



## POTENTIAL ANALYSIS OF AGRICULTURAL SUBSECTORS IN PROBOLINGGO REGENCY, EAST JAVA

Mani'atul Fitan Kusuma<sup>1\*</sup>, Sri Widayanti<sup>2</sup>, Prasmita Dian Wijayati<sup>3</sup>

<sup>1,2,3</sup>University of Pembangunan Nasional "Veteran" East Java, Indonesia

Email: Sriwidayanti@upnjatim.ac.id<sup>2</sup>

### Abstract

National development efforts can be strengthened by understanding and identifying the potential economic sectors in the region. An important part of the economic sector is the agricultural sector, whose performance depends on various subsectors, including food crops, plantations, horticulture, animal husbandry, agricultural services, forestry and logging, and fisheries. The purpose of this study is to analyze the leading agricultural subsectors and the potential of agricultural subsectors in the future in Probolinggo Regency and identify the description of the pattern and economic structure of the agricultural subsector in Probolinggo Regency. The data needed is GRDP data at constant prices of Probolinggo Regency and East Java Province in 2011-2022. The methods used in this analysis are Location Quotient (LQ), Dynamic Location Quotient (DLQ), and Klassen's typology. The results found that during the 2011-2022 period, several sectors such as food crops, plantations, horticulture, livestock, agricultural services, forestry, and fisheries in Probolinggo Regency were basic, characterized by LQ values  $> 1$ . DLQ analysis shows that the food crops and plantations sectors are expected to tend towards non-base sectors, while the horticulture, livestock, agricultural services, forestry, and fisheries sectors are expected to tend to remain in the base sector. Klassen typology analysis illustrates that food crops and plantations are in quadrant III, indicating progress but slow growth, while horticulture, livestock, agricultural services, forestry, and fisheries are in quadrant I, indicating rapid growth and progress.

**Keywords:** Potential, Agriculture Subsector, Location Quotient, Dynamic Location Quotient, Klassen Typology.

### INTRODUCTION

Indonesia as an agricultural country certainly has abundant agricultural, forestry, plantation, livestock, and fishery resources that can provide employment opportunities for some Indonesians. Therefore, the potential of the agricultural sector really needs to be developed through its various subsectors (Latumahina et al., 2021). In general, development is an effort to be able to make sustainable changes towards a better situation and encourage an increase in community welfare which is expected to reduce poverty (Permatasari, 2019). The success of national development can be seen in the successful development of a region that refers to improving welfare. Therefore, it is important for local governments to know the sectors that have a role or potential in the economy of a region in order to improve the welfare of the population & reduce the poverty rate.

Agricultural development is part of economic and human resource (HR) development efforts. Broadly speaking, this reflects that agricultural development is a process of social change that aims to advance economic growth and development, improve welfare, and preserve the natural environment

(Dumasari, 2020). According to Waridin (2019) towards agricultural development, there are problems that often occur in Indonesia, namely the high poverty rate. Poverty can occur because people are less able to optimize the economic sector in an area. The agricultural sector also plays a role in being the main place to be able to support the majority of the population in various agrarian countries, including in Indonesia.

One of the 29 districts/municipalities in East Java that stands out in its contribution to GDRP in the agricultural sector and has a significant number of workers in the sector is Probolinggo Regency. Probolinggo Regency is listed as one of the regencies with the largest number of workers in the agricultural sector, ranking sixth with a total workforce of 284,240 people. This high labor absorption can have a positive impact on the GDRP of the agricultural sector and can contribute to economic growth. However, according to the Probolinggo Regency Statistical Center (2022), the distribution of the agricultural sector to the GDRP of Probolinggo Regency is fluctuating but tends to decrease to 32.87 percent in 2022. This is due to the shift in people's economic activities from the agricultural industry to the non-agricultural industry.

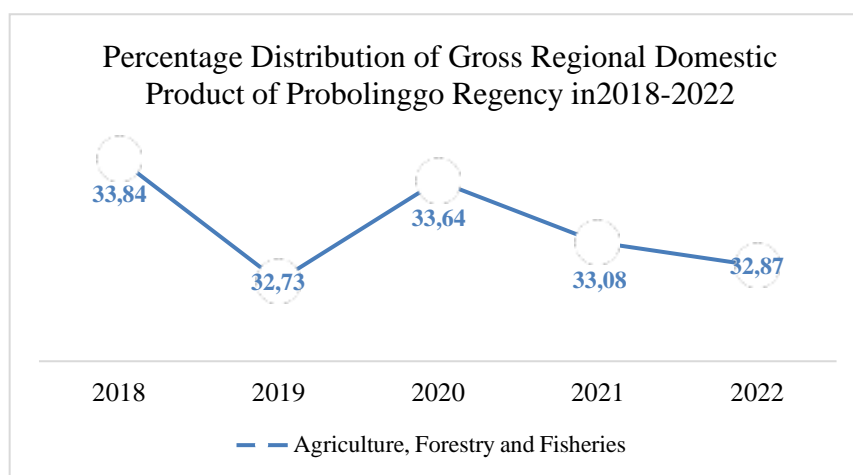


Figure 1

Percentage Distribution of GRDP in the Agriculture, Forestry, & Fisheries Category of Probolinggo Regency (percent) 2018-2022

Source: Badan Pusat Statistik Kabupaten Probolinggo

The potential between one sector and another is of course different, this is related to the characteristics of the sector. According to (Putri et al., 2023) Each region certainly has different superior potential, both from the agricultural and non-agricultural sectors. The agricultural sector, which is one of several national economic sectors with various subsectors, will certainly be able to meet the food needs of the community and generate employment for the community (Mufidah, 2020). This is expected to improve welfare and reduce poverty levels in an area. Potential sectors are also referred to as leading sectors or basic sectors in regional economics that can meet the needs of their region and other regions (Sayifullah & Emmalian, 2018).

The agricultural sector has seven subsectors including food crops, plantations, horticulture, livestock, fisheries, forestry, and agricultural services. The economic condition of development in the agricultural sector certainly depends on the performance of each subsector. Each region certainly has different advantages and potential agricultural resources that can be seen from the role of related subsectors. Subsector identification

Subsector identification agriculture is needed to provide the government with an overview of which subsectors have potential or are included in the leading sectors both now and in the future.

## **LITERATURE REVIEW**

### **Economic Growth & Development**

According to Hasyim (2016) Economic growth is a process of efforts to change the economic situation of a country which aims to improve the country's economic conditions within a certain time span. According to Hendrayanti & Nafi'ah, (2023) economic growth is closely related to welfare, if the economy of a region increases, it is certain that the production of goods & services in the region has also increased, which in turn will have a positive impact on people's welfare. According to Rapanna & Sukarno (2017) Economic development is an effort aimed at an area that can increase national income in the long term while still paying attention to not increasing the population below the poverty line and income inequality. Economic development includes economic change and growth. Changes that occur include structural changes such as changes that occur in the economic structure of the agricultural sector which is the priority sector of the economy to the industrial sector or the secondary sector (Hasan & Muhammad, 2018). Economic development is closely related to economic growth. However, both have differences. According to Pangestu & Prasetya (2021) the concept of economic development is broader than economic growth.

### **Gross Regional Domestic Product**

Gross Regional Domestic Product is a criterion that shows the size of a regional economy from the aspect of regional income. According to (Prasetyani & Sumardi, 2020) Gross Regional Domestic Product is the total value added of final goods & services as a whole that have been produced by all economic sectors in a region. GRDP can be used as a benchmark in planning the development of a region. The calculation of GRDP can identify what business fields or economic sectors contribute the most to national income. According to Ba&Pusat Statistik (2022) there are two types of models for presenting GRDP data. Nominal GRDP calculates the value of final goods or services using prices prevailing in each year of calculation, while Real GRDP calculates the added value of final goods or services using prices that are fixed in a certain year in each year of calculation. GRDP can also be used to identify the potential or economic condition of a region with the presence of GRDP of related

economic sectors using applied analysis, namely *Location Quotient*, *Shift Share*, & *Classen*. (Suparmono, 2018)

### **Economic Base Theory**

According to Kristiawan (2021), base economic theory is a concept that describes the economic structure of the region by considering sectors that serve markets within and outside the region. Indirectly, the base sector has the capacity to export goods/services from the region to other regions. On the other hand, non-base sectors are only able to meet internal needs and do not have the ability to export to other regions. According to Sofyan (2021), the economic base theory is used as the basis of the *Location Quotient* calculation technique which explains that if a base sector can produce goods/services for markets within the region or outside the region, then the proceeds from these sales can generate a flow of income in the region concerned. Therefore, in the economic base theory, export is an important factor in a regional development effort. Therefore, it is important to analyze whether or not there is a basis sector in a region to get a projection of the region's economic growth. The basis sector can also be considered as the leading sector. A region's leading sector can be compared at international, national and regional levels with the same sector. Therefore, if a region is highly competitive in the same sector as other regions, it is considered a base or leading sector. These basic sectors can be used as the basis for planning regional economic development to improve the welfare of the people. According to Sofyan (2021), the basic sector has great potential to grow faster when compared to other non-basic sectors.

### **Agricultural Development**

According to Dumasari (2020) agricultural development is an effort in economic development that focuses on the agricultural sector alone, even so agricultural development is not only related to the economy, but there are also social, institutional, technological, and environmental aspects. Theoretically, according to (Sjamsir, 2017) the direction of agricultural development is to maximize social welfare which has four main components including equity, growth, environmental sustainability, and human rights. The vision of agricultural development is to build communities through more modern, efficient and sustainable agricultural businesses or farms integrated through regional development.

According to (Arwatti, 2018) in Indonesia, agricultural development can be said to be successful if the national economy develops and people's welfare is better thanks to the contribution of the agricultural sector. This success can be seen from an increase in household income, an increase in labor productivity, and a decrease in poverty and unemployment. Agricultural development is of course also accompanied by government policies that aim to be able to advance Indonesian agriculture so that it can be more productive and efficient which will make people's welfare more evenly distributed.

## **Agriculture Sector**

Agriculture is an activity in utilizing human-driven resources by planting crops productively so that they can produce, benefit, and can fulfill human life itself. Or in a narrow sense agriculture is a process of cultivation on a land that can meet the needs of living things (Arwatti, 2018). Agriculture is an important sector in a region because it has a role in providing food and employment. In a narrow sense, agriculture is a farming activity where the majority of people interpret it as an activity that only focuses on rice plants in rice fields to be processed into rice and used to meet human needs. While in a broad sense, agriculture includes all activities included in the agricultural subsector, such as animal husbandry, horticultural crops, forestry, agricultural services, plantation crops, fisheries, & food crops (Pasaribu et al., 2021).

## **METHOD**

The research is located in the Probolinggo Regency as the object of research, with the consideration that Probolinggo Regency is one of several potential agricultural areas in East Java with the largest number of workers in agriculture 284,240 people and there is an imbalance in the increase in GDP of Probolinggo Regency which is accompanied by a decrease in the contribution in the agricultural sector. The data needed is secondary data of GDP at constant prices of Probolinggo Regency & East Java Province in 2011-2022 which comes from the Central Bureau of Statistics (BPS), articles, journals, books, the internet, & related agencies. Data analysis applied to identify leading subsectors in Probolinggo Regency includes Location Quotient (LQ) analysis, Dynamic Location Quotient (DLQ) analysis to evaluate the growth potential of agricultural subsectors in the future, and Klassen Typology analysis to classify the position of agricultural subsectors in the economy of Probolinggo Regency.

## **RESULTS & DISCUSSION**

Probolinggo Regency has an area of 169,616.65 hectares or about 1,696.17 square kilometers (1.07% of the total land & water area of East Java Province). The boundaries of the regency include the Madura Strait in the north, Lumajang and Jember regencies in the south, Situbondo regency in the east, and Pasuruan regency in the west. The land use pattern in Probolinggo Regency is dominated by agricultural land, including paddy fields covering 373.13 square kilometers, productive forests covering 426.46 square kilometers, moorland covering 513.8 square kilometers, ponds covering 13.99 square kilometers, and settlements covering 147.74 square kilometers of the total area of Probolinggo Regency. A portion of the population also makes a living in the agricultural sector, which significantly affects the agricultural sector GRDP of Probolinggo Regency. The GRDP of the agricultural sector in Probolinggo Regency is the highest

compared to other economic sectors. This is due to the geographical condition of Probolinggo Regency which supports the community to engage in the agricultural sector as their main occupation.

Tabel 1. ADHK GRDP by Business Field of Probolinggo Regency (Billion Rupiah) in 2018-2022

Lapangan Usaha	ADHK GRDP by Business Field (Billion Rupiah)				
	2018	2019	2020	2021	2022
Agricultural, Forestry, and Fisheries	7.200.135,6	7.278.299,9	7.280.047,6	7.355.141,8	7.510.657,2
Mining & Quarrying	534.970,0	533.472,1	493.400,6	493.325,0	508.402,9
Processing Industry	5.446.216,7	5.887.621,8	5.820.763,6	6.195.445,1	6.525.659,9
Electricity & Gas Procurement	221.038,6	232.486,9	234.166,7	238.502,7	252.716,7
Water Supply, Waste Management, Waste & Recycling	26.205,4	27.258,8	28.140,7	28.418,0	28.543,8
Construction	1.750.497,3	1.828.744,5	1.716.921,3	1.752.512,0	1.879.501,2
Wholesale & Retail Trade	2.928.897,1	3.111.858,9	2.879.798,8	3.059.219,4	3.253.272,3
Transportation & Warehousing	204.149,6	223.128,7	212.189,5	229.880,4	264.483,5
Accommodation & food provision	350.916,8	373.047,0	330.540,6	337.136,9	380.152,3
Information & Communication	776.286,2	831.092,0	889.120,0	931.549,5	972.946,6
Financial & Insurance Services	420.693,4	435.465,7	434.008,4	435.369,8	443.382,2
Real Estate	552.341,5	575.097,9	585.334,7	590.283,2	612.624,0
Company Services	74.874,3	78.827,7	73.619,1	74.735,1	77.960,4
Government Administration, Land & Social Security	712.453,7	734.611,1	718.360,7	715.697,1	723.201,8
Education Services	590.109,0	626.872,8	641.997,2	647.617,0	648.088,8
Health & Social Services	142.921,3	152.339,8	166.982,0	174.901,7	181.126,8
Other Services	441.867,3	465.025,6	392.847,1	404.652,8	471.473,6
GDRP	22.374.573,7	23.395.250,9	22.898.238,6	23.664.387,7	24.734.193,9

Source: Probolinggo Regency Central Statistics Agency'

The table above shows that the contribution of the Agriculture, Forestry, & Fisheries sector has the highest GDRP figure to the GDRP of Probolinggo Regency in 2022, which amounted to 7,510,657.2 billion. From 2018 to 2022, the GRDP of the Agriculture, Forestry, & Fisheries sector has continued to increase, which means that the Agriculture, Forestry, & Fisheries sector still dominates the economic structure of Probolinggo Regency and has the potential to be developed further. The economic situation of the Agriculture, Forestry, & Fisheries sector over the past 5 years has fluctuated, which only increased in 2020 by 33.64%.

### Leading Agricultural Subsectors

To be able to determine and analyze the leading sector or base sector in the economy of Probolinggo Regency, especially in each agricultural subsector, the method approach used is location quotient. The location quotient analysis tool can be used to compare between a sector in a narrower area with the agricultural subsector. A sector in a wider area as a reference area to find out the leading or potential sectors in the region (Suparmono, 2018). LQ analysis in this study was used to calculate the LQ value of each agricultural subsector in Probolinggo Regency. The identification of superior agricultural subsectors is prioritized to improve the agricultural sector in Probolinggo Regency as seen from the performance of each agricultural subsector. Based on the results of the LQ analysis through the ADHK GRDP data of the Agriculture Subsector of Probolinggo Regency in 2011-2022, the following results were obtained:

Tabel 2. Location Quotient Value of Agriculture Subsector of Probolinggo Regency in 2011-2022

Business Field	Average LQ	Description
a. Food Crops	2,53	BASIS
b. Horticultural Crops	4,86	BASIS
c. Plantation Crops	3,85	BASIS
d. Livestock	2,99	BASIS
e. Agriculture & Hunting Services	4,78	BASIS
f. Forestry & Logging	3,19	BASIS
g. Fisheries	2,07	BASIS

Source: Data processed (2024)

Based on table 2 of the agricultural subsector LQ analysis results above, it is found that the 2011-2022 period all subsectors are still classified as basic sectors in Probolinggo Regency, because each subsector has an LQ value > 1. The highest LQ value is obtained from the horticultural crops subsector of 4.86; agricultural services and hunting of 4.78; plantation crops of 3.85; forestry and logging of 3.19; livestock of 2.99; food crops of 2.53; and fisheries of 2.07. This indicates that all agricultural subsectors in Probolinggo Regency are not only able to meet the needs in Probolinggo Regency, but are also able to export outside the region. The results of the analysis above also show that the agricultural subsectors in Probolinggo Regency are superior to those in East Java Province in the same subsectors. Therefore, local governments must continue to pay attention to natural resources and human resources, especially in the agricultural sector so that each subsector can remain a basic sector or potential sector in the future.

### Potential of Agriculture Subsector in the Future

The weakness of the LQ method is that it is static, so it cannot know the estimates or potential that may occur in the future. The current leading sector included in the basic sector may not necessarily remain a basic sector in the future, and vice versa due to economic changes in a region

(Alhempri et al., 2014). Economic changes within a certain period of time can be identified through DLQ analysis. The following are the results of the calculation of DLQ analysis for each agricultural subsector in Probolinggo Regency in 2011-2022.

Table 3

Dynamic Location Quotient Value of Agriculture Subsector of Probolinggo Regency in 2011-2022

Lapangan Usaha	DLQ	Keterangan
a. Food Crops	0,00	NON BASIS
b. Horticultural Crops	11,18	BASIS
c. Plantation Crops	0,23	NON BASIS
d. Livestock	65,58	BASIS
e. Agriculture & Hunting Services	12,73	BASIS
f. Forestry & Logging	9,78	BASIS
g. Fisheries	6,89	BASIS

Source: Data processed (2024)

The table above shows that during the 2011-2022 period the crops, livestock, horticulture, agricultural services, forestry and logging, and fisheries subsectors have the potential to become base sectors and can experience faster growth in the future in Probolinggo Regency. This shows that these subsectors have good opportunities for development to improve the regional economy. On the other hand, the food crops and plantations subsector does not show potential to become a base sector in the future or is likely to become a non-base sector and develop more slowly in Probolinggo Regency in the future. This indicates that the food crops and plantation subsectors have less attractive prospects for development in the future.

The food crops & plantations subsector tends to have the potential to become a non-base sector in the future. This could happen because of the potential for shifting crops from food crops or plantation crops to horticultural crops because the majority of people find it easier to cultivate the horticultural crop subsector. Then if the harvest & production of these crop commodities continues to decline due to land conversion factors from the agricultural sector to non-agriculture, it will also affect the development of the subsector in the future. According to Sawitri Djelantik et al. (2022), the reduction of agricultural land will affect the social economic conditions of the community and the environment, and it is possible that the agricultural sector will no longer be the leading sector. The regeneration crisis of farmers in Probolinggo Regency can also be said to be low, because based on statistical data 61% of farmers are > 45 years old. According to Sidharta et al. (2021), the farmer regeneration crisis can have a negative impact on the development of agriculture in a region.

### **Classification of Economic Pattern & Structure of Agriculture Subsector**

Regional economic development is the effort of local governments & communities to collaborate in managing available resources by creating partnerships in creating jobs & developing economic activities. The economic classification of a region can be a reference in planning

development to understand the characteristics of the region (Elysanti et al., 2015). The Klassen typology method aims to identify the characteristics of the pattern and economic structure of Probolinggo Regency. The analysis in Klassen typology is classified into 4 quadrants, including developed & fast-growing subsectors (quadrant I), fast-growingsubsectors (quadrant II), developed & fast-growing subsectors (quadrant II), and developed & fast-growing subsectors (quadrant II). slow (quadrant III), & relatively lagging subsectors (quadrant IV).

The calculation of Klassen typology analysis is calculated by comparing the level of economic growth rate of agricultural subsector in Probolinggo Regency with East Java Province and the level of contribution of agricultural subsector in Probolinggo Regency with East Java Province. The results of the calculation of the Klassen typology analysis of the agricultural subsector in Probolinggo Regency are as follows:

Table 4 Value of Klassen Typology of Agriculture Subsector of Probolinggo Regency in 2011- 2022

Business Field	Growth		Contribution		Quadrant
	Probolinggo District	East Java Province	Probolinggo District	East Java Province	
Food Crops	-0,88	0,32	9,1	3,5	3
Horticultural Crops	2,88	2,35	5,6	1,1	1
Plantation Crops	1,03	1,70	6,8	1,8	3
Livestock	3,19	1,97	6,6	2,3	1
Agriculture & Hunting Services	2,48	1,96	0,6	0,1	1
Forestry & Logging	3,91	3,31	1,4	0,4	1
Fisheries	4,81	4,29	4,5	2,2	1

Sumber : Data diolah (2024)

Based on the results of the Klassen typology analysis above, it can be seen that the horticultural crops, livestock, agricultural services, forestry & logging, and fisheries subsectors are included in quadrant I, which indicates rapid growth & progress. In contrast, the food crops and plantations subsectors fall into quadrant III, indicating slow growth. The table also shows that over the 2011-2022 period, the fisheries subsector had the highest growth rate, while the food crops subsector made the highest contribution.

Quadrant I $r_{ik} > r_i$ $y_{ik} > y_i$  Horticultural corps Livestock Agricultural and hunting service  Forestry and logging Fisheries	Quadrant II $r_{ik} > r_i$ $y_{ik} < y_i$
------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------

Quadrant III $rik < ri$ $yik > yi$	Quadrant IV $rik < ri$ $yik < yi$
Food corps Plantation corps	

Figure 2

Klassen Typology Matrix of Agricultural Subsector Classification of Probolinggo Regency 2011-2022

Source : Data processed (2024)

Description:

Rik : Economic growth rate of the agricultural subsector of Probolinggo

Ri : Economic growth rate of agriculture subsector of East Java Province

Yik : Contribution of agriculture subsector of ProbolinggoRegency

Yi : Contribution of agricultural subsectors of East Java Province

Based on the matrix presented, it can be seen that none of the agricultural subsectors in Probolinggo Regency fall into the category of fast-growing subsectors (quadrant II) or relatively underdeveloped subsectors (quadrant IV). Agricultural subsectors in Probolinggo Regency can be divided into two quadrants of the Klassen typology matrix, namely the developed & fast-growing subsector (quadrant I) and the developed & slow-growing subsector (quadrant III). The horticultural crops, livestock, agricultural services, forestry, logging, and fisheries subsectors fall into quadrant I, which signifies rapid growth and progress because they have higher economic growth rates and contributions at the district level than at the provincial level. On the other hand, the food crops & plantations subsector falls in quadrantIII, indicating slow growth as its growth rate is lower at the district level than at the provincial level, but its contribution is higher at the district level.

## CONCLUSIONS

Based on the research results, the conclusion of this study is that during the 2011-2022 period, all agricultural subsectors in Probolinggo Regency, including food crops, horticulture, plantations, animal husbandry, agricultural services, forestry, and fisheries, fall into the category of basic subsectors because they have  $LQ > 1$ . The result of the DLQ analysis is that the horticulture, livestock, agricultural services, forestry, and fisheries subsectors are likely to remain as base subsectors in the future, while food crops and plantations are likely to become non-base subsectors. The economic structure pattern of agricultural subsectors in Probolinggo Regency can be classified in two quadrants, namely quadrants I & III. The horticultural crops, livestock, agricultural services, forestry, and fisheries subsectors are included in quadrant I, while the food crops and plantation subsectors are included in quadrant III.

## DAFTAR PUSTAKA

- Alhempri, R. R., Zainal, H., & Kusumastuti, S. Y. (2014). Keterkaitan Sektor-sektor Ekonomi Potensial di Provinsi Riau. *Mimbar*, 30(1), 7823–7830.
- Arwatti, S. (2018). *Pengantar Ilmu Pertanian Berkelanjutan*. CV Inti Mediatama.
- Badan Pusat Statistik. (2023). PDRB Atas Dasar Harga Konstan Kabupaten Probolinggo Menurut Lapangan Usaha tahun 2010-2022 . <https://probolinggokab.bps.go.id/indicator/52/34/1/pdrb-adhk-menurut-lapangan-usaha.html>
- Dumasari, D. (2020). Pembangunan Pertanian Mendahulukan yang Tertinggal. In *Pustaka Pelajar* (Cetakan I).
- Elysanti, S., Hadi P, T., & Cahyo D, H. (2015). Analisis Tipologi & Sektor Potensial Dalam Pengembangan Ekonomi Wilayah Kecamatan di Kabupaten Jember. *Artikel Ilmiah Mahasiswa 2015*, 1–9. <http://repository.unej.ac.id/handle/123456789/68296>
- Hasan, M., & Muhammad, A. (2018). Pembangunan Ekonomi & Pemberdayaan Masyarakat *Strategi Pembangunan Manusia dalam Perspektif Ekonomi Lokal* (Edisi kedua). Pustaka Taman Ilmu. [http://eprints.unm.ac.id/10706/1/Buku\\_pembangunan\\_ekonomi\\_contoh\\_fix.pdf](http://eprints.unm.ac.id/10706/1/Buku_pembangunan_ekonomi_contoh_fix.pdf)
- Hasyim, A. I. (2016). *Ekonomi Makro*. Kencana.
- Hendrayanti, S., & Nafi'ah, Z. (2023). *Pertumbuhan Ekonomi di Jawa Tengah Kajian Konseptual & Empirik*. Penerbit NEM.
- Kristiawan. (2021). *Pengembangan Potensi Produk Unggulan Buah-buahan Ramah Lingkungan* (Cetakan I). Scopindo Media Pustaka.
- Latumahina, F. S., Hafid, H., Hadi, P., Mutolib, A., Arifiesn, Y., Asir, M., Wattimena, C. M. A., Sarasi, V., Hasibuan, A. K. H., Afifah, L. N., Azhar, Widyaputra, P. K., & Sujalu, A. P. (2021). *Pertanian, Kehutanan & Kemakmuran Petani* (E. Jaelani (ed.); Issue 57). Widina Bhakti Persada Bandung.
- Mardial, A., Antara, M., & Kalaba, Y. (2020). Analisis Penentuan Komoditi Basis Subsektor Hortikultura di Daerah Kabupaten Poso. *E-J. Agrotekbis* 8, 8(6), 1358–1366.
- Mufidah, L. (2020). Analisis Kebijakan Pemerintah Kabupaten Bojonegoro dalam Upaya Peningkatan Kesejahteraan Petani melalui Program Petani Mandiri (PPM). *Jurnal Inovasi Penelitian*, 1(7).
- Pangestu, F. W., & Prasetya, F. (2021). *Ekonomi Pembangunan Kajian Teoritis & Studi Kasus* (Cetakan I). UB Press.
- Pasaribu, D., Gultom, L., Lubis, E., Sumbayak, R. J., & Dkk. (2021). *Pembangunan Pertanian* (Cetakan I). CV Bintang Semesta Media.
- Permatasari, V. B. D. (2019). Analisis Pengaruh Pertumbuhan Ekonomi, IPM, Tingkat Pengangguran, Upah minimum Terhadap Kemiskinan di Jawa Timur tahun 2012-2017. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699.
- Prasetyani, D., & Sumardi. (2020). *Analisis Produk Domestik Regional Bruto (PDRB)*. CV Djiwa Amarta Press.
- Putri, L. A., Widayanti, S., & Syah, M. A. (2023). Kinerja Sektor Pertanian & Non Pertanian dalam Perekonomian Kabupaten Ponorogo. *Jurnal Internasional Ilmu Sosial, Pendidikan, Ekonomi, Penelitian Pertanian, & Teknologi (IJSET)*.
- Rapanna, P., & Sukarno, Z. (2017). *Ekonomi Pembangunan*. CV Sah Media.
- Renjaan, D. (2020). Hubungan Sektor Ekonomi Basis Dengan Penyerapan Tenaga Kerja di Kabupaten Halmahera Barat. *Jurnal Pendidikan & Ekonomi (JUPEK)*, 1(1), 1–9. <http://jurnal.stkipkieraha.ac.id/index.php/jupek/article/view/56>
- Sawitri Djelantik, A. A. A. W., Sudarma, I. M., & Dera Setiawan, I. G. B. (2022). Alih Fungsi Lahan Sawah & Dampaknya di Kecamatan Kediri Kabupaten Tabanan. *Jurnal Manajemen Agribisnis (Journal Of Agribusiness Management)*, 10(2), 904. <https://doi.org/10.24843/jma.2022.v10.i02.p14>
- Sayifullah, S., & Emmalian, E. (2018). Pengaruh Tenaga Kerja Sektor Pertanian & Pengeluaran Pemerintah Sektor Pertanian Terhadap Produk Domestik Bruto Sektor Pertanian Di Indonesia. *Jurnal Ekonomi-Qu*, 8(1), 66–81. <https://doi.org/10.35448/jequ.v8i1.4962>

- Sidharta, V., Resman Muharul Tambunan., Azwar, & Aliafia Ghaniyyu. (2021). Suatu Kajian :Pembangunan Pertanian Indonesia. *KAIS Kajian Ilmu Sosial*, 2(2), 229–232.
- Sjamsir, Z. (2017). *Pembangunan Pertanian dalam Pusaran Kearifan Lokal*. CV Sah Media.
- Sofyan, M. (2021). *Pengembangn Sektor Unggulan Pendukung Perluasan Kesempatan Kerja di Provinsi Jawa Tengah* (Cetakan I). CV ODIS.
- Sujaya, D. H., Hardiyanto, T., & Isyanto, A. (2018). Factors That Influence on the Productivity of Rice-Fish Farming in Tasikmalaya City. *Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis.*, 4(1), 25–39.
- Suparmono. (2018). Buku Pengantar Ekonomi Makro. In *Pengantar Ekonomi Makro*. UPP STIM YKPN.
- Waridin. (2019). *Pembangunan Pertanian &Perdesaaan dalam Upaya Pengentasan Kemiskinan*