limited trade mobilization due to the

pandemic. According to (Bidarti, 2021) research, the impact of the pandemic on the downstream sector of food distribution centers has also had an impact on the upstream sector of food production in rural South Sumatra. South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land (Defriyanti, 2019). Tidal swamp land and lowland are divided into potential land and functional land (Kurniawan & Wahyudati, 2015; Syahputra & Inan, 2019).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on tidal lowlands. Farmer households in tidal lowlands are classified as poor households with low incomes and limited access to household food. A pandemic can have an impact on the production process of rice farming, such as the distribution of agricultural production inputs (production facilities; seeds, pesticides, labor and access to marketing). Restrictions on human movement and mobility and the distribution of agricultural inputs and outputs can lead to scarcity, which in turn will increase the price of production inputs (Bidarti, A. 2021). In addition, limited access to marketing for the output of rice farming will also depress prices at the farm level and in turn have an impact on farmer income. Several research results show a decline in farm household income during the pandemic, for example explanations from A'dani et al, 2021, Darnhofer (2020), Pontoan (2021), Satriyati (2021) and Sudaryanti and Suharyono (2020). Rationally, farmers will try to find other sources of income or regulate their household spending patterns. Because of this, it is important to conduct research related to changes in rice farming household income before and during the pandemic and how these farmer households implemented coping mechanisms for their food needs.

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in the lowlands. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic. The

sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study was 80 respondents, by using the lottery method. A lottery is made by giving a number, then respondents will be selected according to a predetermined lottery number.

. This study used primary and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to (Sagoro, 2014), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to (Sagoro, 2014), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Respondent's Identity

Age is the length of time a person has lived from birth to the present. The age level that a person has will show the work ability activity possessed by that person, because productive age will be able to produce better jobs and be able to do various types of work. The identity of respondents based on age shows that most of the respondents are of productive age. Meanwhile, based on gender, the number of female respondents is higher than the number of male respondents.

The higher a person's education, the greater the opportunity to get a job. By that the opportunity to earn a decent income is also greater. In addition, the higher a person's level of education, the better his knowledge of nutrition tends to be. It is hoped that households with a higher level of education will earn income that can be used to meet food consumption needs and be able to choose good nutritious food for the lives of their family members, especially during a pandemic. Table 1 shows that the education level is dominated by the elementary school group (71.25%).

Table 1. Respondent's Identity

No.	Identity	Number of People	Percentage (%)
I	**Age (Year)**		
1.	21-30	8	10,00
2.	31-40	19	23,75
3.	41-50	28	35,00
4.	51-60	18	22,50
5.	61-80	7	8,75
	Total	80	100,00
II	**Gender**		
6	Male	30	37,50
7	Female	50	62,50
	Total	80	100,00
III	**Level of Education**		
1.	No school	11	13,75
2	Elementary school	57	71,25
3.	Junior high school	11	13,75
4.	Senior high school	1	1,25
	Total	80	100,00
IV	**Family Members**		
1.	0	1	1,25
2.	2-3	33	41,25
3.	4-5	43	53,75
4.	6-8	4	5,00
		80	100,00

The number of family members in question is the number of individuals/people who are borne by a head of family in one house. The results showed that overall the respondents did not have too many family members to support. The average number of respondents' family members is 4-5 people in one house.

Changes in Farmer Household Income before and during the Pandemic

The results showed that the type of work of the respondents was dominated by farmers by 92.50 percent. 5 percent also work as traders. Then each 1.25 percent also work as fishermen and laborers.

Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (Rp/month) can be seen in table 1 below.

Table 2. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No.	Type of work	Average Monthly Income Before the Pandemic (Rp)	Average Monthly Income During the Pandemic (Rp)	Difference (Rp)	Decrease (%)
1.	Farmer	2,147,916	1,995,138	152,778	7.11
2.	Merchant	2,200,000	1,825,000	375,000	17.05
3.	Fisherman	2,000,000	2,000,000	0	0
4.	Labor	3,000,000	3,000,000	0	0
Average		2,336,979	2,205,034	131,945	5.65

Source: Processed by researchers, 2022

The results showed that the type of work of the respondents was dominated by farmers by 92.50 percent. 5 percent also work as traders. Then each 1.25 percent also work as fishermen and laborers.

Based on Table 2, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to 131.945 IDR per month. This situation causes household members to look for side jobs to supplement income, save on family expenses, and borrow some money from other family or friends so they can meet their family's needs.This result is in line with the research of (Junaedi, Salistia, Arsyad, & Romli, 2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20 percent. The pandemic has also made people try to find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 3. Results of Paired Sample T-test

Paired Difference								
	Mean	Std. Dev.	Std. Error Mean	95% Conf.Int. of the Diff. Low	Upp	T	Df	Sig. (2-tailed)

Pair 1	Before the pandemic during the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of t-count = 2.422 while the value of t-table = 1.664. It can be concluded that the value of t-count > t-table or 2.422 > 1.664 so that the decisions taken from this study rejects H_0 and accepts H_1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic. During a pandemic, farming households minimize household expenses by prioritizing staple food needs.

Changes in Farmer's Household Expenditures Before and During the Pandemic

Changes in the household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Whereas non-food consists of clothing, housing, education, health, transportation, and communication, and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer's household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food. Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. This is explained in the results of (Martadona & Leovita, 2021) research, which states that the proportion of farm household expenditure is used for food expenditure, namely grains, with an average total expenditure of 60.26 percent.

In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household

food consumption expenditures before and during the pandemic (Rp/month) can be seen in Table 4.

Table 4. Average Monthly Food Expenditure of Farmers' Households before and during the Pandemic

Food Group	Average Food Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Diff. (Rp)	Perc. (%) Incr.	Perc. (%) Decr.
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0,00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 4, it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because, during a pandemic, fruits and vegetables are a source of important nutrients that the body needs to meet the needs of fiber, vitamins, minerals, and several enzymes that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on the consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24 percent, 2.80 percent, and 2.77 percent. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively. Different research results are found in food consumption expenditure in farmer households when there is no pandemic. The largest food expenditures are tobacco (225), grains (21%), and fish/shrimp/squid/scallops (11%) of total food expenditure (Fatimah & Syamsiyah, 2018).

The increase and decrease in household food expenditure during this pandemic are caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that made households change their consumption patterns. Households with

low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk, and nuts.

In line with the results of this study, Ratnawati research shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant (Ratnawati, 2020). Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life. A research conducted in four Indian states suggested that the impact of the pandemic was seen in disruptions to the food system and impacted livelihoods and diets (Harris, Depenbusch, Arshad, Nair, & Ramasamy, 2020). It is known that the initial impact of the pandemic and the policy response on farming households, the majority of farmers reported a negative impact on production, sales, prices and income.

The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 5 below:

Table 5. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (IDR/month)				
	Before the Pandemic (IDR)	During the Pandemic (IDR)	Difference (IDR)	Perc. (%) Incr.	Perc. (%) Decr.
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Processed by researchers, 2022

Based on the data in Table 5, it is found that during the pandemic, household non-food consumption expenditure experiences two changes, namely an increase, and a decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs by a percentage of 5.69 percent and health costs by a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs, and communication equipment needs. Housing costs increased during the

pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home.

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47 percent, 134.13 percent, and 29.41 percent, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 6 below.

Table 6. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (IDR/Month)

Description	Before	During	Differences	Perc. Diff. (%)
Household Food Consumption Expenditure	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption Expenditure	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by 2.722,90 IDR or as much as 0.24 percent, where this expenditure decreases from an average of 1.159.488,8 IDR to 1.156.766,71 IDR. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara Belida increases by 1.88 or is equivalent to 13.433,35 IDR during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables, and fruit groups, before the pandemic and during the pandemic, but with different amounts. Inversely, the average household non-food consumption expenditure decreases by 3.65 percent or decreases from 458.433,27 IDR to 442.277,83 IDR during the pandemic.

Table 6 also shows that the percentage of household food consumption expenditure for rice farmers in Muara Belida is more than 60 percent of total household expenditure. This indicates that rice farming households in this

location are classified as food insecure when viewed from the proportion of expenditure. The results of this study are different from the results of research conducted by Pradnyadewi, et al (2021) on farming households in Subak Sembung during the Covid-19 pandemic, where the results of his research showed that food consumption expenditure was less than 60 percent of total household expenditure.

Table 7. Results of Paired Sample T-test

		Paired Differences					T	df	Sig.(2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Conf. Int. of the Diff.				
					Low	Upp			
Pair1	Before the pandemic During the pandemic	10,275.00	75,996.49	8,496.66	2,7187.19	6,637.19	1.209	79	.000

Source: Processed by Researchers, 2022

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6, where the value of t-count = 1.209, while the value of t-table = 1.664. So, it can be concluded that the value of t-count > t-table or 1.209 > 1.664, so the decision taken from this study is to reject H_0 and accept H_1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

The change in household consumption expenditure patterns in this study is in line with the results of a research that shows that household consumption patterns vary and are based on the amount of income (Suryati, 2017). The greater the level of income owned; the consumption pattern also changes.

Survival Strategies for Farmers' Households during the Pandemic

The pandemic that causes changes in household income has become the main factor for households to make efforts to maintain their family life. In general, farming households will adjust their farming activities during a pandemic. The results of research conducted by (A'dani, Sukayat, Setiawan, & Judawinata, 2021) explain that there are different opinions regarding farming activities during a pandemic. Some farmer households think that the pandemic has affected their farming activities, and on the other hand, there are those who think that the pandemic has not affected their farming activities.

The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are 3 types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50 percent of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in Table 8. following.

Table 8. Forms of Active Strategies taken by Households in Muara Belida during the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of people	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
	Total	74	100.00

Source: Processed by Researchers, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 8 shows that 41.90 percent do side jobs as fishermen. As many as 6.75 percent do side jobs as traders. As many as 12.16 percent do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account for 1.35 percent. As many as 36.48 percent of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 9. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Table 9. shows that 12.5 percent implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 percent implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Then 12.5 percent said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

The results of this study are in line with the research of (Faradina & Sukayat, 2021) which shows that farming households make several adaptations so they can continue to survive during the pandemic. The adaptations that have been made are reducing the workforce to become family workers, reducing grain sales, and doing various side jobs. This is also the case with the research results of (Zaeni, Kusumo, Syamsiah, & Hapsari, 2022) which showed that the survival strategy adopted by cut flower farming households during the COVID-19 pandemic in order to be able to meet their household needs was by doing side jobs, increasing hours or work intensity, implementing patterns double income, selling assets owned, reducing household expenses, borrowing money from financial institutions, and utilizing social networks owned by these households. The results of research by (Sabariman & Susanti, 2021) explain the same thing. Adaptation strategies carried out by poor farming families in rural areas, namely: building group solidarity according to developing values and norms, utilizing very strong family ties, and minimizing household expenses and utilizing social networks for business development.

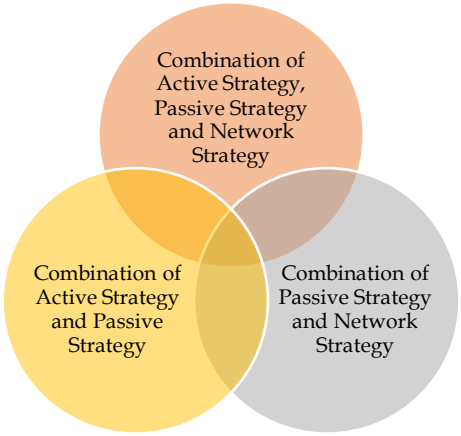


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5 percent. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36 percent. Meanwhile, those who apply a combination of active strategies, passive strategies, and network strategies are 12 people with a percentage of 15 percent.

The combination of active and passive strategies used is to work as a fisherman as well as to make savings or change the food menu by choosing cheaper ingredients. Or looking for additional income as a farm laborer and prioritizing expenses to meet basic food needs compared to other expenses. Farming households that apply a combination of passive strategies and network strategies make savings and also borrow money from family, neighbors or other friends. In addition, there are also households that take advantage of various assistance from the government and reduce non-food purchases. Meanwhile, households that apply a combination of active, passive and network strategies try to find side jobs by working as farm laborers or construction workers, while their wives make savings by utilizing food that is around the house. In addition, if the supply of money or food is not sufficient, they try to borrow from family or neighbors.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include:

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was 701.055,53 IDR and during the pandemic is 714.488,88 IDR, meaning that there is an increase of 1.88 percent. Meanwhile, household non-food expenditure decreases by 3.65 percent during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.
3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5 percent. The combination of passive strategy and network strategy is 36 percent and those who apply a combination of active strategy, passive strategy and network strategy are 15 percent.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household non-food expenditure.
2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

REFERENCES

Abidin, M. Z. (2021). Pemulihan Ekonomi Nasional pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. *Indonesian Treasury Review*, *6*(2), 117–138.

A'dani, F., Sukayat, Y., Setiawan, I., & Judawinata, M. G. (2021). Pandemi Covid 19: Keterpurukan dan Kebangkitan Pertanian Strategi

Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Padi pada Masa Pandemi Covid 19 (Studi Kasus: Desa Pelem, Kecamatan Gabus, Kabupaten Grobogan, Jawa Tengah). *Mimbar Agribisnis*, *7*(1), 309–319.

Bidarti, A. (2021). Survive of the Indonesia farmers in during the Covid-19 Pademic: Findings of the South Sumatra. *E3S Web of Conferences*, *232*. EDP Sciences. https://doi.org/10.1051/e3sconf/202123201019

Darnhofer, I. (2020). Farm resilience in the face of the unexpected: Lessons from the COVID- 19 pandemic. *Agriculture and Human Values*, 1–2. https://doi.org/10.1007/s10460-020-10053-5

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah dan Luas Tanam Terhadap Produksi Padi di Sumatera Selatan Melalui Analisis Regresi. *Publikasi Penelitian Terapan Dan Kebijakan* , *2*(2), 122–124.

Dewi, I. S. (2020). *Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja atas Pemutusan Hubungan Kerja Dampak Covid 19*.

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce in Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. *Jurnal Ekonomi & Bisnis JAGADITHA*, *8*(2), 179–186. https://doi.org/10.22225/jj.8.2.2021.179-186

Faradina, Y., & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota di Era Covid 19 serta Pengaruhnya terhadap Usahatani (Studi Kasus: Desa Sukabakti Kecamatan Tambelang Kabupaten Bekasi). *Mimbar Agribisnis*, *7*(2), 1111–1125.

Fatimah, N., & Syamsiyah, N. (2018). Proporsi Pengeluaran Rumah Tangga Petani di Desa Patimban Kecamatan Pusakanagara Kabupaten Subang Jawa Barat. *Mimbar Agribisnis*, *4*(2), 184–196.

Graeber, D., Kritikos, A. S., & Seebauer, J. (2021). COVID-19: a crisis of the female self-employed. *Journal of Population Economics*, *34*(4), 1141–1187. https://doi.org/10.1007/s00148-021-00849-y

Gu, S., Ślusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021). Impact of the covid-19 pandemic on online consumer purchasing behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(6), 2263–2281. https://doi.org/10.3390/jtaer16060125

Guampe, F. A., Pasambaka, Y., Hengkeng, J., & Ponagadi, S. T. (2021). Analisis Pendapatan Petani Jagung di Masa Pandemi Covid 19. *Jurnal Sosial Ekonomi Pertanian*, *17*(2), 55–64.

Harris, J., Depenbusch, L., Arshad, A. P., Nair, R. M., & Ramasamy, S. (2020). Food System Disruption: Initial Livelihood and Dietary Effects of COVID-19 on Vegetable Producers in India. *Food Security*, 841–851. https://doi.org/10.1007/s12571-020-01064-5/Published

Hasanah, E. A., Heryanto, M. A., Hapsari, H., & Noor, T. I. (2021). Dampak Pandemi Covid 19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin

Perkotaan: Studi Kasus Kelurahan Ciroyom Kecamatan Andir Kota Bandung. *Mimbar Agribisnis*, *7*(2), 1560–1571.

Hernanda, E. N. P., Indriani, Y., & Kalsum, U. (2017). Pendapatan dan Ketahanan Pangan Rumah Tangga Petani Padi di Desa Rawan Pangan. *JIIA*, *5*(3), 283–291.

Hertz, R., Mattes, J., & Shook, A. (2021). When Paid Work Invades the Family: Single Mothers in the COVID-19 Pandemic. *Journal of Family Issues*, *42*(9), 2019–2045. https://doi.org/10.1177/0192513X20961420

Junaedi, D., Salistia, F., Arsyad, M. R., & Romli, M. (2021). Dampak Covid-19 terhadap Perekonomian Masyarakat Bogor. *Reslaj: Religion Education Social Laa Roiba Journal*, *3*(2), 207–226. https://doi.org/10.47476/reslaj.v3i2.283

Kansiime, M. K., Tambo, J. A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2021). COVID-19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment. *World Development*, *137*. https://doi.org/10.1016/j.worlddev.2020.105199

Kurniawan, R., & Wahyudati, D. (2015). Analisis Perbandingan Pendapatan Petani Padi yang Menggunakan Mesin Perontok Padi dan Yang Tidak Menggunakan Mesin Perontok Padi di Kelurahan Pulokerto Kecamatan Gandus Kota Palembang. *Societa*, *4*(2), 74–78.

Lippert, J. F., Furnari, M. B., & Kriebel, C. W. (2021). The impact of the covid-19 pandemic on occupational stress in restaurant work: A qualitative study. *International Journal of Environmental Research and Public Health*, *18*(19). https://doi.org/10.3390/ijerph181910378

Martadona, I., & Leovita, A. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan di Kota Padang. *Jurnal Pangan*, *30*(3), 167–174.

Novia, R. A., & Zulkifli, L. (2021). Dampak Kegagalan Panen terhadap Ketahanan Pangan Rumah Tangga Tani Padi di Kabupaten Banyumas. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, *20*(2), 239–250. https://doi.org/10.31186/jagrisep.20.2.239-250.

Pontoan, K. A., Merung, Y. A., Kelana, G., & Lengkong, M. R. (2021). Peningkatan Kapasitas Petani pada Masa Pandemi COVID-19 Melalui Pelatihan Manajemen Keuangan & Pemasaran Digital. *COMSERVA : Jurnal Penelitian Dan Pengabdian Masyarakat*, *1*(5), 178–186. https://doi.org/10.36418/comserva.v1i5.28

Pujowati, Y., & Sufaidi, A. (2021). The COVID-19 Pandemic: Analysis of Large-Scale Social Restrictions (PSBB) Policies for the Community in Various Prevention Efforts. *Jurnal Magister Administrasi Publik (JMAP)*, *2*(1), 2021. https://doi.org/10.31629/jmap.v1i2.3655

Ratnawati, K. (2020). The Impact of Financial Inclusion on Economic Growth, Poverty, Income Inequality, and Financial Stability in Asia. *The Journal of Asian Finance, Economics and Business*, *7*(10), 2288–4645. https://doi.org/10.13106/jafeb.2020.vol7.no10.073

Ridwan, M. (2022). Poverty Reduction Through Strengthening The Role of Cooperative Institutions: Case Study of Rural Rice Farming Communities. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, *21*(1), 55–68. https://doi.org/10.31186/jagrisep.21.1.55-68

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi dan Strategi Adaptasi Keluarga Miskin selama Pandemi Covid 19: kasus dari Madura. *Brawijaya Journal of Social Science*, *1*(1), 1–13.

Sagoro, E. M. (2014). Kinerja Keuangan Industri Kreatif di Yogyakarta Pasca ACFTA dan AIFTA. *Jurnal Nominal*, *3*(1), 120–137.

Sari, V. K., & Prastyani, D. (2021). The Impact of the Institution on Economic Growth: An Evidence from ASEAN. *Jurnal Ekonomi Pembangunan*, *19*(1), 17–26. https://doi.org/10.29259/jep.v19i1.12793.

Satriyati, E., & Biroli, A. (2021). Kembali ke Rempah: Upaya Rumah Tangga Petani di Bangkalan Guna Peningkatan Kesehatan dan Penanggulangan Kemiskinan selama Pandemi Covid-19. *Prosiding Seminar Nasional Penanggulangan Kemiskinan*, *1*(1), Article 1. **https://conference.trunojoyo.ac.id/pub/index.php/semnaspk/article/view/45.**

Sayuti, R. H., & Hidayati, S. A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat di Nusa Tenggara Barat. *Resiprokal*, *2*(2), 133–150.

Setyorini, N., Sumastuti, E., & Utami, R. H. (2022). Urgensi Keamanan Pangan Rumah Tangga dalam Menghadapi Pandemi Covid 19. *Jurnal Sosial Ekonomi Pertanian*, *18*(1), 15–26. Retrieved from https://journal.unhas.ac.id/index.php/jsep

Shang, Y., Li, H., & Zhang, R. (2021). Effects of Pandemic Outbreak on Economies: Evidence From Business History Context. *Frontiers in Public Health*, *9*. https://doi.org/10.3389/fpubh.2021.632043.

Sudaryanto, T., & Suharyono, S. (2020). *Peningkatan Daya Tahan Petani dan Usaha Tani Terhadap Pandemi Covid-19. In Dampak Pandemi Covid- 19: Perspektif Adaptasi dan Resiliensi Sosial Ekonomi Pertanian*. IAARD Press.

Suryati, D. (2017). Pola Konsumsi Pangan dan Non Pangan Rumah Tangga Muslim Kaya dan Rumah Tangga Muslim Miskin di Kota Bima. *Ganec Swara*, *11*(1), 162–167.

Syahputra, F., & Inan, I. Y. (2019). Prospek Lahan Sawah Lebak untuk Pertanian Berkelanjutan di Kabupaten Banyuasin Provinsi Sumatera Selatan. *Indonesian Journal of Socio Economics*, *1*(2), 109–114.

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption Of Expenditure Local Apparatus Organization Prabumulih City Government During The Covid-19 Period. *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal*, *6*(3), 1321–1335. Retrieved from https://jurnal.stie-aas.ac.id/index.php/IJEBAR

Wibowo, A. A., & Suharno, S. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, *21*(1), 161–172. https://doi.org/10.31186/jagrisep.21.1.161-172

Yunita, Ginting, B., Asngari, P. S., Susanto, D., & Amanah, S. (2011). Ketahanan Pangan dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. *Jurnal Ilmu Keluarga Dan Konsumen*, *4*(1), 21–29.

Zaeni, N. S. A., Kusumo, R. A. B., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong pada saat Pandemi Covid 19 (Studi Kasus di Desa Pasirlangu Kecamatan Cisarua Kabupaten Bandung Barat). *Mimbar Agribisnis*, *8*(2), 710–724.

10. Bukti artikel accepted (20 Maret 2023)

[jagrisep] Editor Decision

Dari: Muhammad Khaliqi, M.Si (ejournal_postmaster@unib.ac.id)

Kepada: bidarti2019@gmail.com; fathursyifa.nita@yahoo.co.id

Tanggal: Senin, 20 Maret 2023 pukul 08.59 WIB

Agustina Bidarti, Yunita, Riswani:

We have reached a decision regarding your submission to Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis, "Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District, Muara Enim Regency before and during the Pandemic".

Our decision is to: Accept Submission

Reviewer A:
Recommendation: Accept Submission

Jenis naskah :

artikel

Kode Naskah :

23762

1. Apakah judul menggambarkan isi naskah dengan jelas?

YA

2. Apakah judul sudah ditulis secara ringkas/efisien?

YA

3. Apakah abstrak sudah menggambarkan seluruh bagian naskah?

YA

4. Apakah abstrak sudah ditulis secara ringkas/efisien?

YA

5. Apakah bahasa inggris yang dipergunakan sudah benar?

YA

6. Apakah kata kunci menggambarkan ranah masalah penelitian atau istilah yang menjadi dasar pemikiran penelitian?

YA

7. Apakah bagian pendahuluan menguraikan secara jelas mengenai urgensi, masalah, dan ruang lingkup penelitian?

YA

8. Apakah bagian pendahuluan menunjukkan kemutakhiran topik penelitian?

YA

9. Apakah bagian pendahuluan menguraikan dengan jelas tentang pendekatan dalam pemecahan masalah penelitian?

YA

10. Apakah bagian pendahuluan menguraikan secara jelas mengenai hasil yang diharapkan?

YA

11. Apakah bagian pendahuluan sudah mengindikasikan *state of the art* dalam bidang yang diteliti?

YA

12. Apakah metode penelitian sudah menggambarkan rancangan penelitian secara memadai?

YA

13. Apakah metode penelitian sudah menunjukkan keutuhan cara yang dipergunakan sehingga memungkinkan penelitian dapat diulangi atau diverifikasi oleh peneliti lain?

YA

14. Apakah metode penelitian memuat pendekatan teori yang dipergunakan dalam menganalisis data?

YA

15. Apakah hasil penelitian berupa pembahasan disusun secara rinci mulai dari data yang disajikan telah diolah, dituangkan dalam tabel atau gambar, serta diberi keterangan yang mudah dipahami?

YA

16. Apakah simpulan mengandung implikasi dari temuan penelitian baik teoretis maupun praktis?

- YA

17. Apakah saran disusun berdasarkan temuan penelitian secara konsisten?

- YA

18. Apakah saran memungkinkan dapat dilakukan oleh pihak-pihak yang dimaksud?

- YA

19. Apakah daftar pustaka sudah ditulis dengan benar dan taat azas?

- YA

20. Apakah daftar pustaka memuat pustaka yang mutakhir (5 tahun terakhir)?

- YA

22. Apakah pustaka primer yang digunakan lebih banyak daripada pustaka sekunder?

- YA

23. Apakah lampiran yang digunakan menunjang uraian temuan dan pembahasan?

- YA

Bila ada komentar silahkan diidikan dibawah ini :

accepted

REKOMENDASI:

Berdasarkan penilaian tersebut maka direkomendasikan :

- Diterbitkan langsung tanpa perbaikan penulis

PENILAIAN UMUM

a. Orisinalitas (Substansi dan materi tulisan merupakan gagasan asli penulis) :

- Baik

b. Kebaruan (*novelty*)

Substansi dan materi tulisan mengandung hal-hal yang baru

- Cukup

c. Signifikansi :

Relevansi dan pentingnya tulisan

- Baik

d. Sistematika naskah

- Baik

C-Review+4+(2)(1).docx
278.5kB

11. Bukti artikel masuk ke proses produksi (27 Maret 2023)

[jagrisep] Editor Decision

Dari: Anggita Dwi Oktaviani (ejournal_postmaster@unib.ac.id)

Kepada: bidarti2019@gmail.com; fathursyifa.nita@yahoo.co.id

Tanggal: Senin, 27 Maret 2023 pukul 10.10 WIB

Agustina Bidarti, Yunita, Riswani:

The editing of your submission, "Income and Expenditure Analysis and Coping Mechanisms of Rice Farmer Households in Muara Belida District, Muara Enim Regency before and during the Pandemic," is complete. We are now sending it to production.

Submission URL: https://ejournal.unib.ac.id/agrisep/authorDashboard/submission/23762

_____ Jurnal AGRISEP
http://ejournal.unib.ac.id/index.php/agrisep

12. Hasil published artikel (28 Maret 2023)

Section ARTICLE

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

https://doi.org/10.31186/jagrisep.22.01.207-226 (https://doi.org/10.31186/jagrisep.22.01.207-226)

Yunita

yunita@fp.unsri.ac.id (Primary Contact)

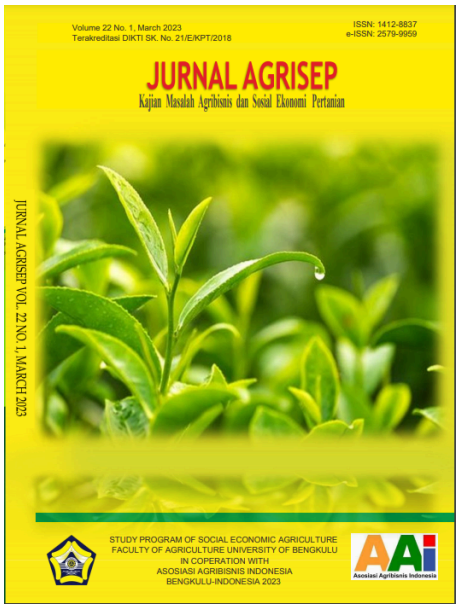
Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, South Sumatera, Indonesia

Riswani

Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, South Sumatera, Indonesia

Agustina Bidarti

Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, South Sumatera, Indonesia



(https://ejournal.unib.ac.id/agrisep/issue/view/1539)

Submitted

September 5, 2022

Accepted

March 20, 2023

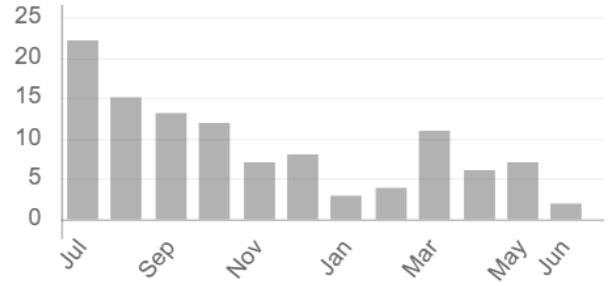
Published

March 29, 2023

Download

PDF (https://ejournal.unib.ac.id/agrisep/article/view/23762/11985)

Statistic



Abstract

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65% during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65% during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5%, a combination of passive strategies

and network strategies by 36% and those applying a combination of active strategies, passive strategies and network strategies by 15%. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household non-food expenditure.

Keywords

consumption patterns | survival strategies | income | pandemic

How to Cite

Yunita, Riswani, & Bidarti, A. (2023). INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT MUARA ENIM REGENCY BEFORE AND DURING

THE PANDEMIC. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, *22*(01), 207–226. https://doi.org/10.31186/jagrisep.22.01.207-226

MORE CITATION FORMATS

Download Citation

Endnote/Zotero/Mendeley (RIS) (https://ejournal.unib.ac.id/agrisep/citationstylelanguage/download/ris?submissionId=23762&publicationId=33064)
BibTeX (https://ejournal.unib.ac.id/agrisep/citationstylelanguage/download/bibtex?submissionId=23762&publicationId=33064)

References

1. Abidin, M. Z. (2021). Pemulihan Ekonomi Nasional Pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. Indonesian Treasury Review, 6(2), 117–138. doi: 10.33105/itrev.v6i2.292
2. A'dani, F., Sukayat, Y., Setiawan, I., & Judawinata, M. G. (2021). Pandemi Covid 19: Keterpurukan Dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Padi Pada Masa Pandemi Covid 19 (Studi Kasus: Desa Pelem, Kecamatan Gabus, Kabupaten Grobogan, Jawa Tengah). Mimbar Agribisnis, 7(1), 309–319 doi: 10.25157/ma.v7i1.4529.g3658
3. Bidarti, A. (2021). Survive Of The Indonesia Farmers In During The Covid-19 Pademic: Findings Of The South Sumatra. E3S Web Of Conferences EDP Sciences, 232. doi: 10.1051/e3sconf/202123201019
4. Darnhofer, I. (2020). Farm Resolience In The Face Of The Unexpected: Lesson From The Covid-19 Pandemic. Agriculture And Human Values, 37(3), 605-606. doi: 10.1007/s10460- 020-10053-5
5. Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah Dan Luas Tanam Terhadap Produksi Padi Di Sumatera

READ MORE

Address

Department of Socio Economic of Agriculture

Faculty of Agriculture, Bengkulu University

WR. Supratman Street, Kandang Limun - Bengkulu

Contact Info

Phone : 0736-21170, 21884 ext. 220, Fax.: 0736-21290

Email : jurnalagrisep@unib.ac.id (mailto:%20jurnalagrisep@unib.ac.id)

ISSN : 1412-8837

e-ISSN : 2579-9959

13. Artikel yang telah terpublished online (28 Maret 2023)

ISSN : 1412-8837
e-ISSN : 2579-9959
JURNAL AGRISEP
Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis

DOI: 10.31186/jagrisep.22.1.207-226

INCOME AND EXPENDITURE ANALYSIS AND COPING MECHANISMS OF RICE FARMER HOUSEHOLDS IN MUARA BELIDA DISTRICT MUARA ENIM REGENCY BEFORE AND DURING THE PANDEMIC

Analisis Pendapatan dan Pengeluaran Serta Mekanisme Koping Rumah Tangga Petani Padi di Kecamatan Muara Belida Kabupaten Muara Enim Sebelum dan Saat Pandemi

Yunita[1)]; Riswani[2)]; Agustina Bidarti[3)]
[1),2),3)] ***Department of Socio-Economic of Agriculture, Faculty of Agriculture, Universitas Sriwijaya, South Sumatera, Indonesia***
Email: yunita@fp.unsri.ac.id

ABSTRACT

The pandemic has brought major changes to all aspects of the society, including social and economic changes. Various limitations are experienced by almost all levels of society. This study aims to 1) analyze changes in household income and expenditure of rice farmers before and during the pandemic and 2) describe the coping mechanisms of rice farmer households during the pandemic. The method used is a survey method. Data collection is done directly through interviews using a questionnaire. The samples used were 80 farmer households which were taken through simple random sampling technique. The data were processed quantitatively and explained descriptively, then presented in tabulated form and continued with paired-sample t test. The results show that 1) there is a significant decrease in household income, which is 5.65% during the pandemic compared to the income before the pandemic, 2) there is a shift (an increase of 1.88%) in household food consumption expenditures before and during the pandemic, while household non-food expenditure decreases by 3.65% during the pandemic, and 3) The survival strategies applied by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5%, a combination of passive strategies and network strategies by 36% and those applying a combination of active strategies, passive strategies and network strategies by 15%. Farmer households are

expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household non-food expenditure.

Keyword: consumption patterns, survival strategies, income, pandemic

ABSTRAK

Pandemi telah membawa perubahan besar bagi seluruh lapisan masyarakat, termasuk perubahan sosial dan ekonomi. Berbagai keterbatasan dialami oleh hampir seluruh lapisan masyarakat. Penelitian ini bertujuan untuk 1) menganalisis perubahan pendapatan dan pengeluaran rumah tangga petani padi sebelum dan pada masa pandemi dan 2) mendeskripsikan mekanisme koping rumah tangga petani padi pada masa pandemi. Metode yang digunakan adalah metode survey. Pengumpulan data dilakukan secara langsung melalui wawancara menggunakan kuesioner. Sampel yang digunakan sebanyak 80 rumah tangga petani yang diambil melalui teknik simple random sampling, dengan cara pengundian. Data diolah secara kuantitatif dan dijelaskan secara deskriptif, kemudian disajikan dalam bentuk tabulasi dan dilanjutkan dengan uji t sampel berpasangan (paired-sampel t test). Hasil penelitian menunjukkan bahwa 1) terjadi penurunan pendapatan rumah tangga yang signifikan, yaitu sebesar 5,65% saat pandemi dibandingkan sebelum pandemi, 2) terdapat pergeseran (peningkatan sebesar 1,88%) pengeluaran konsumsi pangan rumah tangga petani sebelum dan saat pandemi, sedangkan untuk pengeluaran non pangan rumah tangga mengalami penurunan sebanyak 3,65% pada saat pandemi, dan 3) strategi bertahan hidup yang diterapkan rumah tangga petani selama pandemi mencakup kombinasi strategi aktif dan strategi pasif sebesar 62,5%, kombinasi strategi pasif dan strategi jaringan sebesar 36% dan yang menerapkan kombinasi antara strategi aktif, strategi pasif dan strategi jaringan sebesar 15%. Rumah tangga petani diharapkan mampu memaksimalkan pemanfaatan lahan pekarangan, kolam ikan, dan ternak yang dimiliki sebagai sumber mata pencaharian tambahan ataupun upaya mengurangi pengeluaran non pangan rumah tangga.

Kata Kunci: pola konsumsi, strategi bertahan hidup, pendapatan, pandemi

INTRODUCTION

The pandemic has brought great changes to all levels of society. Various limitations are experienced by almost all levels of society (Pujowati & Sufaidi, 2021; Shang et al., 2021; Wardayani et al., 2022). Data from the Manpower Office of the City of Palembang show that as of April 5, 2020, the number of workers who have been laid off or experienced layoffs has reached 1,262 workers in Palembang (Dewi, 2020).

Although the pandemic has resulted in people losing their jobs, being laid off, changing jobs, limited working hours, and lowered wages, it also creates new job opportunities that rely on creativity in various sectors (Graeber et al., 2021; Lippert et al., 2021). In addition, the use of social media and applications is also

growing rapidly during the pandemic because many sales transactions are carried out online (Dianda & Pandin, 2021; Gu et al., 2021). Based on a research (Sayuti & Hidayati, 2020), the pandemic affects the pattern of people's economic life significantly, starting from the income received, spending patterns for daily life, employment, and shopping habits which are dominated by online shopping.

The agricultural sector supports food security and food availability and improves people's welfare. Welfare of farmers plays an important role in maintaining and increasing agricultural production. An advanced agricultural sector can encourage faster economic growth and reduce poverty (Abidin, 2021; Wibowo & Suharno, 2022).

The study by (Hernanda et al., 2017; Novia & Zulkifli, 2021) state that food expenditure has a negative relationship with food security. Even though the impact of the pandemic resulted in a weakening of the community's economy (Ridwan, 2022), people in rural areas who are generally engaged in the agricultural sector still have various strategies to be able to maintain their family's economy. This is done because family income during the pandemic has decreased significantly (Hertz et al., 2021; Kansiime et al., 2021). In the economic activity of a country, consumption has an important role and has a very large influence on economic stability (Ratnawati, 2020; Sari & Prastyani, 2021). The economic slowdown in the community causes households in this layer to find difficulties to meet the needs of life. As a result, household consumption decreases due to decreased purchasing power (Setyorini et al., 2022).

The results of (Hasanah et al., 2021) show that food insecurity for poor families occurs due to the impact of the pandemic which has caused access to food for poor families to become increasingly limited which is characterized by decreased food consumption in terms of quantity and quality. The capacity level of farmers is in the moderate category, the food security level of farmer households is classified as low, and the coping mechanisms of farmer households are classified as high (Yunita et al., 2011).

Based on a research it is known that the COVID-19 pandemic has also had an impact on the agricultural sector, including food crop farmers in the world in general and in several regions in Indonesia (Faradina & Sukayat, 2021). The research results of (Bidarti, 2021; Guampe et al., 2021) show that the impact of Covid-19 has affected the rural agriculture sector, such as a scarcity of production inputs. The scarcity of agricultural inputs occurs due to limited trade mobilization due to the pandemic. According to (Bidarti, 2021) research, the impact of the pandemic on the downstream sector of food distribution centers has also had an impact on the upstream sector of food production in rural South Sumatra. South Sumatra as one of the provinces with the title of food barn, cannot be separated from the availability of quite varied land resource potential, ranging from irrigated rice fields, rainfed land, tidal swamps, lowland and dry land (Defriyanti, 2019). Tidal swamp land and lowland are divided into potential

land and functional land (Kurniawan & Wahyudati, 2015; Syahputra & Inan, 2019).

Muara Belida District, Muara Enim Regency, which borders the city of Palembang, is a rice-producing area which is the staple food of the people of South Sumatra Province. Rice farming in Muara Belida District is cultivated on tidal lowlands. Farmer households in tidal lowlands are classified as poor households with low incomes and limited access to household food. A pandemic can have an impact on the production process of rice farming, such as the distribution of agricultural production inputs (production facilities; seeds, pesticides, labor and access to marketing). Restrictions on human movement and mobility and the distribution of agricultural inputs and outputs can lead to scarcity, which in turn will increase the price of production inputs (Bidarti, 2021). In addition, limited access to marketing for the output of rice farming will also depress prices at the farm level and in turn have an impact on farmer income. Several research results show a decline in farm household income during the pandemic, for example explanations from A'dani et al (20210, Darnhofer (2020), Pontoan (2021), Satriyati (2021) and Sudaryanti & Suharyono (2020). Rationally, farmers will try to find other sources of income or regulate their household spending patterns. Because of this, it is important to conduct research related to changes in rice farming household income before and during the pandemic and how these farmer households implemented coping mechanisms for their food needs.

RESEARCH METHOD

This research was conducted in Muara Belida District, Muara Enim Regency, South Sumatra Province. The location selection was carried out intentionally with the consideration that Muara Belida sub-district is a fairly large rice producer and most of its residents are rice farmers in the lowlands. This research was conducted in July 2022.

This study applied a survey method by interacting directly with the head of the household who is the respondent to be interviewed. The interviews were guided with the help of structured questionnaires in order to obtain information and primary data on household income and expenditure as well as the coping mechanisms of rice farmers' households during the pandemic. The sampling method in this study uses a simple random sampling technique, namely a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a member of the sample. The number of samples in this study was 80 respondents, by using the lottery method. A lottery is made by giving a number, then respondents will be selected according to a predetermined lottery number.

This study used primary and secondary data. Answering the first objective, the data were processed quantitatively and explained descriptively, namely by

calculating the income and expenditure of farmer households before and during the pandemic. The data were presented in tabulated form, then followed by a paired-sample t test.

According to Sagoro (2014), Paired Samples T Test is a parametric test used to test the hypothesis, whether or not the two variables are the same. The data came from two measurements or two different observation periods taken from paired subjects. Paired sample t-test in this study was to determine whether there were differences in income and household expenditure of farmers before and during the pandemic. The formula used to find out whether there is a difference in household income before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household income of farmers before the pandemic
Xb = Average household income of farmers during the pandemic
Sp = Combined standard deviation
Sa = Standard deviation of farmer household income before the pandemic
Sb = Standard deviation of farmer household income during the pandemic
na = Sample of farmer household income before the pandemic
nb = Farmer household income sample during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household income of farmers during the pandemic is lower than that before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household income before and during the pandemic.

According to (Sagoro, 2014), the formula used to find out whether there are differences in farmer household expenditures before and during the pandemic is as follows:

$$t = \frac{Xa - Xb}{Sp\sqrt{\left(\frac{1}{na}\right) + \left(\frac{1}{nb}\right)}}$$

$$\text{In which :} \quad Sp^2 = \frac{(na-1)Sa^2 - (nb-1)Sb^2}{na + nb - 2}$$

Notes:
Xa = Average household expenditure of farmers before the pandemic
Xb = Average household expenditure of farmers during the pandemic
Sp = Combined standard deviation

Sa = Standard deviation of farmer household expenditure before the pandemic
Sb = Standard deviation of farmer household expenditure during the pandemic
na = Sample of farmer household expenditure before the pandemic
nb = Sample of farmer household expenditure during the pandemic

With the following decision rules:

1. The significance value (2-tailed) < 0.05 indicates that the household expenditure of farmers during the pandemic is lower than before the pandemic.
2. The significance value (2-tailed) > 0.05 indicates that there is no significant difference in farmer household expenditures before and during the Pandemic.

The second objective is described descriptively from the data and information obtained through interviews. This descriptive analysis is used to find out what strategies are carried out by farmer households to survive during the pandemic.

RESULT AND DISCUSSION

Respondent's Characteristics

Age is the length of time a person has lived from birth to the present. The age level that a person has will show the work ability activity possessed by that person, because productive age will be able to produce better jobs and be able to do various types of work. The identity of respondents based on age shows that most of the respondents are of productive age. Meanwhile, based on gender, the number of female respondents is higher than the number of male respondents.

The higher a person's education, the greater the opportunity to get a job. By that the opportunity to earn a decent income is also greater. In addition, the higher a person's level of education, the better his knowledge of nutrition tends to be. It is hoped that households with a higher level of education will earn income that can be used to meet food consumption needs and be able to choose good nutritious food for the lives of their family members, especially during a pandemic. Table 1. shows that the education level is dominated by the elementary school group (71.25%).

The number of family members in question is the number of individuals/people who are borne by a head of family in one house. The results showed that overall the respondents did not have too many family members to support. The average number of respondents' family members is 4-5 people in one house.

Table 1. Respondent's Identity

No.	Identity	Number of People	Percentage (%)
I	Age (Year)		
	a. 21-30	8	10.00
	b. 31-40	19	23.75
	c. 41-50	28	35.00
	d. 51-60	18	22.50
	e. 61-80	7	8.75
	Total	80	100.00
II	Gender		
	a. Male	30	37.50
	b. Female	50	62.50
	Total	80	100.00
III	Level of Education		
	a. No school	11	13.75
	b. Elementary school	57	71.25
	c. Junior high school	11	13.75
	d. Senior high school	1	1.25
	Total	80	100.00
IV	Family Members		
	a. 0	1	1.25
	b. 2-3	33	41.25
	c. 4-5	43	53.75
	d. 6-8	4	5.00
		80	100.00

Changes in Farmer Household Income before and during the Pandemic

The research found that the type of work of the respondents was dominated by farmers by 92.50%, 5% also work as traders. Then each 1.25% also work as fishermen and laborers. Household income is the amount of money obtained from the head of the household and its members which is used to meet common needs in the household. The average total household income before and during the pandemic in Muara Belida by occupation (IDR/month) can be seen in Table 2.

Based on Table 2, it is found that during the pandemic, household income in Muara Belida decreases from the one before the pandemic, which is 5.65 percent or equivalent to 131.945 IDR per month. This situation causes household members to look for side jobs to supplement income, save on family expenses, and borrow some money from other family or friends so they can meet their family's needs.This result is in line with the research of (Junaedi et al., 2021) which stated that the pandemic has caused most people to experience a decrease in monthly income between 5-20%. The pandemic has also made people try to

find additional income through culinary businesses, part-time work, odd jobs, and providing consulting services.

Table 2. Average Total Farmer Household Income Before and During the Pandemic by Occupation (Rp/Month)

No	Type of work	Average Monthly Income (Rp.)		Difference (Rp)	Growth (%)
		Before the Pandemic	During the Pandemic		
1.	Farmer	2,147,916	1,995,138	- 152,778	- 7.11
2.	Merchant	2,200,000	1,825,000	- 375,000	- 17.05
3.	Fisherman	2,000,000	2,000,000	0	0.00
4.	Labor	3,000,000	3,000,000	0	0.00
	Average	2,336,979	2,205,034	- 131,945	- 5.65

Source: Primary Data Processed, 2022

Table 3. Results of Paired Sample T-test

		Paired Difference							
		Mean	Std. Dev.	Std. Error Mean	95% Conf.Int. of the Diff.		T	Df	Sig. (2-tailed)
					Low	Upp			
Pair 1	Before the pandemic during the pandemic	156250.00000	576950.46186	64505.02262	27855.96417	284644.03583	2.422	79	.018

Source: Processed by researchers, 2022

Based on the results of the paired sample T-test using SPSS, it is stated that the pandemic causes the average household income of farmers in Muara Belida to be lower than the one before the pandemic. The results of the paired sample T-test test show that the value of t-count = 2.422 while the value of t-table = 1.664. It can be concluded that the value of t-count > t-table or 2.422 > 1.664 so that the decisions taken from this study rejects H_0 and accepts H_1, which means that the household income of farmers in Muara Belida during the pandemic is lower than the one before the pandemic. During a pandemic, farming households minimize household expenses by prioritizing staple food needs.

Changes in Farmer's Household Expenditures Before and During the Pandemic

Changes in the household expenditure of farmers in Muara Belida before and during the pandemic in this study consist of food expenditure and non-food

expenditure. Farmer household consumption expenditures in this study are expenditures to buy goods and services that will be used to fulfill their lives. Farmer household consumption expenditure is the total expenditure on food and non-food. Whereas non-food consists of clothing, housing, education, health, transportation, and communication, and electricity. In general, this expenditure is influenced by the level of income received by farmer households. If the income level is low, then the farmer's household will prioritize food needs over others. On the contrary, if the household income of farmers is high, there will be a shift from food needs to needs other than food. Food expenditure is one of the most important expenditures because food is a basic human need that must be fulfilled. This is explained in the results of (Martadona & Leovita, 2021) research, which states that the proportion of farm household expenditure is used for food expenditure, namely grains, with an average total expenditure of 60.26%.

In addition, there are many household expenditures that are considered as important needs to strengthen the household. This depends on the level of income received. Differences in household consumption expenditure of farmers are influenced by how many household dependents and also the habits of each household in fulfilling their daily needs. The average percentage of household food consumption expenditures before and during the pandemic (IDR/month) can be seen in Table 4.

Table 4. Average Monthly Food Expenditure of Farmers' Households Before and during the Pandemic

Food Group	Average Food Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Diff. (IDR)	Perc. (%) Increase	Perc. (%) Decrease
Grains	345,455.56	345,877.78	422.22	0.12	0.00
Tubers	7.022,22	6,944.44	-777.80	0.00	1.12
Fish	124,455.56	127,311.11	2,855.55	2.24	0.00
Meat	82,911.10	85,300.00	2,388.90	2.80	16.85
Egg and Milk	45,277.80	46,566.70	1,288.90	2.77	0.00
Vegetables	64,244.40	69,077.78	4,833.38	7.00	0.00
Nuts	26,000.00	25,444.40	-555.60	0.00	2.18
Fruits	5,688.89	7,966.67	2,277.78	28.59	0.00
Total	701,055.53	714,488.88	13,433.35	1.88	

Source: Survey Results, 2022

Based on Table 4., it is found that the average percentage of expenditure on food consumption by farmer households, both before and during the pandemic, is in the food group of fruits and vegetables. This is because, during a pandemic, fruits and vegetables are a source of important nutrients that the body needs to meet the needs of fiber, vitamins, minerals, and several enzymes

that are beneficial for digestive function. Vegetables and fruits contribute to the fulfillment of essential nutrients for the body.

The increase in the average expenditure on the consumption of fruits and vegetables during this pandemic is also followed by other food groups such as fish, meat, eggs and milk with the percentage increase in average expenditure respectively as much as 2.24%, 2.80%, and 2.77%. As for the food groups that experience a decline during the pandemic, namely the tubers and legumes, the percentages decreases by 22.18 percent and 1.12 percent, respectively. Different research results are found in food consumption expenditure in farmer households when there is no pandemic. The largest food expenditures are tobacco (225), grains (21%), and fish/shrimp/squid/scallops (11%) of total food expenditure (Fatimah & Syamsiyah, 2018).

The increase and decrease in household food expenditure during this pandemic are caused by the increase in prices for these types of food. This is also in line with the information conveyed by the general chairman of IKAPPI that in 2020 almost all household foodstuffs experienced an increase in prices that made households change their consumption patterns. Households with low incomes, for example, reduced their spending on meat consumption and replaced their meat consumption with more eggs, milk, and nuts.

In line with the results of this study, research shows that there has been a very sharp decline in income between 30%-70% due to the pandemic while spending tends to remain constant (Ratnawati, 2020). Since the pandemic, people have drastically changed their food consumption patterns. People only change the pattern of food consumption by changing the type of side dish and prefer to find additional income to cover family expenses in order to maintain life. A research conducted in four Indian states suggested that the impact of the pandemic was seen in disruptions to the food system and impacted livelihoods and diets (Harris et al., 2020). It is known that the initial impact of the pandemic and the policy response on farming households, the majority of farmers reported a negative impact on production, sales, prices and income.

Based on the data in Table 5., it is found that during the pandemic, household non-food consumption expenditure experiences two changes, namely an increase, and a decrease in the average percentage of expenditure. For non-food types, expenditures have increased in housing costs by a percentage of 5.69 percent and health costs by a percentage of 10.10 percent. Housing costs in this study consist of electricity needs, water needs, and communication equipment needs. Housing costs increased during the pandemic because the implementation of the *PSBB* (lockdown) during the pandemic has caused people to use electricity more at home. The average monthly non-food expenditure of farmer households before and during the pandemic can be seen in Table 5.

Table 5. Average Monthly Non-Food Expenditures of Farmers' Households Before and During the Pandemic

Non-Food Group	Average Expenditure (IDR/month)				
	Before the Pandemic	During the Pandemic	Difference (IDR)	Perc. (%) Incr.	Perc. (%) Decr.
Housing	212.733,30	225,577.78	12,844.48	5.69	0.00
Goods and services	193,933.30	183,877.78	-10,055.52	0.00	5.47
Education costs	32,777.78	14,000.00	-18,777.78	0.00	134.13
Health	10,388.89	11,555.60	1,166.71	10.10	0.00
Clothing	111.11	111.11	0	0.00	0.00
Durable goods	2,444.44	1,888.89	-555.55	0.00	29.41
Taxes and insurance	4,266.67	4,266.67	0	0.00	0.00
Social needs	1,777.78	0	-1,777.78	0.00	0.00
Total	458,433.27	442,277.83	16,155.44		3.65

Source: Primary Data Processed , 2022

On the other hand, non-food types that experienced a decrease in the average percentage of expenditure during a pandemic include the cost of various goods and services, education costs, and durable goods costs with a decrease in percentages of 5.47%, 134.13%, and 29.41%, respectively. This decline in expenditure occurs because, during the pandemic, household income decreases so that households reduce their consumption to buy clothes and electronic goods or additional household items. The average expenditure on overall household consumption in Muara Belida before and during the pandemic can be seen in Table 6. below.

Table 6. Average and Percentage Difference in Average Household Consumption Expenditure in Muara Belida Before and During the Pandemic (IDR/Month)

Type of Household expenditure	Before	During	Differences	Perc. Diff. (%)
Food Consumption	701,055.53	714,488.88	13,433.35	1.88
Non-Food Consumption	458,433.27	442,277.83	16,155.44	3.65
Total	1,159,488.8	1,156,766.71	2,722.90	0.24

Source: Processed by Researchers, 2022

Household spending in Muara Belida experiences a decrease in the average amount of expenditure during the pandemic by 2,722.90 IDR or as much as 0.24 %, where this expenditure decreases from an average of 1,159,488.8 IDR to 1,156,766.71 IDR. However, when viewed from the consumption group, it is found that the average household food consumption expenditure in Muara

Belida increases by 1.88% or is equivalent to 13,433.35 IDR during the pandemic. The results show that people in Muara Belida continue to consume foodstuffs in the grain group, especially rice as the main or staple food, continue to consume foodstuffs from the tubers, legumes, animal food groups, as well as vegetables, and fruit groups, before the pandemic and during the pandemic, but with different amounts. Inversely, the average household non-food consumption expenditure decreases by 3.65% or decreases from 458,433.27 IDR to 442,277.83 IDR during the pandemic.

Table 6. also shows that the percentage of household food consumption expenditure for rice farmers in Muara Belida is more than 60% of total household expenditure. This indicates that rice farming households in this location are classified as food insecure when viewed from the proportion of expenditure. The results of this study are different from the results of research conducted by Pradnyadewi et al. (2021) on farming households in Subak Sembung during the Covid-19 pandemic, where the results of his research showed that food consumption expenditure was less than 60% of total household expenditure.

The results of the paired sample T-test using SPSS on household consumption expenditures of farmers in Muara Belida before the pandemic and during the pandemic can be seen in Table 6., where the value of t-count = 1.209, while the value of t-table = 1.664. So, it can be concluded that the value of t-count > t-table or 1.209 > 1.664, so the decision taken from this study is to reject H_0 and accept H_1, meaning that the consumption expenditure of farmer households in Muara Belida during the pandemic is lower than that before the pandemic.

Table 7. Results of Paired Sample T-test

		Paired Differences							
		Mean	Std. Dev.	Std. Error Mean	95% Conf. Int. of the Diff.		T	df	Sig.(2-tailed)
					Low	Upp			
Pair1	Before the pandemic During the pandemic	10,275.00	75,996.49	8,496.66	2,7187.19	6,637.19	1.209	79	.000

Source: Processed by Researchers, 2022

The change in household consumption expenditure patterns in this study is in line with the results of a research that shows that household consumption patterns vary and are based on the amount of income (Suryati, 2017). The greater the level of income owned; the consumption pattern also changes.

Survival Strategies For Farmers' Households During the Pandemic

The pandemic that causes changes in household income has become the main factor for households to make efforts to maintain their family life. In general, farming households will adjust their farming activities during a pandemic. The results of research conducted by (A'dani et al., 2021) explain that there are different opinions regarding farming activities during a pandemic. Some farmer households think that the pandemic has affected their farming activities, and on the other hand, there are those who think that the pandemic has not affected their farming activities.

The pandemic requires households to implement survival strategies, namely looking for side jobs to increase income, save family expenses, and implement social networking strategies by borrowing some money to temporarily meet the needs of their families. In this study, there are three types of survival strategies carried out by households, namely active strategies, passive strategies, and network strategies.

Active Strategy

An active strategy is a strategy that optimizes all existing potential to get additional income. As many as 92.50% of farmers in Muara Belida carry out different active strategies, depending on the abilities and potentials of each respondent. The forms of active strategy carried out by respondents can be seen in Table 8. following.

Table 8. Forms of Active Strategies Taken by Households in Muara Belida During the Pandemic

No.	Active Strategies Formed by Respondents Due to the Pandemic	Number of People	Percentage (%)
1	Doing a side job as a Fisherman	31	41.90
2	Doing a side job as a merchant	5	6.75
3	Doing a side job as a Farmer	9	12.16
4	Doing a side job as a massage service	1	1.35
5	Doing a side job as a Truck Driver	1	1.35
6	There are family members who work	27	36.48
Total		74	100.00

Source: Primary Data Processed, 2022

Households whose main occupation is farming, have a way of surviving when harvests fail or when production declines. They usually look for side jobs such as trading, fishing, agricultural labor, massage services, coal employees, or truck drivers. Table 8. shows that 41.90% do side jobs as fishermen. As many as 6.75% do side jobs as traders. As many as 12.16% do side work as farm laborers. For side jobs as massage services, employees and truck drivers each only account

for 1.35%. As many as 36.48% of rice farmer households allow their wives and children to work outside the agricultural sector because they cannot rely on farming results to increase their income.

Passive Strategy

Passive strategy is a survival strategy that is done by minimizing family expenses. The passive strategy is a survival strategy by reducing household expenses.

Table 9. shows that 12.5% implements a passive strategy by making changes to their family's diet. Before the pandemic the households could eat fish quite often, now they can only eat it once a week or even less than once week. The rest consumes tofu, tempeh, vegetables or eggs. As many as 73.35 % implements a strategy by prioritizing basic food needs. Through this strategy, farmer households are required to arrange their needs based on their priority scale.

Table 9. Forms of Passive Strategies carried out by Farmer Households in Muara Belida during the Pandemic

No.	Forms of Passive Strategies by Respondents Due to the Pandemic	Number	Percentage (%)
1	Applying a frugal lifestyle	10	12.5
2	Make changes to the food menu	11	13.75
4	Prioritizing basic food needs	59	73.35
	Total	80	100.00

Source: Processed by Researchers, 2022

Then 12.5% said that the passive strategy is carried out by making savings in all aspects of spending to support their family, for example: by reducing the frequency of eating out (stalls/restaurants), by eating at home with a simple meal menu, by only buying things that are really needed, and so on. Based on the facts above, it can be concluded that farmer households prioritize their spending on food needs and minimize spending on basic needs.

The results of this study are in line with the research of (Faradina & Sukayat, 2021) which shows that farming households make several adaptations so they can continue to survive during the pandemic. The adaptations that have been made are reducing the workforce to become family workers, reducing grain sales, and doing various side jobs. This is also the case with the research results of Zaeni et al. (2022) which showed that the survival strategy adopted by cut flower farming households during the COVID-19 pandemic in order to be able to meet their household needs was by doing side jobs, increasing hours or work intensity, implementing patterns double income, selling assets owned, reducing

household expenses, borrowing money from financial institutions, and utilizing social networks owned by these households. The results of research by (Sabariman & Susanti, 2021) explain the same thing. Adaptation strategies carried out by poor farming families in rural areas, namely: building group solidarity according to developing values and norms, utilizing very strong family ties, and minimizing household expenses and utilizing social networks for business development.

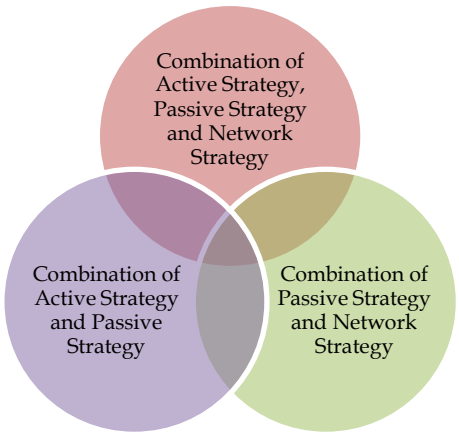


Figure 1.
Farmer Household Strategy Combination

The results also show that farming households do not only apply one strategy to survive during a pandemic, but also combine the three strategies. Farming households that apply a combination of active strategies and passive strategies are 50 households with a percentage of 62.5%. There are 18 people who apply a combination of passive strategies and network strategies with a percentage of 36%. Meanwhile, those who apply a combination of active strategies, passive strategies, and network strategies are 12 people with a percentage of 15%.

The combination of active and passive strategies used is to work as a fisherman as well as to make savings or change the food menu by choosing cheaper ingredients. or looking for additional income as a farm laborer and prioritizing expenses to meet basic food needs compared to other expenses. Farming households that apply a combination of passive strategies and network strategies make savings and also borrow money from family, neighbors or other friends. In addition, there are also households that take advantage of various assistance from the government and reduce non-food purchases. Meanwhile, households that apply a combination of active, passive and network strategies try to find side jobs by working as farm laborers or construction workers, while their wives make savings by utilizing food that is around the house. In addition,

if the supply of money or food is not sufficient, they try to borrow from family or neighbors.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the analysis and discussion of the data described above, several important things that can be concluded in this study include:

1. Household income during the pandemic is lower than the one before the pandemic with a percentage decrease of 5.65%. Based on the results of the Paired Samples T-test, there is a significant difference between the household income of rice farmers before and during the pandemic.
2. There is a shift in household food consumption expenditure of farmers before and during the pandemic where the average food expenditure before the pandemic was 701,055.53 IDR and during the pandemic is 714,488.88 IDR, meaning that there is an increase of 1.88%. Meanwhile, household non-food expenditure decreases by 3.65% during the pandemic. This is because, during the pandemic, farmer households are more concerned with food expenditure than non-food expenditure.
3. Survival strategies implemented by farming households during the pandemic include a combination of active strategies and passive strategies by 62.5%. The combination of passive strategy and network strategy is 36% and those who apply a combination of active strategy, passive strategy and network strategy are 15%.

Suggestion

1. Farmer households are expected to be able to maximize the use of their yards, fish ponds, and livestock as an additional source of livelihood or an effort to reduce household non-food expenditure.
2. It is hoped that further researchers will be able to analyze other factors, besides income, that affect changes in household food consumption.

Acknowledgments

This article was funded by the DIPA of the Public Service Agency of Sriwijaya University 2021, SP DIPA-023.17.2.677515/2022, and was authored on December 13, 2021. The Rector's Decree Number: 0109/UN9.3.1/SK/2022 was issued on April 28, 2022

REFERENCES

Abidin, M. Z. (2021). Pemulihan Ekonomi Nasional Pada Masa Pandemi Covid 19: Analisis Produktivitas Tenaga Kerja Sektor Pertanian. *Indonesian Treasury Review*, 6(2), 117–138. doi: 10.33105/itrev.v6i2.292

A'dani, F., Sukayat, Y., Setiawan, I., & Judawinata, M. G. (2021). Pandemi Covid 19: Keterpurukan Dan Kebangkitan Pertanian Strategi Mempertahankan Ketersediaan Pangan Pokok Rumah Tangga Padi Pada Masa Pandemi Covid 19 (Studi Kasus: Desa Pelem, Kecamatan Gabus, Kabupaten Grobogan, Jawa Tengah). *Mimbar Agribisnis*, *7*(1), 309–319 doi: 10.25157/ma.v7i1.4529.g3658

Bidarti, A. (2021). Survive Of The Indonesia Farmers In During The Covid-19 Pademic: Findings Of The South Sumatra. *E3S Web Of Conferences EDP Sciences*, 232. doi: 10.1051/e3sconf/202123201019

Darnhofer, I. (2020). Farm Resolience In The Face Of The Unexpected: Lesson From The Covid-19 Pandemic. *Agriculture And Human Values*, 37(3), 605-606. doi: 10.1007/s10460-020-10053-5

Defriyanti, W. T. (2019). Pengaruh Luas Lahan Sawah Dan Luas Tanam Terhadap Produksi Padi Di Sumatera Selatan Melalui Analisis Regresi. *Publikasi Penelitian Terapan Dan Kebijakan*, 2(2), 122–124. doi: 10.46774/pptk.v2i2.94

Dewi, I. S. (2020). *Peranan Dinas Tenaga Kerja Kota Palembang Terhadap Tenaga Kerja Atas Pemutusan Hubungan Kerja Dampak Covid 19*. (Tesis, Universitas Muhammadiyah Palembang, Sumatera Selatan, Indonesia). Retrieved from http://repository.um-palembang.ac.id/id/eprint/13617/1/502016241_BAB%20I_DAFTAR%20PUSTAKA.pdf

Dianda, A., & Pandin, M. G. R. (2021). E-Commerce In Strengthening The Economy During The Covid-19 Pandemic: A Historical Review. *Jurnal Ekonomi & Bisnis Jagaditha*, 8(2), 179–186. doi: 10.22225/jj.8.2.2021.179-186

Faradina, Y., & Sukayat, Y. (2021). Adaptasi Perilaku Petani Padi Daerah Pinggiran Kota Di Era Covid 19 Serta Pengaruhnya Terhadap Usahatani (Studi Kasus: Desa Sukabakti Kecamatan Tambelang Kabupaten Bekasi). *Mimbar Agribisnis*, 7(2), 1111–1125. doi: 10.25157/ma.v7i2.5062

Fatimah, N., & Syamsiyah, N. (2018). Proporsi Pengeluaran Rumah Tangga Petani Di Desa Patimban Kecamatan Pusakanagara Kabupaten Subang Jawa Barat. *Mimbar Agribisnis*, 4(2), 184–196. doi: 10.25157/ma.v4i2.1161.g1194

Graeber, D., Kritikos, A. S., & Seebauer, J. (2021). COVID-19: A Crisis Of The Female Self-Employed. *Journal of Population Economics*, 34(4), 1141–1187. doi: 10.1007/s00148-021-00849-y

Gu, S., Ślusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhbieva, A. (2021). Impact Of The Covid-19 Pandemic On Online Consumer Purchasing Behavior. *Journal Of Theoretical And Applied Electronic Commerce Research*, 16(6), 2263–2281. doi: 10.3390/jtaer16060125

Guampe, F. A., Pasambaka, Y., Hengkeng, J., & Ponagadi, S. T. (2021). Analisis Pendapatan Petani Jagung Di Masa Pandemi Covid 19. *Jurnal Sosial Ekonomi Pertanian*, 17(2), 55–64. doi: 10.20956/jsep.v17i2.14630

Harris, J., Depenbusch, L., Arshad, A. P., Nair, R. M., & Ramasamy, S. (2020). Food System Disruption: Initial Livelihood And Dietary Effects Of Covid-19 On Vegetable Producers In India. *Food Security*, 12, 841–851. doi: 10.1007/s12571-020-01064-5

Hasanah, E. A., Heryanto, M. A., Hapsari, H., & Noor, T. I. (2021). Dampak Pandemi Covid 19 Terhadap Pengeluaran Pangan Rumah Tangga Miskin Perkotaan: Studi Kasus Kelurahan Ciroyom Kecamatan Andir Kota Bandung. *Mimbar Agribisnis*, 7(2), 1560–1571. doi: 10.25157/ma.v7i2.5492

Hernanda, E. N. P., Indriani, Y., & Kalsum, U. (2017). Pendapatan Dan Ketahanan Pangan Rumah Tangga Petani Padi Di Desa Rawan Pangan. *Jurnal Ilmu-Ilmu Agribisnis*, 5(3), 283–291. doi: 10.23960/jiia.v5i3.1641

Hertz, R., Mattes, J., & Shook, A. (2021). When Paid Work Invades The Family: Single Mothers In The COVID-19 Pandemic. *Journal Of Family Issues*, 42(9), 2019–2045. doi: 10.1177/0192513X20961420

Junaedi, D., Salistia, F., Arsyad, M. R., & Romli, M. (2021). Dampak Covid-19 Terhadap Perekonomian Masyarakat Bogor. *Reslaj: Religion Education Social Laa Roiba Journal*, 3(2), 207–226. doi: 10.47476/reslaj.v3i2.283

Kansiime, M. K., Tambo, J. A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2021). COVID-19 Implications On Household Income And Food Security In Kenya And Uganda: Findings From A Rapid Assessment. *World Development*, 137, 1-10. doi: 10.1016/j.worlddev.2020.105199

Kurniawan, R., & Wahyudati, D. (2015). Analisis Perbandingan Pendapatan Petani Padi Yang Menggunakan Mesin Perontok Padi Dan Yang Tidak Menggunakan Mesin Perontok Padi Di Kelurahan Pulokerto Kecamatan Gandus Kota Palembang. *Societa*, 4(2), 74–78. doi: 10.237468/sc/v8i6.4732

Lippert, J. F., Furnari, M. B., & Kriebel, C. W. (2021). The Impact Of The Covid-19 Pandemic On Occupational Stress In Restaurant Work: A Qualitative Study. *International Journal Of Environmental Research And Public Health*, 18(19), 1-15. doi: 10.3390/ijerph181910378

Martadona, I., & Leovita, A. (2021). Analisis Ketahanan Pangan Rumah Tangga Petani Padi Berdasarkan Proporsi Pengeluaran Pangan Di Kota Padang. *Jurnal Pangan*, 30(3), 167–174. doi: 10.33964/jp.v30i3.544

Novia, R. A., & Zulkifli, L. (2021). Dampak Kegagalan Panen Terhadap Ketahanan Pangan Rumah Tangga Tani Padi Di Kabupaten Banyumas. *Jurnal Agrisep: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, 20(2), 239–250. doi: 10.31186/jagrisep.20.2.239-250

Pontoan, K. A., Merung, Y. A., Kelana, G., & Lengkong, M. R. (2021). Peningkatan Kapasitas Petani Pada Masa Pandemi Covid-19 Melalui Pelatihan Manajemen Keuangan Dan Pemasaran Digital. *Comserva: Jurnal Penelitian dan Pengabdian Masyarakat*, 1(5), 178-186. doi: 10.36418/comserva.v1i5.28

Pujowati, Y., & Sufaidi, A. (2021). The COVID-19 Pandemic: Analysis Of Large-Scale Social Restrictions (PSBB) Policies For The Community In Various Prevention Efforts. *Jurnal Magister Administrasi Publik (JMAP)*, 2(1), 102-111. doi: 10.31629/jmap.v1i2.3655

Ratnawati, K. (2020). The Impact Of Financial Inclusion On Economic Growth, Poverty, Income Inequality, And Financial Stability In Asia. *The Journal Of Asian Finance, Economics and Business*, 7(10), 2288–4645. doi: 10.13106/jafeb.2020.vol7.no10.073

Ridwan, M. (2022). Poverty Reduction Through Strengthening The Role Of Cooperative Institutions: Case Study Of Rural Rice Farming Communities. *Jurnal Agrisep: Kajian Masalah Sosial Ekonomi Pertanian Dan Agribisnis*, 21(1), 55–68. doi: 10.31186/jagrisep.21.1.55-68

Sabariman, H., & Susanti, A. (2021). Kerentanan Sosial Ekonomi Dan Strategi Adaptasi Keluarga Miskin Selama Pandemi Covid 19: Kasus Dari Madura. *Brawijaya Journal Of Social Science*, 1(1), 1–13. doi: 10.21776/ub.bjss.2021.001.01.1

Sagoro, E. M. (2014). Kinerja Keuangan Industri Kreatif Di Yogyakarta Pasca ACFTA Dan AIFTA. *Jurnal Nominal*, 3(1), 120–137. doi: 10.21831/nominal.v3i1.2158

Sari, V. K., & Prastyani, D. (2021). The Impact Of The Institution On Economic Growth: An Evidence From ASEAN. *Jurnal Ekonomi Pembangunan*, 19(1), 17–26. doi: 10.29259/jep.v19i1.12793

Satriyati, E., & Biroli, A. (2021). Kembali Ke Rempah: Upaya Rumah Tangga Petani Di Bangkalan Guna Peningkatan Kesehatan Dan Penanggulangan Kemiskinan Selama Pandemi Covid-19. *Prosiding Seminar Nasional Penanggulangan Kemiskinan*, 1(1), Article 1. Retrieved from: https://conference.trunojoyo.ac.id/pub/index.php/semnaspk/article/view/45

Sayuti, R. H., & Hidayati, S. A. (2020). Dampak Pandemi Covid-19 Terhadap Ekonomi Masyarakat Di Nusa Tenggara Barat. *Resiprokal*, 2(2), 133–150. doi: 10.29303/resiprokal.v2i2.46

Setyorini, N., Sumastuti, E., & Utami, R. H. (2022). Urgensi Keamanan Pangan Rumah Tangga Dalam Menghadapi Pandemi Covid 19. *Jurnal Sosial Ekonomi Pertanian*, 18(1), 15–26

Shang, Y., Li, H., & Zhang, R. (2021). Effects Of Pandemic Outbreak On Economies: Evidence From Business History Context. *Frontiers in Public Health*, 9, 1-12. doi: 10.3389/fpubh.2021.632043.

Sudaryanto, T., & Suharyono, S. (2020). *Dampak Pandemi Covid-19: Perspektif Adaptasi dan Resiliensi Sosial Ekonomi Pertanian*. Jakarta: IAARD Press

Suryati, D. (2017). Pola Konsumsi Pangan Dan Non Pangan Rumah Tangga Muslim Kaya Dan Rumah Tangga Muslim Miskin Di Kota Bima. *Ganec Swara*, 11(1), 162–167. doi: 10.24776/unmas.2017.024.01.1

Syahputra, F., & Inan, I. Y. (2019). Prospek Lahan Sawah Lebak Untuk Pertanian Berkelanjutan Di Kabupaten Banyuasin Provinsi Sumatera Selatan. *Indonesian Journal of Socio Economics*, 1(2), 109–114. doi: 10.36256/ijse.unila.2019.001.89.1

Wardayani, K., Dewata, E., & Jauhari, H. (2022). Factors Affecting Budget Absorption Of Expenditure Local Apparatus Organization Prabumulih City Government During The Covid-19 Period. *Business and Accounting Research (IJEBAR) Peer Reviewed-International Journal*, *6*(3), 1321–1335. doi: 10.19413/ijebar.2022.6205.1

Wibowo, A. A., & Suharno, S. (2022). Study Of Farmers Household Food Security: Case Study In Kebasen District, Banyumas Regency. *Jurnal Agrisep: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis*, *21*(1), 161–172. doi: 10.31186/jagrisep.21.1.161-172

Yunita, Ginting, B., Asngari, P. S., Susanto, D., & Amanah, S. (2011). Ketahanan Pangan Dan Mekanisme Koping Rumah Tangga Petani Padi Sawah Lebak Berdasarkan Status Kepemilikan Lahan. *Jurnal Ilmu Keluarga Dan Konsumen*, 4(1), 21–29. doi: 10.24156/jikk.2011.4.1.21

Zaeni, N. S. A., Kusumo, R. A. B., Syamsiah, N., & Hapsari, H. (2022). Strategi Bertahan Hidup Rumah Tangga Petani Bunga Potong Pada Saat Pandemi Covid 19 (Studi Kasus Di Desa Pasirlangu Kecamatan Cisarua Kabupaten Bandung Barat). *Mimbar Agribisnis*, 8(2), 710–724. doi: 10.25157/ma.v8i2.7209