

Analysis Of Welfare Level Of Singkong Farmers In Sukadana Ilir Village, East Lampung

Suripto

Fakultas Ekonomi, Universitas Ahmad Dahlan

Corresponding author: suripto@ep.uad.ac.id

Intan Kumala Sari

Fakultas Ekonomi, Universitas Ahmad Dahlan

Istanti

BPS Provinsi D.I. Yogyakarta

Abstract. *This study aims to analyze the level of welfare of cassava farmers in Sukadana Ilir Village, Sukadana District, East Lampung Regency. This research was conducted specifically in Sukadana Ilir Village using 80 samples of respondents who work as cassava farmers. The analytical method used is chi-square. The results based on the chi-square results, there is an effect for the variables of land area and income on the welfare of cassava farmers in Sukadana Ilir Village and there is no effect for the education level variable on the welfare of cassava farmers in Sukadana Ilir Village. The level of welfare in Sukadana Ilir Village is in the high category, namely KS3.*

Keywords: *Welfare, Land Area, Income, Education Level.*

PRELIMINARY

Indonesia itself has land and soil that is quite fertile so the agricultural sector is considered quite promising. The agricultural sector contributes a large part to development such as food security, employment, increasing people's income, increasing GRDP, export and import values, and suppressing inflation. One of the agricultural commodities grown in Indonesia is cassava. Cassava is one of the root crops originating from America and is widespread in Indonesia. This plant thrives in Indonesia. Besides that, cassava is used as a source of carbohydrates to replace rice and corn in the Indonesian population. According to Roch (2016), Indonesia is ranked 3rd in the country that produces the largest cassava after Nigeria with an average amount of 48,382 tons and Vietnam with 26,803 tons, and Indonesia with an average production of 23,903 tons.

Farmers still face many challenges in various ways, including land that is still rented, lack of capital, and lack of fertilizer subsidies from the government. Cassava planting itself is carried out in every season and is carried out almost simultaneously between farmers. This causes the price of cassava to fall due to higher supply compared

Received on October 7th, 2022; Revised on November 2nd, 2022; December 23rd, 2022

* Suripto, suripto@ep.uad.ac.id

to the existing or desired market demand. Another phenomenon occurs when the planting season begins, the price of cassava increases due to a lack of supply or demand.

Barriers faced by cassava farmers in Indonesia affect the level of income and also welfare which makes Indonesia have to increase the amount of cassava production to influence changes in cassava prices which change from time to time because Indonesia still imports staples from cassava. Indonesia has a high level of demand for tapioca flour. This causes cassava prices to soar. However, if tapioca flour imports entered Indonesia, it will cause cassava prices to fall or drop dramatically. Therefore, in the East Lampung region, the uncertainty about the price of cassava is felt by farmers.

The agricultural sector has a major contribution to the economy in Lampung Province seen from the area of land and the amount of production. East Lampung is the third place with a large area of land and a large amount of production after Central Lampung in the first place and North Lampung in second. The land area owned by East Lampung is spread evenly across 24 sub-districts. According to the Food Crops Agency (2019), the number of products produced in 2019 reached 5,055,614 tons.

LITERATURE REVIEW

Welfare is security, safety, and tranquility. The level of welfare can be measured through the ability of the community to meet their daily needs. Assessment of the level of welfare of a person is still very relative. In the United States, welfare is sometimes considered synonymous with assisting in the form of social security. The Ministry of Agriculture and the Ministry of Foreign Affairs jointly designed pillars to improve welfare with 3 pillars, namely: Reform of the scope of Agriculture, Intensification of Production, and Increasing Access to the market which was held at the Agribusiness Information Center (PIA) building located within the Central Office of the Ministry of Agriculture. The purpose of the workshop is to exchange ideas among stakeholders to find out an open approach that can be used as a consideration for the regions or centers to improve the welfare of farmers in all regions of Indonesia.

According to Article 1 of the Law of the Republic of Indonesia number 11 of 2009 concerning Social Welfare, it means that the material, spiritual, and social needs of the state community are worthy and can spread their inner abilities, as a result, they can carry

out social functions. The material cannot be used as a measure of welfare but can be seen from the spiritual and social sides.

a. Welfare Measure

The level of welfare of a family can be known from the way they meet the needs of life. When the various needs of life are met, the more prosperous. BKKBN has divided the level of family welfare into five stages, namely:

Table 1. Stages of a Prosperous Family

No	Prosperity level	Size
1.	Pre-Prosperous (KPS)	Not being able to meet their basic needs, such as religious needs, food, clothing, and health
2	Prosperous Family 1 (KS I)	Family members can eat twice a day or more. Family members have different clothes for at home, work/school, and traveling. The house occupied by the family has a good roof, floor, and walls. If a family member is sick, they are taken to a health facility. If a couple of childbearing age wants to use family planning, they go to a contraceptive service facility. All children aged 7-15 years in the family attend school.
3	Prosperous Family 2 (KS II)	Family members carry out worship according to their respective religions and beliefs. At least once a week all family members eat meat/fish/eggs. all family members get at least one new set of clothes a year. The floor area of the house is at least 8 m ² for each occupant of the house. For the last three months, the family is in good health so that they can carry out their respective duties/functions. There are one or more family members who work to earn an income. All family members aged 10-60 years can read Latin script. Couples of childbearing age with two or more children use contraceptives/drugs.
4	Prosperous Family 3 (KS III)	The family seeks to increase religious knowledge. Some of the family income is saved in the form of money or goods. The family habit of eating together at least once a week is used to communicate. The family participates in community activities in the neighborhood where they live. Families obtain information from newspapers/magazines/radio/ tv /internet
5	Prosperous Family 3 Plus (KS III+)	Families regularly voluntarily make material contributions to social activities. There are family members who are active as administrators of social associations/foundations/community institutions.

Source: BKKBN

Determining Family Welfare

Underprivileged families are families who have not been able to fulfill their basic needs such as trust, food, clothing, and health. If there is one on the indicator that is not met. A prosperous family in the term I am a family that has been able to meet basic needs but has not been able to meet their social and psychological needs. Stage II prosperous families are families that can meet all basic and psychosocial needs, but cannot meet developmental needs such as preservation and news gathering. If the family meets all the criteria for levels I and II. however, one of the level III criteria was not met.

A stage III prosperous family can meet basic, psychological, social, and developmental needs, but is not self-responsible. If your family meets the criteria for levels I, II, and III.

prosperous family stage III plus is a family that can meet all needs, including basic, psychosocial, and developmental needs, and fulfills the needs of self-responsibility. If the family can meet the criteria for terms I, II, III, III+. So, even though a family meets the criteria for terms II, III, and III+, if one of the indicators in term I am not met, then the family is categorized as underprivileged (BKKBN, 2015).

The Relationship between Land Area and Welfare

The area of land is the place where production runs and production results come out. Land area is one of the important factors in obtaining income to increase welfare. Agricultural land is a determinant of the effect that occurs on agricultural commodities. The larger the area planted, the greater the number of products produced. According to Utami et al (2016), land area has a positive effect on welfare. The land is an important indicator in the business carried out by farmers. If the land owned is large, it is hoped that the results will also be large. However, it is not necessarily appropriate because there may be other factors that can influence it.

Land, which is one of the factors of production, and factories for agricultural products make a major contribution to agriculture. The scale of production from agriculture is influenced, among others, by the small area of land used. The narrower the business area, the more inefficient its management is if it is not managed in an orderly manner. The degree of ownership or control relates to operational efficiency. The larger the area of land managed, the more efficient the use of inputs.

Agricultural land use in general can be divided into seasonal, annual, and permanent land use. The use of the land area for annual crops is prioritized for annual crops, which can be in the form of crop rotation or intercropping, and harvesting is usually done at any time of the year, with a period of less than one year. Land use for seasonal crops is the use of long-term crops that are rotated after the crops are no longer economically viable. Plantation crops. The relationship between land area and welfare is that the wider the farmer's land, the more income will also increase. the land area has a positive effect on farmers' income/income. Well-managed land will certainly provide good and profitable results for farmers. With higher or higher income, farmers will be more prosperous.

The Relationship between Income and Welfare

According to Herawan (2017), there is a positive influence between income and welfare. Income itself is the income earned by each family or household. Thus, the more income earned, the higher the welfare of the family.

The Relationship between Education Level and Welfare

According to Utami et al (2016), the level of education has a positive effect on welfare. Welfare is a condition to meet family needs and is also a way of life for a person to fulfill his welfare needs (such as consumption, education, health, work, housing, population, society, and other aspects). The central statistical agency also sets benchmarks for a person's level of well-being. Education is the right of every individual to be able to meet his needs physically and spiritually. In education there are several levels, starting from the elementary school level, junior high school, and so on. Education is divided into formal, non-formal, and informal. The unit used is the scale.

The level of welfare is a very important factor in the development of education. Because every individual in life is very anxious about all the needs that need to be met. Therefore, to meet these needs, it is necessary to have a better economic order for the community, and the form of welfare is its form: the form of economic, social, health, and safety welfare. Facing the fact that education is growing, the development of children's education is to fulfill the ability to change the pattern of human life and increase learning in the field of improving welfare to meet needs. In other words, the level of welfare needs to be linked to the development of children's education in dealing with children.

From this explanation, it can be understood that the level of education can affect welfare, where the scope of welfare includes economics related to work, and getting a good job also requires a high level of education.

RESEARCH METHODS

The research was conducted in Sukadana Ilir Village, Sukadana District, East Lampung Regency. The population in this study were cassava farmers in Sukadana Ilir Village with a total of 395. The data collected in this study consisted of primary and secondary data. Primary data were obtained from interviews with cassava farmers using a questionnaire. Secondary data were obtained from literature studies in the form of journal books and statistical data sourced from related agencies. The method used is chi-square with the following equation:

$$\chi^2 = \sum_{i=1}^k \left(\frac{(O_i - E_i)^2}{E_i} \right)$$

Information:

O_i = Observation frequency

E_i = Expected frequency, where $DK = (k-1)$

RESULTS AND DISCUSSION

With 80 respondents, the calculated R-value is compared to the R table with $df = n - k$, then $df = 80 - 2 = 78$, the R table value is 0.2199 one unit. The questionnaire is declared valid when the R count is greater than the R table. The results of the validity test on the variables of this study can be seen in the following table:

Table 2. Validity Test

No Instrument Items	Person Correlation R Count	R Table	Sig Value	Description
1.	0,305	0,2199	0,006	valid
2.	0,732	0,2199	0	valid
3.	0,732	0,2199	0	valid
4.	0,318	0,2199	0,004	valid
5.	0,747	0,2199	0	valid
6.	0,732	0,2199	0	valid
7.	0,732	0,2199	0	valid
8.	0,318	0,2199	0,004	valid
9.	0,732	0,2199	0	valid
10.	0,732	0,2199	0	valid
11.	0,287	0,2199	0,01	valid
12.	0,274	0,2199	0,014	valid
13.	0,598	0,2199	0	valid
14.	0,318	0,2199	0,004	valid
15.	0,318	0,2199	0,004	valid
16.	0,318	0,2199	0,004	valid
17.	0,577	0,2199	0	valid
18.	0,477	0,2199	0	valid
19.	0,732	0,2199	0	valid
20.	0,22	0,2199	0,05	valid
21.	0,357	0,2199	0,001	valid

Source: Data Processed 2022

Based on the observations in the R table, the value of the sample (N) = 80 is 0.2199. So it refers to the validity results that the instrument of the welfare variable (Y) which consists of Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20, Q21 all produce calculated R values > R table (0.2199). So it can be concluded that all the instruments in this study can be said to be valid.

Table 3. Reliability Test

Variable	F	R Table	Description
Family Welfare	0,759	0,6	Reliable

Source: Processed Data 2022

From the results of the reliability test, all values obtained from the results of the X variable produce Cronbach's alpha values > 0.6. So it can be concluded that all instruments in this study are reliable.

Table 4. Distribution of Welfare Levels by Category

Welfare	Total	Percentage
KSP	3	3,8%
KS I	17	21,3%
KS II	4	5,0%
KS III	55	68,8%
KS III+	1	1,3%
Total	80	100%

Source: Primary data processed (2022)

From table 3 it is known that 3 families are included in the Pre-Prosperous Family with a percentage of 3.8%. Meanwhile, the highest percentage was in prosperous families stage 3 (KS III) as many as 55 or 68.8%, followed by prosperous families stage I (KS I) as many as 17 or 21.3%, prosperous families stage 2 (KS II) as many as 4 or 5.0%, then the prosperous family stage 3 plus (KS III+) is 1 or 1.3%.

Table 5. Land Area Distribution

Land Area	Total	Percentage
Narrow < 0.5 Ha	14	17,5%
Medium 0.5 - 2 Ha	31	38,8%
Area > 2 Ha	35	43,8%
Total	80	100%

Source: Primary data processed (2022)

Table 4 above shows that the land area owned by farmers tends to be at medium and wide levels. However, some families still use a narrow area of land to plant cassava. This is because not all of the land they own is used to grow cassava, but some of them cultivate other tubers such as sweet potatoes or others, and the majority use part of the land to grow rice. Most of the land area owned by farmers is 43.8% Area > 2 Ha, Medium 0.5 - 2 Ha is 38.8%, and Narrow < 0.5 Ha is 17.5%.

Table 6. Income Distribution

Income	Total	Percentage
0 - 1.000.000	19	23,8%
1.000.000-2.000.000	44	55,8%
> 2.000.000	17	21,3%
Total	80	100%

Source: Primary data processed (2022)

Table 5, it can be seen the variety of income obtained each month by each family. The income of cassava farmers has different values, namely 0 - 1,000,000 as much as 23.8%, 1,000,000-2,000,000 as much as 55.0%, and > 2,000,000 as much as 21.3%.

Table 7. Distribution of Education Levels

Education Level	Total	Percentage
SD	40	50,0%
JUNIOR HIGH SCHOOL	13	16,3%
Vocational High School	26	32,5%
Diploma, Bachelor*	1	1,3%
Total	80	100%

Source: Primary data processed (2022)

Table 6 above shows that the level of education in Sukadana Ilir Village is dominated by farmers with elementary school graduates as many as 40 families (50.0%). The education level of the majority of both SMA/SMK is 26 (32.5%). The education level of the majority of the three junior high schools was 13 families (16.3%), and the diploma/bachelor was 1.3%.

Table 8. Chi-Square Test Results of Land Area and Welfare Level

Pearson Chi-Square			
Likelihood Ratio	37,865	8	0,000
Linear-by-LinearAssociation	40,782	8	0,000
N of Valid Cases	32,143 80	1	0,000

Source: Primary data processed (2022)

From the table above, the significance value is $0.000 < 0.05$. With this, it can be concluded that there is a relationship between land area and the level of welfare.

Table 9. Chi-Square Test Results Income and Welfare Level

Pearson Chi-Square	Value	df	Asymp.Sig.(2-sided)
	16,758	8	0,033
Likelihood Ratio	20,083	8	0,010
Linear-by-LinearAssociation	12,988	1	0,000
N of Valid Cases	80		

Source: Primary data processed (2022)

From the table above, a significance value of $0.033 < 0.05$ was obtained. With this, it can be concluded that there is a relationship between income and the level of welfare.

Table 10. Chi-Square Test Results Education Level and Welfare Level

	Value	Df	Asymp.Sig.(2-sided)
Pearson Chi-Square	7,887	2	0,794
Likelihood Ratio	9,747	2	0,638
Linear-by-LinearAssociation	1,033	1	0,309
N of Valid Cases	80		

Source: Primary data processed (2022)

From the table above, the significance value is $0.794 > 0.05$. With this, it can be concluded that there is no relationship between the level of education and the level of welfare.

The results showed that the level of welfare of cassava farmers in Sukadana Ilir Village was in the high category. It is known that there are still 3.8% of farming families who still have not been able to reach the level of prosperity (pre-prosperity). The level of welfare of farmers in Sukadana Ilir Village can be said to be high because as many as 68.8% are included in the stage 3 category (KS III). However, there are still stage 1 family (KS I) as many as 21.3% of farming families. Successively there are 5.0% in the stage 2 category (KS II), and 1.3% families in stage 3 plus category (KS III+).

The family cannot reach the stage of a prosperous family or a certain level of welfare because there are indicators of family welfare that the family still cannot fulfill, which can be seen in the following table:

Table 11. Distribution of Cassava Farmer Family Welfare Based on Unfulfilled Indicators

No	Welfare Level	Number of Families	Unfulfilled Indicator	Number F	Percent %	Percent %
1	Pre-Prosperous	3	Food	2	67%	100%
			Clothing	1	33%	
2	KS I	17	Income	12	70%	100%
			Education	1	24%	
			Family planning	4	6%	
3	KS II	4	Social Interaction with the environment	1	25%	100%
			Interaction in the family	3	75%	
4	KS III	55	Social Interaction with the environment	53	96%	100%
			Role in society	2	4%	
5	KS III Plus	1	-	1	100	100
				80		

Source: Primary data processed (2022)

From the table above, it is known that the 3 farming families included in the Pre-Prosperous Family have not been able to become the most prosperous families due to food indicators, namely, family members eat twice a day or more as much as 2 farmers

or by 67%. This is because most families who are engaged in agriculture do not only use their income to meet consumption needs. Therefore, families cannot fulfill one of the categories, namely eating two or more meals a day.

In the KS I category, there are 17 farmers, or 21.3% of cassava farming families in Sukadana Ilir Village. In this category, farming families cannot reach the welfare stage of KS II because the income indicators are not met, namely, other family members work as much as 71%. This is because most of the farming families in Sukadana Ilir Village only depend on the head of the family to earn a living, while the wife plays more of a role at home as a housewife. In the KS II category, there are 4 farmers, or 5.0% of cassava farming families in Sukadana Ilir Village. In this category, farming families cannot reach the stage of KS III because the indicator of interaction in the family is that 75% of family members eat together at least once a week. This is because, according to field data, it is rare for families to have a meal together. In addition, eating together which is specifically held is also not a habit carried out by farming families.

In the KS III category, there are 55 farmers, or 68.8% of cassava farming families in Sukadana Ilir Village. In this category, farming families cannot reach the welfare stage of KS III+ because there are indicators that cannot be fulfilled at most because of indicators of social interaction with the community, namely families routinely make material contributions to social activities as much as 96%. The lack of awareness in the community to participate in making contributions in the form of material means that welfare at the stage of KS III has not been achieved. Meanwhile, for the KS III+ category, 1 or 1.3% of cassava farming families in Sukadana Ilir Village have succeeded in becoming economically and socially prosperous families.

The Welfare Level of Cassava Farming Families in Sukadana Ilir Village in terms of Land Area

From the table on the distribution of agricultural land area, most farming families in Sukadana Ilir Village have 38.8% medium land and 43.8% of farming families have medium land, 17.5%. This narrow arable land usually occurs because cassava cultivation is carried out from generation to generation in a family, so the longer the arable land owned will become increasingly narrow because the arable land or land will be distributed among the number of children in the family (inheritance). Because the land area is something important in cassava farming, the more land used to grow cassava, the more

yields will be produced. After the chi-square test using spss 25, the significance value shows the result of 0.000 which means more than 0.05 ($0.000 < 0.05$), which means that there is an influence between the area of land used to plant cassava with the level of family welfare. So it can be concluded that there is an influence between land area and the level of family welfare. The wider the land used to plant cassava, the higher the level of welfare for the farming family. The area of land owned which in theory can improve the welfare of farmers has been able to improve the welfare of farmers in Sukadana Ilir Village.

The Welfare Level of Cassava Farming Families in Sukadana Ilir Village in terms of Income Level

From the results of the cross table, it is known that the income level obtained by the heads of families of cassava farmers in Sukadana Ilir Village every month is in the medium category, which is 55.0%. Meanwhile, for incomes of 0 - 1,000,000, there are 23.8% of farming families and for incomes $> 2,000,000$ there is 21.3%. This low income often occurs because families in Sukadana Ilir Village only rely on agriculture. Meanwhile, for medium and high incomes, farming families usually have other jobs or other businesses to meet their daily needs. The results of the chi-square test using spss 25, the significance value is 0.033 which means more than 0.05 ($0.033 < 0.05$), indicating that there is an influence between the income obtained from planting cassava with the level of family welfare. So it can be concluded that there is an influence between income and the level of family welfare. The greater the income obtained from planting cassava, the higher the level of welfare for the farmer's family. Income which in theory can improve the welfare of farmers can already increase the welfare of farmers

CONCLUSION

Based on the results of research and discussion, the conclusions from this study are as follows:

1. The welfare level of cassava farming families in Sukadana Ilir Village is in the high category because from the results obtained the dominating family in Sukadana Ilir Village is at the KS III welfare level.
2. The level of welfare of cassava farmers in Sukadana Ilir Village is seen from the area of land used to plant cassava, there is an influence between the level of welfare and land area. The more land owned, the higher the level of family welfare.

3. The level of welfare of cassava farmers in Sukadana Ilir Village is seen from the income earned every month, there is an influence between the level of welfare and income. The greater the level of income obtained, the higher the level of family welfare.
4. The level of welfare of cassava farmers in Sukadana Ilir Village is seen from the last education level taken by the head of the family, there is no influence between the level of welfare and the level of education. The higher education taken by the family does not make the farmer's family increase in welfare.

SUGGESTION

Based on the conclusions above, the suggestions that can be given by researchers are as follows:

1. The government, especially the Sukadana Ilir village government, should provide training related to 1. the effectiveness or good use of land to achieve a better level of welfare.
2. Farmers in Sukadana Ilir Village can pay attention to several existing indicators, including indicators of food, income, interaction in the family, and social interaction to meet a higher level of welfare.
3. Further researchers can add variables or questions so that the data obtained is more complete.

REFERENCES

- Dinas Tanaman Pangan. (2019). *Kinerja Tanaman Pangan dan Holtikultura Provinsi Lampung Tahun 2014-2018*.
- Dwipradnyana, I. M. M., Wayan, W., & I. Made, S. (2015). Faktor-faktor yang Mempengaruhi Konversi Lahan serta Dampaknya Terhadap Kesejahteraan Petani: Kasus di Subak Jadi, Kecamatan Kediri, Kabupaten Tabanan. *Jurnal Manajemen Agribisnis*, 3(1), 34–42.
- Fadholi Hernanto. (1990). *Ilmu Usaha Tani* (hal. 64). PT Penebar swadaya.
- Fathorrozi, M. (2003). *Ekonomi Mikro*. Salemba Empat.
- Hartati, G. A. R., Budhi, M. K. S., & Yuliarmi, N. N. (2017). Analisis faktor-faktor yang mempengaruhi kesejahteraan petani di Kota Denpasar. *E-Jurnal Ekonomi dan Bisnis*, 6(4), 1513–1546.
- Herawan, N. (2017). Pengaruh Pendapatan Terhadap Kesejahteraan Pengrajin Anyaman Bambu (Besek / Piti) Desa Kalimandi Kecamatan Purwareja Klampok Kabupaten

- Banjarnegara. *Jurnal Pendidikan Ekonomi*, 11(1), 75–80.
- Iqbal, Agum, M., Lestari, Dyah, Aring, H., & Soelaiman, A. (2014). Pendapatan dan Kesejahteraan Rumah Tangga Petani Ubi Kayu di Kecamatan Sukadana Kabupaten Lampung Timur. *Jurnal Ilmu Ilmu Agribisnis*, 2(3), 246–252.
- Kementerian Pertanian. (2019). *Statistik Lahan Pertanian Tahun 2013-2017*. 1–201.
- Rahmanta, S., May, G., & Negara, L. S. (2016). Faktor-faktor yang mempengaruhi nilai tukar petani ubi kayu. *Jurnal Agribisnis*, 51(5), 1–10.
- Rizki Syofiandi, R., Hilmanto, R., & Herwanti, S. (2016). Analisis Pendapatan Dan Kesejahteraan Petani Agroforestri Di Kelurahan Sumber Agung Kecamatan Kemiling Kota Bandar Lampung. *Jurnal Sylva Lestari*, 4(2), 17. <https://doi.org/10.23960/jsl2417-26>
- Roch, W. (2016). Outlook Komoditas Pertanian Sub Sektor Tanaman Pangan. *Pusat Data dan Sistem Informasi Pertanian Kementerian Pertanian*, 1.
- Siti, R., & Erna, M. L. (n.d.). *Setugede Kota Bogor*. 133–159.
- Sudjana. (2002). *Metode stastitika*. Tarsito.
- Sukirno, S. (2006). *Mikro ekonomi : Teori pengantar*. Jakarta Rajagrafindo Persada.
- Tania, R., Widjaya, S., & Suryani, A. (2019). Usahatani, Pendapatan Dan Kesejahteraan Petani Kopi Di Lampung Barat. *Jurnal Ilmu-Ilmu Agribisnis*, 7(2), 149. <https://doi.org/10.23960/jiia.v7i2.149-156>
- Utami, perma p, Saputro, G. S., & Nikmatulloh, D. (2016). The Income and Welfare of Corn Farmers in Ketapang Sub District, South Lampung District. *Journal of Chemical Information and Modeling*.
- Warnaen, A., Cangara, H., & Bulkis, S. (n.d.). *FAKTOR-FAKTOR YANG MENGHAMBAT INOVASI The Inhibiting Factors of Innovation in The Community in Improving Farmers and Fishermen Welfare Society in Takalar*. 241–250.
- Weriantoni, W., Srivani, M., Lukman, L., Fibriani, F., Silvia, S., & Maivira, E. (2017). ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI KESEJAHTERAAN PETANI KARET (Studi Kasus di Nagari Limo Koto Kecamatan Koto VII Kabupaten Sijunjung). *Jurnal Teknologi Pertanian Andalas*, 21(2), 161. <https://doi.org/10.25077/jtpa.21.2.161-167.2017>
- Wikipedia. (n.d.). *Pertanian - Wikipedia bahasa Indonesia, ensiklopedia bebas*.
- Zakaria, W. A., Endaryanto, T., Sari, M. I. L., Melly Sari, I. R., & Mutolib, A. (2020). Pendapatan Dan Kesejahteraan Rumah Tangga Petani Ubikayu Di Provinsi Lampung. *Jurnal Agribisnis Indonesia*, 8(1), 83–93. <https://doi.org/10.29244/jai.2020.8.1.83-93>