FOOD CROPS-BASED AND HORTICULTURE-BASED VILLAGES POTENTIAL AS GROWTH CENTER VILLAGES IN JAMBI PROVINCE, INDONESIA

Junaidi Junaidi*, Yulmardi Yulmardi2, Hardiani Hardiani3

1,2,3 Development Economics Department, Faculty of Economics and Business, Universitas Jambi, Indonesia

*Corresponding author Email: junaidi@unjia.ac.id

Abstract

This study aims to analyze the potential of food crops-based and horticulture-based villages to become growth center villages in Jambi Province. The potential of the villages as growth centers is evaluated based on the village development level and non-agricultural activities in the villages. Primary data for this study are the raw data of Village Potential Data Collection or Potensi Desa (PODES) 2018. Data were analyzed in quantitative descriptive method. The results showed that: 1) Based on the main source of income, of the total villages in Jambi Province (1399 villages), 96.71 percent (1353 villages) were mainly in the agricultural sector and only 3.29 percent were mainly in industrial/manufacturing sector or sector of services. Furthermore, out of the total agricultural villages, 28.97 percent of them were food crops-based and horticulture-based villages; 2) Based on the village development level and non-agricultural activities in the food crops-based and horticulture-based villages, it can be stated that there is a great potential to develop these villages to be growth centers. Only 4.34 percent of the villages are listed as underdeveloped villages, while the majority of them (95.66 percent) are developing villages and independent/developed villages. Moreover, nearly half (46.17 percent) of the food crops-based and horticulture-based villages already have non-agricultural MSMEs as a basis to be established as growth center villages. Industries developed in these villages are wool products, products of noble metal or metal materials, fabric goods/weaving, pottery/ceramics/stone, and woven industries.

Keywords: food crops, growth centers, horticulture, industry, MSME.

INTRODUCTION

Economically, ecologically, and socio-culturally, agriculture is one of the strategic sectors and plays an important role in national development. Agriculture can improve the prosperity and welfare of the community as well as strengthen regional and national economic structures; agriculture has ecological function to improve soil and water conservation, as a carbon sink, oxygen producer, and buffer zone of protected areas; and agriculture has social-cultural function to unify the nation.

From these consideration, it is necessary to formulate a basic framework of robust and resilient agricultural development, it means that the development must be supported by all components dynamically and resiliently, and able to optimize resources, capital, energy, and technology while being able to create community welfare. Agricultural development must be based on the principle of ‘sustainability’ which includes ecological, social, and economic aspects (Wibowo, 2004).

Same with other regions, agriculture sector is also one of the mainstay sectors in economic growth and regional development in Jambi Province. In 2017, agricultural sectors (agriculture, livestock, hunting, and agricultural services) contributed more than a quarter (25.97 percent) of the GRDP of Jambi Province. In the same year, the growth of the agricultural sector which reached 5.80 percent per year was also higher than the overall economic growth of 4.64 percent.

There are two sub-sectors that have an important role in the growth of the agricultural sector, namely food crops and horticulture (other than the plantation sub-sector) ((Raj, Hariya, Yadav, and Banerjee, 2019), (Singh, Patel, Dalwadi, Kathota, Suthar, and Kalubarme, 2017)). Food crops and horticulture with its various kinds are regarded as main commodities which drive the growth of rural economies in Jambi Province and they had been able to contribute 22.23 percent in 2017 for GRDP of agricultural sectors. In addition, food crops and horticulture also have a very important role in realizing food security, and they are potentially developed in agribusiness because of their high economic value and high added value.

Considering the huge potential and importance of food crops and horticultural commodities, it is important to formulate the right policy in order to improve regional development performance of Jambi Province. It should be food crops and horticultural development policies related sectorally to non-agricultural activities (upstream and downstream) or spatially related between regions. In this context, a model of growth center villages must put agriculture as the main driver of the economy.

Based on the consideration, this study aims to analyze the potential of food crops-based and horticulture-based villages to become growth center villages in Jambi Province.

One of the fundamental elements in regional development is the existence of the center. In this context, the concept of growth pole is a link between the structure of nodal regions that develops on their own and physical and regional planning. According to Haruo [4], to encourage growth in developing countries, a regional development strategy is recommended to take in the form of concentrating investment in a limited number of growth poles.

Adisasmita (2008) and Priyadi (2017) attempted to explain the impact of development from the existence of growth poles in a specific geographic context. He defined a regional growth pole as a set of expanding industries located in an urban area and including further development of economic activity throughout its zone of influence.

Related to the development of village that will become a growth center, Jamal (2009) stated that there are three poles of thought in Indonesia related to the approach of rural development. First group sees rural areas and its communities as something particular and specific and in the effort to drive the development, government intervene as little as possible. Second group tends to
see the village as something homogeneous and its development needs to be driven by government's interference at its maximum. Third group tries to balance the power of rural communities and government in determining the direction and purpose of social change in rural communities. According to this group, blueprint system in rural development will make it efficient to reach the goal but it does not grow the participation of community.

Mosher (1974) suggested that the village can develop progressively if it has some accelerator components, namely: 1) the village must has market towns; 2) rural roads must be built to expand and reduce costs as well as facilitate the distribution of information and services; 3) there must have local testing to find the most appropriate way of attempting to the condition of the village; 4) there should have counselor or officer who can help residents to learn new technologies including the way to make use of these technologies; and 5) credit facilities should be provided to finance production and product marketing.

Mosher's argument was developed by experts from Indonesia by adding social and institutional aspects. Prabowo (1995) argued that it is necessary to have a diversification of rural businesses in order to spur the growth of economic activities, in addition to boost traditional agricultural production, that can become the foundation for sustainable development and equity. Murdoch (2000) also argued that, besides vertical linkages, it is also necessary to build horizontal linkages by strengthening local production that benefits the rural economy as a whole by integrating it into a broader economy. In this case, rural development is not restricted to agricultural sector (production) but also to agricultural sector related to the economy of urban areas.

There have been many similar studies on growth center at the village-level, sub-district-level, or regency-level. However, there are no researches that specifically study food crops-based and horticulture-based growth center villages as the focus of the research.

Junaidi (2012) examined the determinants of the development of villages in Jambi Province, especially in ex-transmigration settlement villages. The main results of the study are: (1) the development of ex-transmigration villages can be determined by its community welfare, non-agricultural activities and agricultural activities; (2) it is important to integrate plantation activities with other economic activities to create a growth center village. Junaidi, Amir and Hardiani (2014) examined the development of agro-industry clusters of micro, small, and medium enterprises in enhancing the competitiveness in Jambi Province. The study concluded that there is potential for developing MSME agro-industry clusters in Jambi Province in order to integrate agricultural activities and other economic activities. Junaidi, Amir, and Hardiani (2016) conducted a research about the formulation of a development model for plantation-based growth center village. The main conclusion of the study is that there are five potential industrial groups in plantation-based growth centers in Jambi Province, namely: a) industry of flour made from grains/seeds/beans/nuts, industry of crude vegetable and animal oils; b) industry of soybean tempe and tofu, of food from soybean and legumes, other than soya sauce, tempe, and tofu, of crackers, chips, and the like from sweet potato and banana, of breads and cakes; c) day processing industry; d) furniture industry; wood, rattan, bamboo, and the like industry. Clay processing industry has the highest weight of core competence, followed by other industries. Furthermore, five regional core competence criteria that support most the development of potential industries in rural areas are the market outside the region/village, market opportunity to continue developing, local/village market, availability of supporting infrastructure, and local content.

Muta’ali (2003) had a research on the growth center villages in Yogyakarta and he found that the growth center village is a village in a strategic location which has high service hierarchy, and various basis sectors. Its economic activity lies in the agricultural sector, with support from service, trade, and industry sectors. Most of the growth center villages are the capital of the sub-district, and some of the villages are the capital of the regency.

Research by Farizal, Hidayati, and Kuncoro (2011) found that the formation of growth centers in Bima Regency was due to the existence of forward and backward linkages from existing industries; businesses embracing regional market shares; industrial agglomeration; and the amount of labor absorbed. In addition to the well development of the industries, Sugiyanto and Sukses (2010) also found that potential natural resources also support the growth centers.

Research by Nainggolan (2013) in Simalungun Regency found that the availability of facilities is a major factor in creating growth centers. Similar findings were stated by Gulo (2015) in Nias Regency and Utari (2015) in Yogyakarta City. The establishment of a growth center is driven by the availability of a comprehensive facility. The more comprehensive the economic and social facility a region has, the more it attracts the public's interest to carry out activities in the region.

METHODS

Data in this study were from 2018 Village Potential Data Collection (Potensi Desa/PODES) and 2018 Village Development Index (Indeks Pembangunan Desa/IPD). Data were analyzed in descriptive statistical analysis using single frequency tables and cross-tabulations.

Raw data from PODES was processed to get the classification of villages on the basis of the main source of income and main commodity. Villages are grouped into food crops-based, horticulture-based, plantation-based, fisheries-based, and agricultural services and others based village. Raw data from IPD was processed to get the development level of the village. Based on the development level, villages are grouped into underdeveloped, developing, and independent village.

RESULTS AND DISCUSSION

Source of Income and Main Commodity of Rural Community in Jambi Province

Based on 2018 PODES, there are 1,399 desa (villages) and 163 kelurahan (urban villages). Based on the source of income and main commodity, 1,353 villages or 96.71 percent of the total villages in Jambi Province were agricultural villages. On the contrary, only 3.29 percent of the villages had non-agricultural sector as its main source of income and commodity (Table 1). This section may each be divided by subheadings or may further divided into next heads as shown below.
Various agricultural commodities have developed in agricultural villages in Jambi Province. There are six main commodities in agricultural villages in Jambi Province. The biggest commodity is rubber. More than one third (38.06 percent) of agricultural villages in Jambi Province are villages with rubber as its main commodities. In the second place, there are villages with rice as its main commodities, followed by oil palm, horticulture, coconut, and coffee. Other commodities beside these six commodities were distributed in relatively small quantity and proportion (Table 2).

Table 3 provides the distribution of agricultural villages based on its commodity groups, namely food crops (rice and palawija/secondary food crops), horticulture, plantations (rubber, palm oil, coffee, cocoa, coconut, sugar cane), fisheries (capture fisheries and aquaculture), and other agricultural services.

Based on Table 3, 10 regencies/cities in Jambi Province have agricultural villages, 8 of them are regions dominated by plantation-based villages, while two regions, namely Kerinci Regency and Sungai Penuh City have dominated by food crops-based villages. The dominance of plantation-based villages is very evident (with a proportion above 90 percent) in Batanghari, Bungo, Merangin, Tanjung Jabung Barat, Tanjung Jabung Timur, and Tebo. On the contrary, in Muaro Jambi and Sarolangun, even though plantation-based villages are dominant, it seems that food crops-based villages began to develop.

Table 1: Distribution of Villages Based on Source of Income and Main Commodity in Jambi Province, 2018

| Source of Income/Main Commodity | Number of Villages | % |
|--------------------------------|-------------------|---|
| Agriculture                    | 353               | 36.71 |
| Mining and Excavating          | 7                 | 0.50 |
| Manufacture Industry           | 8                 | 0.57 |
| Large and Retail Trade and Restaurants | 20         | 1.43 |
| Services                       | 10                | 1.71 |
| Others                         | 1                 | 0.07 |
| **Total**                      | 1,399             | 100.0 |

Source: Processed from raw data of PODES 2018

Table 2: Distribution of Agricultural Villages Based on Its Main Commodity/Sector in Jambi Province, 2018

| Main Commodity          | Number of Villages | % |
|-------------------------|--------------------|---|
| Rice                    | 304                | 22.47 |
| Palawija/Secondary food crops | 7         | 0.52 |
| Horticulture            | 81                 | 5.99 |
| Rubber                  | 515                | 38.06 |
| Palm Oil                | 330                | 22.17 |
| Coffee                  | 57                 | 4.21 |
| Cocoa                   | 2                  | 0.15 |
| Coconut                 | 71                 | 5.25 |
| Sugar cane              | 1                  | 0.07 |
| Capture fisheries       | 5                  | 0.37 |
| Aquaculture             | 5                  | 0.32 |
| Agricultural Services   | 1                  | 0.06 |
| Others                  | 3                  | 0.22 |
| **Total**               | 1,353              | 100.0 |

Source: Processed from raw data of PODES 2018

Table 3: Distribution of Agricultural Villages Based on Regency in Jambi Province, 2018

| Regency/City             | Village Groups (%) | Number of Villages (N) |
|-------------------------|--------------------|------------------------|
|                         | Food crops | Horticulture | Plantations | Fisheries | Agricultural Services & Others | Total | |
| Kerinci                 | 65.71       | 23.93        | 8.93        | 0.00      | 1.43                        | 144.00 | |
| Merangin                | 3.47        | 0.00         | 96.53       | 0.00      | 0.00                        | 109.00 | |
| Sarolangun              | 22.22       | 0.00         | 77.88       | 0.00      | 0.00                        | 73.00  | |
| Batang Hari             | 4.59        | 0.00         | 95.41       | 0.00      | 0.00                        | 280.00 | |
| Muaro Jambi             | 19.71       | 4.38         | 70.80       | 5.11      | 0.00                        | 137.00 | |
| Tanjung Jabung Timur    | 5.48        | 2.74         | 90.41       | 1.37      | 0.00                        | 141.00 | |
| Tanjung Jabung Barat    | 2.68        | 1.79         | 92.86       | 0.00      | 2.68                        | 107.00 | |
| Tebo                    | 0.93        | 0.00         | 99.07       | 0.00      | 0.00                        | 48.00  | |
| Bungo                   | 2.84        | 0.71         | 96.45       | 0.00      | 0.00                        | 202.00 | |
| Sungai Penuh            | 91.67       | 6.25         | 2.00        | 0.00      | 0.00                        | 112.00 | |
| Jambi Province          | 22.99       | 5.99         | 69.92       | 0.59      | 0.52                        | 1353.00|

Source: Processed from raw data of PODES 2018

Nonagricultural villages in Jambi Province consist of villages with mining and excavating, manufacture industry, large/retail trade and restaurants, services, and others as its main source of income. Based on its distribution, the majority of non-agricultural villages are villages with large/retail trade and restaurants as its main commodity, followed by those with services as its main commodity. Conversely, villages with others as its main commodity have the least number.
Development Level of Agricultural Villages

In order to assess the development level of a village, Indonesian Ministry of National Development Planning (abbreviated Bappenas) and Statistics Indonesia (BPS) released a measurement system known as the Village Development Index (Indeks Pembangunan Desa/IPD). IPD is a composite index structured based on five dimensions which includes 12 variables and 42 indicators. Dimensions in IPD are Basic Service Dimensions, Infrastructure Condition Dimensions, Transportation Dimensions, Public Service Dimensions, and Village Government Implementation Dimensions. Based on the index, villages are categorized into underdeveloped village, developing village, and independent village.

In detail, the development level of village on the basis of regency/city in Jambi Province is given in Table 4.

| Regency/City | Development Level of Village (%) | Total Number of Villages (N) |
|--------------|---------------------------------|-----------------------------|
| Kerinci      | 2.50                            | 92.14                       | 5.36 | 100.00 | 144 |
| Merangin     | 12.87                           | 79.21                       | 7.92 | 100.00 | 109 |
| Sarolangun   | 10.42                           | 85.42                       | 4.17 | 100.00 | 73  |
| Batang Hari  | 2.75                            | 96.33                       | 0.92 | 100.00 | 280 |
| Muaro Jambi  | 0.00                            | 89.78                       | 10.22| 100.00 | 137 |
| Tanjung Jabung Timur | 5.48 | 94.52 | 0.00 | 100.00 | 141 |
| Tanjung Jabung Barat | 0.04 | 86.61 | 5.36 | 100.00 | 107 |
| Tebo         | 2.80                            | 84.11                       | 13.08| 100.00 | 48  |
| Bungo        | 1.42                            | 90.07                       | 8.51 | 100.00 | 202 |
| Sungai Penuh City | 0.00 | 89.58 | 10.42| 100.00 | 112 |
| Jambi Province | 5.10 | 88.32 | 6.58 | 100.00 | 1353|

Source: Processed from raw data of PODES 2018

Of the total agricultural villages in Jambi Province, most of the villages (88.32 percent) are developing villages. Only 5.10 percent of the villages are underdeveloped, and only 6.58 percent of the villages are independent.

Based on regency/city, the largest proportion of underdeveloped villages are located in Merangin Regency, followed by Sarolangun Regency and Tanjung Jabung Barat Regency. On the contrary, there are two regions that do not have underdeveloped villages. Those are Muaro Jambi Regency and Sungai Penuh City (Table 5).

| Village Group | Development Level of Village (%) | Number of Villages (N) |
|---------------|---------------------------------|------------------------|
| Food crops    | 4.50                            | 89.70                  | 5.80 | 100.00 | 311 |
| Horticulture  | 3.70                            | 92.60                  | 3.70 | 100.00 | 81  |
| Plantations   | 5.30                            | 87.50                  | 7.20 | 100.00 | 946 |
| Fisheries     | 12.50                           | 87.50                  | 0.00 | 100.00 | 8   |
| Agricultural Services/Others | 14.30 | 85.70 | 0.00 | 100.00 | 7  |
| Total         | 5.10                            | 88.30                  | 6.60 | 100.00 | 1353|

Source: Processed from raw data of PODES 2018

Based on its main commodity, villages with food crops, horticulture, and plantation commodities have a better development than those with fisheries and agricultural services and other commodities. The largest proportion of independent villages is in the plantation group, followed by food crops and horticulture groups. On the contrary, there are no independent villages in fisheries group and agricultural services/other group. There are even underdeveloped villages in these two groups with a relatively large proportion.

MSME industry in Agricultural Villages in Jambi Province

The existence and growth of industries in rural areas are believed to be able to enhance the development of villages as well as the welfare of their communities. Industry will increase the added value of the agricultural products and will further increase the income of the farmers. Lanjouw, and Shariff, (2004), Malek, and Usami, (2010), Yulmardi, and Junaidi, (2020).

Various industrial activities (especially MSME industry) have been developing as well in rural areas in Jambi Province. However, these industries have not been evenly distributed in all villages. Especially for agricultural villages, only 42.87 percent of the total villages have MSME industry. In contrast, the majority of the villages (57.13 percent) did not yet have MSME industry (Table 6).

| Village Group | MSME Industry |
|---------------|---------------|
|               | Have | Do not have | Total | Number of Villages (N) |
| Food crops    | 41.80 | 58.20       | 100.00 | 311 |
| Horticulture  | 62.96 | 37.04       | 100.00 | 81  |
| Plantations   | 41.23 | 58.77       | 100.00 | 946 |
| Fisheries     | 62.50 | 37.50       | 100.00 | 8   |
| Agricultural Services/Others | 57.14 | 42.86 | 100.00 | 7  |
| Total         | 42.87 | 57.13       | 100.00 | 1353|

Source: Processed from raw data of PODES 2018
2018 data shows that there were 6,752 units of MSME industry in 1,353 agricultural villages in Jambi Province. It covers a wide range of industries as given in the following Table 7.

Table 7: Distribution of Type of MSME Industry in Agricultural Villages in Jambi Province, 2018

| Type of Industry                              | Qty | %  |
|----------------------------------------------|-----|----|
| a. Leather industry                          | 1   | 0.06 |
| b. Wood industry                             | 1566| 23.19 |
| c. Precious metals industry and metal industry | 169 | 2.50 |
| d. Clothes/Weaving industry                  | 412 | 6.10 |
| e. Ceramics/Stone industry                   | 1402| 20.76 |
| f. Cane work industry ([from bamboo, rattan, pandanus, grass, and the similar)] | 698 | 10.34 |
| g. Food and beverage industry                | 1782| 26.39 |
| h. Other industry                            | 719 | 10.65 |
| Total                                       | 6752| 100.00 |

Source: Processed from raw data of PODES 2018

Table 7 shows that the main industry in the agricultural villages in Jambi Province was Food and Beverage industry, followed by Wood industry, and Ceramics/Stone industry. Referring to the table, industries that are flourishing in the agricultural villages in Jambi Province are industries with its raw material from local agricultural products.

Based on Table 8, Food and Beverage industry is a quite prospective industry in the agricultural villages. It can be seen from the existence of this type of industry in all groups of village. On the contrary, Leather industry is only existed in plantation-based villages.

Table 8: Distribution of Type of MSME Industry Based on Groups of Agricultural Village in Jambi Province, 2018

| Village Group                      | Total Number of Villages (N) | Type of Industry                              | Qty | Horticulture | Plantations | Fisheries | Agricultural Services/Other | Total |
|------------------------------------|------------------------------|----------------------------------------------|-----|--------------|-------------|-----------|-----------------------------|-------|
| Leather industry                   | 1000                         | Leather industry                             | 1   | 0.00         | 100.00      | 0.00      | 0.00                        | 1000  |
| Wood industry                      | 1566                         | Wood industry                                | 1566| 14.24        | 2.75        | 82.69     | 0.00                        | 1000  |
| Precious metals industry and metal industry | 169 | 100.00 | 169 | 30.18        | 1.78        | 68.05     | 0.00                        | 1000  |
| Clothes/Weaving industry           | 412                          | Clothes/Weaving industry                     | 412 | 17.23        | 1.70        | 81.07     | 0.00                        | 1000  |
| Ceramics/Stone industry            | 1402                         | Ceramics/Stone industry                      | 1402| 6.70         | 14.48       | 78.82     | 0.00                        | 1000  |
| Cane work industry ([from bamboo, rattan, pandanus, grass, and the similar]) | 698 | 100.00 | 698 | 18.62        | 0.00        | 74.79     | 0.00                        | 1000  |
| Food and beverage industry         | 1782                         | Food and beverage industry                   | 1782| 16.22        | 7.41        | 75.14     | 0.67                        | 1000  |
| Other industry                     | 719                           | Other industry                               | 719 | 9.32         | 4.31        | 86.37     | 0.00                        | 1000  |
| Total                              | 6752                          | Total                                        | 6752| 13.70        | 6.21        | 79.01     | 0.18                        | 1000  |

Source: Processed from raw data of PODES 2018

Wood industry has visible presence in food crops-based, horticulture-based, and plantation-based villages, and has a relatively small proportion in agricultural service/others based villages. Precious metals industry and metal industry, clothes/weaving industry, ceramics/stone industry and other industry are only found in food crops-based, horticulture-based, and plantation-based villages. Furthermore, cane work industry is growing in food crops-based and plantation-based villages as well as in agricultural services/others based villages.

CONCLUSION AND RECOMMENDATIONS

Conclusion
1. Based on its main source of income, of the total villages in Jambi Province (1,399 villages), 96.71 percent (1,353 villages) are agricultural villages, and only 3.29 percent are industry-based or service-based villages. Furthermore, of the total agricultural villages, 28.97 percent of them are food crops-based and horticulture-based villages;
2. Referring to the development level of villages and non-agricultural villages in food crops-based and horticulture-based villages, it can be concluded that these villages have a great potential to become growth centers. Only 4.34 percent of these villages are underdeveloped, while the majority of the villages (95.66 percent) are categorized as developing villages and independent villages. In addition, nearly half (46.17 percent) of food crops-based and horticulture-based villages already have non-agricultural MSME industries as the basis to be developed as growth center villages.
3. Industries growing in those villages are wood industry, precious metals industry and metal industry, clothes/weaving industry, ceramics/stone industry, and cane work industry.

Recommendation
Food crops-based and horticulture-based villages have great potential to be developed into growth centers, both in terms of its level of development and the existence of MSME industries. Therefore, the government needs to formulate policies in order to increase non-agricultural activities to encourage the acceleration of these villages to become growth centers. Furthermore, it is recommended in further research to analyze core competences in food crops-based and horticulture-based villages in order to create a policy framework and set a model of growth center village.
Source of Funding
This research was conducted based on the funding received from University of Jambi through The Institute of Research and Community Service of Universitas Jambi, Indonesia.

Conflict of Interest
The authors declare no conflict of interest.

REFERENCES
1. Adisasmita, R. (2008). Pengembangan Wilayah: Konsep dan Teori. Jakarta: Graha Ilmu.
2. Farizal, F., Hidayanti, A.N. & Kumcoro, T. (2011). Penentuan Faktor-Faktor yang Mempengaruhi Terbentuknya Pusat Pertumbuhan (Studi Kasus: Kabupaten Bima, NTT). Jurnal Tata Kota dan Daerah, 3(1): 39 – 46.
3. Gulo, Y. (2015). Identifikasi Pusat Pertumbuhan dan Hinterland Dalam Pengembangan Wilayah Kabupaten Nias. Widyaniset, 18(1): 37-48.
4. Haruo, N. (2000). Regional Development in Third World Countries: Paradigms and Operational Principles. Tokyo: The International Development Journal Co.Ltd.
5. Jamal, E. (2009). Membangun Momentum Baru Pembangunan Perdesaan di Indonesia. Jurnal Litbang Pertanian, 28(1):7-13.
6. Junaidi, J. (2012). Perkembangan Desa-Desa Eks Transmigrasi dan Interaksi dengan Wilayah Sekitarnya serta Kebijakan ke Depan (Kajian di Provinsi Jambi). (Doctoral Dissertation). Bogor, Institut Pertanian Bogor.
7. Junaidi., Amir, A. and Hardiani, H. (2014). Potensi Klaster Agroindustri Usaha Mikro Kecil dan Menengah di Provinsi Jambi. Jurnal Perspektif Pembiayaan dan Pengembangan Daerah, 2(1): 9-20.
8. Junaidi, J., Amir, A., and Hardiani, H. (2016). Model Pengembangan Desa Pusat Pertumbuhan Berbasis Komoditi Perkebunan. Research Report. Universitas Jambi, Jambi, Indonesia.
9. Lanjouw, P., & Shariff, A. (2004). Rural Non-Farm Employment in India: Access, Incomes and Poverty Impact. Economic and Political Weekly, 39(40): 4449-4446.
10. Malek, M.A. and Usami, K. (2010). Do non-farm incomes really matter for poverty among small households in rural Bangladesh? A case of advanced villages. Journal of Development and Agricultural Economics, 2(7): 250-267.
11. Mosher, A.T. (1974). Creating A Progressive Rural Structure. New York: Agriculture Development Council Inc.
12. Murdoch, J. (2000). Network—a new paradigm of rural development. Journal of Rural Studies, 16: 407-419.
13. Muta’ali, L. (2003). Studi Penentuan Desa-Desa Pusat Pertumbuhan di Propinsi Daerah Istimewa Yogyakarta. Majalah Geografi Indonesia, 17(1): 33 – 51.
14. Nainggolan, P.T. (2013). Analisis Penentuan Pusat-Pusat Pertumbuhan Ekonomi di Kabupaten Simalungung. Jurnal Ekonomi dan Keuangan, 1(12): 15-26.
15. Prabowo, D. (1995). Diversifikasi Perdesaan. Jakarta: UI-Press.
16. Priyadi U, Eko A. (2017). Identifikasi Pusat Pertumbuhan Dan Wilayah Hinterland di Provinsi Daerah Istimewa Yogyakarta. Asian Journal Of Innovation And Entrepreneurship, Vol. 2(2): 194.
17. Raj, A., Jhariya, M.K., Yadav, D.K. dan Banerjee, A. (2019). Agroforestry with Horticulture: A New Strategy Toward a Climate-Resilient Forestry Approach In Jhariya, M.K., Yadav, D.K. and Banerjee, A. (eds.) Agroforestry and Climate Change: Issues and Challenges, Canada: Apple Academic Press.
18. Singh, V., Patel A.N., Dalwadi, A., Kathota, J., Suthar, J. and Kalubarme, M.H. (2017). Horticultural Fruit Crop Plantations Mapping using Geo-informatics Technology in Gujarat State, India. International Journal of Advanced Remote Sensing and GIS, 6(2): 2033-2049.
19. Sugiyanto and Sukses (2010). Penelitian Pengembangan Pusat-Pusat Pertumbuhan Ekonomi di Kabupaten Lamandau. Jurnal Mitra Ekonomi dan Manajemen Bisnis, 1(2): 202-2015.
20. Utari, E.S. (2015). Analisis Sistem Pusat Pelayanan Pemukiman di Kota Yogyakarta Tahun 2014. Journal of Economics and Policy, 8(1):1-88.
21. Wibowo, R. (2004). Koperasi dan Korporasi Petani: Kunci Pengembangan Agrobisnis Berdaya Saing, Berkerakyatan dan Berkeadilan. PERHEPI National Conference. Jakarta, 28–29 May 2004.
22. Yulmardli, Y. And Junaidi, J. (2020). Household Livelihoods Strategies of Descendants of Transmigrants in Jambi Province, Indonesia. International Journal of Advanced Sciences and Technology, 29(3): 6118 - 6133.

Journal of critical reviews