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THE ROLE OF AGRICULTURAL SECTOR IN ECONOMY OF CENTRAL KALIMANTAN PROVINCE, INDONESIA: A STUDY AND SIMULATION OF INPUT-OUTPUT TABLES

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ABSTRACT
Central Kalimantan Province can be regarded as one of the leading centers of national agricultural development. The proportion of the agricultural sector is quite large (IDR. 39,775,875 million), namely 17.19% of the total output, which is higher than the output of other economic sectors, except for the manufacturing sector. Its ability to play a role in the economy can be seen from the size of its contribution to GRDP and its linkages with other sectors. This study aims to estimate the magnitude of the role of the agricultural sector in the economy. The analysis uses the Leontief Multiplier after collecting 42 sectors into 17 sectors and 23 sectors in the 2016-2021 Central Kalimantan Input-Output Table is completed. The results of the study, the agricultural sector plays a more domestically oriented sector from the output side, while it has less role (non-domestic basis) from the input side compared to other sectors. Nevertheless, to support Central Kalimantan Province as one of the national agricultural development centers, the injection of increased investment in this sector still needs to be implemented. Investment in the plantation sub-sector could be one of the other priorities, and it is suggested to the private sector to boost economic growth further.

KEY WORDS
Leontief multiplier, backward and forward linkage, output multiplier, input multiplier, household income multiplier, Central Kalimantan.

Central Kalimantan Province is one of the leading centers of national agricultural development because (1) it is one of the choices for a national food storage area because it has the potential for areas to be developed, especially in alluvial areas of ex-Peat land. The Food Estate program aims to build an integrated food-agriculture area. This program is a collaboration between several institutions in Indonesia to realize the Integrated Food Estate Program (Marwanto & Pangestu, 2021); (Darma Putra & Yuli Pratiwi, 2019), (2) The most significant plantation area is oil palm, the eighth order is the rubber (BPS Indonesia, 2022); (BPS Indonesia, 2020), and (3) the forest area and water area are relatively the largest due to the relatively rarer population density.

Loizou et al., (2019) states that the agricultural and food sector as sectors related to meeting people's basic needs has present a unique resistance in economic aberrations, has attitude resilience, and plays a stabilizer role, supporting growth and employment. Using the Input Output analysis tool, it is shown that the impact of the new Common Agricultural Policy (CAP) is not limited to the primary sector, but - directly and indirectly affects other sectors, as well as total output, employment opportunities and household income in the region. The results show that agriculture is an important driver of growth across the region, contributing to an increase in local gross output of around €300 million, only with the entry of funds, while 14% of it is distributed to sectors other than agriculture.

The agricultural sector enormously contributes to this region's regional gross income (GDP). The BPS of Central Kalimantan Province (2021) informs that the contribution of the agricultural sector is quite enormous (IDR 39,775,875 million; 17.19%) to GRDP is greater than that of other economic sectors, except for the manufacturing sector (IDR 63,652,980 million; 27.50%).

(Daryanto & Hafizrianda, 2010; (Siswahto & Muryani, 2020), explain that from the results of the I-O analysis, it can be decided which sectors are used as the leading sectors in

economic development. The expected financial growth target can be achieved better by focusing development on leading sectors. A sector that is indicated as a leader is considered to have very high direct and indirect links in an economy, so the effect it gives is double. On the one hand, this sector can encourage higher aggregate demand, and on the other hand, it can increase aggregate supply to meet domestic needs.

At the national level, the role of the agricultural sector concerning other sectors in the economy using the Input-Output analysis tool produced by several previous researchers is varied. (Syofya & Rahayu, 2018); Saragih, J.R. (2015) estimate that rice, corn, fruits, and vegetables are the leading commodities forming the economy in the agricultural sector in Indonesia, while generally, other agricultural commodities show lower backward linkages than forward linkages. The agricultural sector shows more significant forward linkages than backward linkages in Central Java Province, except for the livestock and food crops sub-sectors in Banten Province (Muchendar et al., 2020), in Banjarnegara (Oktafiana Fortunika et al., 2017), except for the fisheries subsector in East Java (Mushlih et al., 2018); (Oktavia et al., 2016); (Marlianti et al., 2017) based on the 2013 East Java IO table (2010 update), concluded that:

- The backward linkage with the most outstanding value is in other livestock commodities (1.46);
- The forward linkage with an enormous value is in the rice commodity (1.48);
- Leading commodities in the agricultural sector, namely: seafood commodities and other fishery products, land fish commodities and other fishery products, rice commodities, corn commodities, vegetable commodities, fruit commodities, commodity soybeans, egg commodities, beef commodities, chicken commodities, fresh milk commodities, other livestock commodities, sheep and goat commodities, sugarcane commodities, tobacco commodities (Rosy & Bahij, n.d.).

(Haris et al., 2018) stated that West Java's food crops sub-sector needs stronger links with its upstream and downstream sectors. The final demand impact of the food crops sub-sector on output, gross value added, and household income is also lower than that of the processing industry sector. (Widyawati, 2017); (Wijaya et al., 2016) states that the output multiplier of the agricultural sector has a lower output multiplier effect than other sectors. However, the multiplier effect of household income and employment opportunities has a more significant multiplier effect than other sectors. (Indah et al., 2022), In West Kalimantan Province, the highest value of backward linkage is the plantation sector and other annual crops. The agricultural and hunting services sector has the highest value of forward linkages; However, the multiplier effect on output, income and the multiplier on the number of workers from the agricultural sector is still lower than other sectors. The agricultural sector is interdependent with other sectors to grow (Dawson, P.J. 2005); Gilbert, *et al*., 2013).

Several research results in other countries show similar results berbeda (Fauzi & Sutrisno, 2022); Malba & Taher 2016). (Tekin & Evcim, 2011) conclude that the agricultural sector has less "backward dependency coefficient" than other sectors; it is supported by most to fulfill its input. The rating is 46 out of 59 sectors. On the other hand, agriculture has one of the highest "forward dependency coefficients" of any other sector; it transfers most of its product to other sectors lain (Tanggu REDU et al., 2020); (Kang, 2015); (Ouma et al., 2016). (Yusof Saari et al., 2013) show that the agricultural sector contributes primarily through forward linkages, implying that the output of this sector is demanded more by other sectors, particularly the manufacturing sector, as their input. Large-scale oil palm plantations (plantations and smallholders) should be highlighted for economic sector growth policies because of the strong pull effect in other countries. (Poonyth et al., 2001) in this paper a simple growth model is adapted to explain the effect of the agricultural sector's growth on the non-agricultural sector. The empirical results suggest that for a 1% growth in the agricultural sector, the non-agricultural sector responds by more than 1%. The results also confirm that productivity difference exists, the non-agricultural sector being more efficient in terms of input use.

Agree with Daryanto & Hafizrianda, (2010) that the size of the sector's role in the economy is not complete if it is only shown by the large share of this commodity in GDP

because it cannot describe its ability to encourage growth and development of other sectors. So, there is an urgent main question to be answered in this research: How significant is the sector's role in the economy of Central Kalimantan Province?

This study aims to estimate the role of the agricultural sector in the economy (direct and indirect linkages, impact on total input and output, effect on household income, and output elasticity). The results of this research are expected to provide helpful information, especially for the Government to produce optimal policy products for the economy.

METHODS OF RESEARCH

The type of data used is secondary data from the 2016 Central Kalimantan Province Input-Output Table for the 2021 Fiscal Year (42 Sectors). The analytical method used is the Input-Output analysis method using an open input-output model analysis. The steps taken are as follows:

- Aggregating the 2016 Central Kalimantan Province Input-Output Table for the 2021 Fiscal Year (42 Sectors) to become the 2016 Central Kalimantan Province Input-Output Table for the 2021 Fiscal Year (17 sectors). The agricultural industry, which initially consisted of 7 (seven) sub-sectors, was aggregated to be only the agricultural sector. Likewise, the industrial sub-sector became only the manufacturing industry sector, and the service sub-sub-sector became several service sectors;
- Compile an Identity Matrix (matrix I). The identity matrix is arranged in row and column sizes according to the number of economic sectors analyzed (17). All the elements in this matrix consist of numbers 0 and 1 in the diagonal matrix;
- Calculating the Input Coefficient (matrix A). The input coefficient is the input portion of a sector to its total input. The demand:

$$A_{ij} = z_{ij}/\sum z_j \quad \ldots\ldots(1)$$

Where: A_{ij} = input coefficient row i column j; z_{ij} = intermediate input sector ij; z_j = intermediate input sector j.

- Compile Leontief Matrix. Leontief matrix is the difference between matrix I and matrix A:

$$M = I - A \quad \ldots\ldots(2)$$

Where: M = Leontief matrix; I = identity matrix; A = input coefficient matrix.

- Compile Invers Leontief matrix (Leontief Multiplier):

$$M^{-1} = (I - A)^{-1} \quad \ldots\ldots(3)$$

Where: M^{-1} = Inverse Leontief matrix (Leontief Multiplier); I = identity matrix; A = input coefficient matrix.

- Calculating Direct and Indirect Linkages. Direct, indirect linkages, in this case, are differentiated into the direct, indirect backward link and direct, indirect forward Links:
  - Direct, indirect backward linkage is the sum of the columns in the inverse Leontief (M)-1 matrix in Table I-O;
  - Indirect, direct linkage to the number of rows in the inverse Leontief (M)-1 matrix in Table I-O.
- The value of the household income multiplier is estimated using the formula:

$$HHIM = (\Sigma W_i \times M^{-1}{}_{ij})/W_i^* \quad \ldots\ldots(4)$$

Where: HHIM = household income multiplier; W_i^* = sector I wage/salary coefficient (the value of sector i wages/salaries divided by the total value output; $M^{-1}{}_i$ = input coefficient multiplier matrix.

- The value of the output elasticity ($\in_o$) is estimated using the formula:

$$\in_o = (FD_i/O_i) \times M^{-1}{}_j \text{ .....(5)}$$

Where: $\in_o$ = output elasticity; FD_i = final demand sector I; O_i = total output sector I; $M^{-1}{}_j$ = output multiplier.

RESULTS AND DISCUSSION

From the Central Kalimantan Input-Output Table for 2016, 2021, it is known that the gross added value of the agricultural sector (74.54%) is relatively higher than the total intermediate input (25.46%). Gross value added consists of Compensation for Labor, Gross Business SuIDRlus, and Taxes–Subsidies on Production. The gross added value of this sector is distributed for gross business surplus (57.37%), compensation for labor (41.30%), and taxes/subsidies (1.33%). Furthermore, inputs between the agricultural sector are distributed between domestic imported goods from abroad and imported goods between provinces. The total input for the agricultural sector consists of input between regions (58.78%), intermediate input for inter-provincial imports (40.92%), and only a small amount of intermediate input for imports (0.30%). Sectors with a high coefficient of direct and indirect backward linkage (DIBL) are said to be sectors with a domestic basis, meaning that these sectors use more intermediate inputs originating from domestic production.

Muljarijadi (2011); Nazara S. (1997) states that (a) the base sector is a sector that can be exported to get a certain amount of income from outside the region, and (b) the non-base sector is a sector that supports the base sector. These sectors have the scope of the local economy and are a function of the total income of the region/region (Y_{nb} = a.Y). It determines the rank of sectors that are domestic-based or non-based from the input side; it can be seen from the ranking and value of Direct and Indirect Backward Linkages (DIBL) and the Power of Dispersion Index (PDI). The rating and the DIBL value, and the PDI for each sector can be seen in the following table.

Table 1 – Ranking and Value of Direct and Indirect Backward Linkages (DIBL) and Power of Dispersion Index (PDI) by Sector in Central Kalimantan Province in 2016-2021

Rank	Sector	DIBL	PDI
I	Electricity and Gas	2.0388	1.4646
II	Provision of Accommodation and Food and Drink	1.7162	1.2328
III	Manufacturing	1.6835	1.2094
IV	Health Services and Social Activities	1.4500	1.0416
V	Construction	1.4421	1.0359
VI	Government Administration, Defense, and Compulsory Social Security	1.3871	0.9965
VII	Transportation and Warehousing	1.3845	0.9946
VIII	Mining and Quarrying	1.3573	0.9751
IX	Water Supply, Severage & Waste Management, Remediation activities	1.3289	0.9547
X	Other Services	1.3096	0.9408
XI	Company Services	1.2803	0.9197
XII	Information and Communication	1.2649	0.9087
XIII	Wholesale and Retail Trade; Car and Motorcycle Repair	1.2303	0.8838
XIV	Real Estate	1.2287	0.8827
XV	Education Services	1.2274	0.8817
XVI	Agriculture	1.2075	0.8674
XVII	Financial Services and Insurance	1.1276	0.8100

Source: Table I-O Central Kalimantan Province, 2016-2021.

The Direct and Indirect Backward Linkage (DIBL) of the agricultural sector with other economic sectors is relatively the lowest (ranked XVI), and the Power of Dispersion Index (PDI) shows a figure of 0.8674 <1.0000. Because of that, it is classified as a non-domestic basis sector. If further broken down based on the 2016-2021 Central Kalimantan Input-Output Table (23 sectors), only the livestock sub-sector (DIBL = 1.5351, PDI = 1.1406) is

primary, while the other sub-sectors are non-base. The ranking and DIBL value, also the PDI of the Agriculture subsectors, can be seen in the following table.

Table 2 – Ranking and Value of Direct and Indirect Backward Linkages (DIBL) and Power of Dispersion Index (PDI) of Agricultural Sub-sectors in Central Kalimantan Province in 2016-2021

Rank	Subsector	DIBL	PDI
I	Animal Husbandry	1.5351	1.1406
II	Annual Plantations	1.2104	0.8994
III	Agricultural and Hunting Services	1.1917	0.8854
IV	Fishing	1.1556	0.8586
V	Food Crops	1.1542	0.8576
VI	Annual and sesosonal Horticulture crops, Others	1.1307	0.8401
VII	Forestry and Logging	1.1153	0.8287

Source: Table I-O Central Kalimantan Province, 2016-2021.

The value of direct and indirect backward linkages (DIBL) of the agricultural sector to other sectors can be seen in the following table.

Table 3 – Value of Direct and Indirect Backward Linkages (DIBL) of the Agricultural Sector to other Sectors in Central Kalimantan Province in 2016-2021

Agriculture to	DIBL
Agriculture	1.0785
Mining and Quarrying	0.0112
Manufacturing	0.3988
Electricity and Gas	0.0056
Water Supply, Severage & Waste Management, Remediation activities	0.0350
Construction	0.1001
Wholesale & Retail Trade; Car and Motorcycle Repair	0.0155
Transportation and Warehousing	0.0313
Provision of Accommodation and Food and Drink	0.1864
Information and Communication	0.0070
Financial Services and Insurance	0.0074
Real Estate	0.0146
Company Services	0.0165
Government Administration, Defense & Compulsory Social Security	0.0263
Education Services	0.0180
Health Services and Social Activities	0.0694
Other Services	0.0370
Total	1.2075

Source: Table I-O Central Kalimantan Province, 2016-2021.

The DIBL coefficient of 1.2075 means that if there is an increase in final demand in the agricultural sector by IDR 1 million. It will increase the supply of intermediate inputs as a whole in the economy of Central Kalimantan Province by IDR 1.2075 million, which is mainly distributed in the supply of intermediate inputs to the agricultural sector itself by 1.0785, manufacturing sector as much as IDR 0.0532 million, and other sectors are relatively small. Likewise, most of the different sub-sectors are distributed for each of its sub-sectors and use input from the manufacturing industry sector (Table Central Kalimantan IO 2016-2021, 23 sectors), except for the forestry sub-sector other than the input for the needs of the sub-sector itself and use the services of the construction sector.

The impact of the final demand on changes in household work income can be seen from the multiplier value of household work income. If there is an additional final demand for one unit in a particular sector, it will impact increasing output in this sector. This increase in production will accompany an increase in intermediate and primary inputs used by this sector. An increase in intermediate inputs will encourage increased production for the economic sectors, which are the input factors. In contrast, growing primary inputs will

increase wage/salary receipts. Because these wages/salaries are a source of income for households, indirect changes in demand in a sector will increase household income in this sector; details of the calculations can be seen in the following table.

Table 4 – Value of Household Income Multiplier per Sector in Central Kalimantan Province, 2016-2021

Rank	Sector	Household Income Multiplier
I	Electricity and Gas	5.7191
II	Manufacturing	3.9596
III	Real Estate	1.8402
IV	Mining and Quarrying	1.8133
V	Water Supply, Severage & Waste Management, Remediation activities	1.7401
VI	Provision of Accommodation and Food and Drink	1.4988
VII	Transportation and Warehousing	1.4944
VIII	Construction	1.4445
IX	Information and Communication	1.2521
X	Government Administration, Defense, and Compulsory Social Security	1.1859
XI	Health Services and Social Activities	1.1809
XII	Company Services	1.1684
XIII	Other Services	1.1598
XIV	Agriculture	1.1383
XV	Wholesale and Retail Trade; Car and Motorcycle Repair	1.1308
XVI	Financial Services and Insurance	1.0736
XVII	Education Services	1.0681

Source: Table I-O Central Kalimantan Province, 2016-2021.

The multiplier value of household work income in the agricultural sector is ranked XIV (1.1383), relatively the lowest compared to other sectors, instead the same low for all agricultural sub-sectors (Table IO Central Kalimantan 20162-21, 23 sectors). The multiplier value of household income in the agricultural sector is 1.1383, which means that each additional final demand for this sector of IDR 1 billion will increase household income in the agricultural sector by IDR 1.1383 billion. Sectors that have a high forward linkage coefficient are said to be domestically oriented sectors from the output side. So, it sells more of its output to meet intermediate input needs from the domestic production sector. The description of direct and indirect linkages between sectors/sub-sectors can be seen from the value of the output multiplier, both forward and backward.

To find out the ranking of sectors that are domestically oriented or not from the output side, it can be seen from the ranking and the Direct and Indirect Forward Linkage (DIFL) value, and the Sensitivity of the Dispersion Index (SDI) per sector in the following table 5.

Table 5 – Rating and Value of Direct and Indirect Forward Linkages (DIFL) and Sectoral Sensitivity of Dispersion Index (SDI) in Central Kalimantan Province in 2016-2021

Rank	Sector/subsector	DIFL	SDI
I	Manufacturing	2.3199	1.6665
II	Electricity and Gas	2.1777	1.5644
III	Agriculture	2.0586	1.4789
IV	Transportation and Warehousing	1.9646	1.4113
V	Wholesale and Retail Trade; Car and Motorcycle Repair	1.5920	1.1436
VI	Information and Communication	1.3244	0.9514
VII	Construction	1.2063	0.8665
VIII	Company Services	1.1961	0.8593
IX	Provision of Accommodation and Food and Drink	1.1817	0.8489
X	Real Estate	1.1697	0.8403
XI	Government Administration, Defense, and Compulsory Social Security	1.1158	0.8016
XII	Financial Services and Insurance	1.1115	0.7984
XIII	Mining and Quarrying	1.0949	0.7866
XIV	Other Services	1.0819	0.7772
XV	Water Supply, Severage & Waste Management, Remediation activities	1.0457	0.7512
XVI	Education Services	1.0124	0.7273
XVII	Health Services and Social Activities	1.0114	0.7266

Source: Table I-O Central Kalimantan Province, 2016-2021.

The agricultural sector's direct and indirect forward linkage (DIFL) value is 2.0586. This value is relatively large, ranking III after several other sectors. At the same time, the Sensitivity of the Dispersion Index (SDI) of 1.4789 > 1.0000 is classified as a domestic-oriented sector, mainly dominated by the plantation crops sub-sector (Table IO Central Kalimantan 2016-2021, 23 sectors).

The value of direct and indirect forward linkage (DIFL) of the agricultural sector to other sectors can be seen in the following table.

Table 6 – The value of direct and indirect forward linkages (DIFL) of the agricultural sector to other sectors in Central Kalimantan Province in 2016-2021

Agricultural Sector to	DIFL
Agriculture	1.0785
Mining and Quarrying	0.0112
Manufacturing	0.3988
Electricity and Gas	0.0056
Water Supply, Severage & Waste Management, Remediation activities	0.0350
Construction	0.1001
Wholesale & Retail Trade; Car and Motorcycle Repair	0.0155
Transportation and Warehousing	0.0313
Provision of Accommodation and Food and Drink	0.1864
Information and Communication	0.0070
Financial Services and Insurance	0.0074
Real Estate	0.0146
Company Services	0.0165
Government Administration, Defense & Compulsory Social Security	0.0263
Education Services	0.0180
Health Services and Social Activities	0.0694
Other Services	0.0370
Total	2.0586

Source: Table I-O Central Kalimantan Province, 2016-2021.

The DIFL coefficient of 2.0586 means that if there is a change in the final demand in the agricultural sector by IDR 1 million, where the last order in other sectors does not change, then the economic output of Central Kalimantan Province will increase by IDR 2.0586 million. It is distributed mainly to increased output supplied to the agricultural sector, IDR 1.0785 million. The manufacturing industry sector IDR 0.3988 million, accommodation and food and drink provision IDR 0.1864 million, construction IDR 0.1001 million, and other relatively small minor sectors. Then the sectoral response to changes in final demand can be seen from the output elasticity figures.

Table 7 – Output Elasticity per Sector in the Economy of Central Kalimantan Province in 2016-2021

Rank	Sector	Output Elasticity	Note
I	Manufacturing	1.7810	elastic
II	Transportation and Warehousing	1.2035	elastic
III	Agriculture	1.1547	elastis
IV	Construction	1.0792	elastis
V	Wholesale and Retail Trade; Car and Motorcycle Repair	1.0483	elastic
VI	Education Services	0.9996	in elastic
VII	Government Administration, Defense, and Compulsory Social Security	0.9921	in elastic
VIII	Mining and Quarrying	0.9794	in elastic
IX	Health Services and Social Activities	0.9765	in elastic
X	Provision of Accommodation and Food and Drink	0.9304	in elastic
XI	Real Estate	0.8799	in elastis
XII	Financial Services and Insurance	0.8749	in elastic
XIII	Other Services	0.8217	in elastic
XIV	Water Supply, Severage & Waste Management, Remediation activities	0.6835	in elastic
XV	Information and Communication	0.6204	in elastic
XVI	Electricity and Gas	0.5481	in elastic
XVII	Company Services	0.1994	in elastic

Source: Table I-O Central Kalimantan Province, 2016-2021.

According to Table 7, the output elasticity value of the agricultural sector is 1.1547 (> 1.0000), which means it is elastic and ranks III. Briefly, the output response of the agricultural sector is greater than the magnitude of changes in final demand that occur but slightly smaller than the manufacturing sector (1.7810) and the transportation and warehousing sector (1.2035).

With the commitment to make Central Kalimantan Province one of the leading centers of national agricultural development, it will be supported by significant investments sourced from the APBN, APBD, and others. If there is an injection in the form of an investment of IDR 1 billion, it will cause an increase in the economy of the agricultural sector, as seen in the following table.

Table 8 – Estimated Detailed Value of Increased GDP in the Agricultural Sector with an Investment of IDR 1 billion

Agriculture Sector	Amount (IDR million)		Increase Rate (IDR million)	
	Before Investment	After Investment	Total	Percentage
Total Input	39,775,875	39,777,083	1,207.5	0.0030
Intermediate Input Own Sector	2,199,582	2,200,661	1,078.5	0.0490
Intermediate Input Manufacturing Sector	1,676,595	1,676,648	53.2	0.0032
household income	12,243,352	12,244,490	1,138.3	0.0093
Total Output	39,775,875	39,777,934	2,058.6	0.0052
Intermediate Demand Manufacturing Sector	21,524,480	21,524,879	398.8	0.0019

Source: Table I-O Central Kalimantan Province, 2016-2021.

An investment of IDR 1 billion in the agricultural sector is estimated to increase the total input of the agricultural sector by IDR 1,207.5 million (0.0030%), where the increase in intermediate inputs for the needs of the agricultural sector itself is IDR 1.078.5 million (0.0119%), intermediate inputs from the manufacturing sector are IDR 53. 2 million (0.0032%), and the input between other sectors is relatively small. The increase in household income is IDR 1,138.3 million (0.0093%). This investment also increases the value of total output, which is greater, namely IDR 2,058.6 million (0.0052%), and increases supply to meet intermediate demand manufacturing sectors, which is IDR. 398.8 million (00.19%). When broken down further (Table IO Central Kalimantan 2016, 23 sectors processed), then the investment priority scale is mainly in the plantation manufactory because the manufacturing is the mainstay sector of the economy. The value of DIBL in the animal husbandry sub-sector is the highest among other agricultural sub-sectors. However, as with other agricultural sub-sectors, it has a relatively low DIFL compared to other sectors except for the manufacturing sector.

CONCLUSION

Based on the discussion above, several conclusions are obtained as follows:

- From an input standpoint, the agricultural sector plays a relatively less important role compared to most other sectors based on the following indicators: the direct and indirect backward linkages (DIBL) value of the agricultural sector is relatively the lowest (ranked XVI) compared to other economic sectors, and the Power of Dispersion Index (PDI) shows a figure of 0.8674 <1.0000. It is classified as a non-domestic-based sector; the agricultural sector household income multiplier figure of 1.1383 is relatively smaller than several other sectors (rank XIV);
- The agricultural sector, from the output side, plays a more critical role with the following indicators: the direct and indirect forward linkages (DIFL) value for the agricultural sector is 2.0586. This value is relatively large, ranking third after several other sectors, while the Sensitivity of the Dispersion Index (SDI) is 1.4789 > 1.0000 belonging to a domestically industry oriented; the output elasticity value of the agricultural sector is 1.1547 (> 1.0000), which means it is elastic and is ranked III. In

brief, the output response of the agricultural sector is greater than the magnitude of the change in final demand;

- Investment of IDR 1 billion in the agricultural sector is estimated to increase the total input of the agricultural sector by IDR 1,207.5 million (0.0030%) and increase household income by IDR 1,138.3 million (0.0093%). This investment also increased the total output value, which was more remarkable, IDR 2,058.6 million (0.0052%). The investment priority scale is mainly in the plantation manufactory because manufacturing is the mainstay subsector of the agricultural sector.

The agricultural sector plays a more domestically oriented sector from the output side, while it has less role (non-domestic basis) from the input side compared to other sectors. Nevertheless, to support Central Kalimantan Province as one of the national agricultural development centers, the injection of increased investment in this sector still needs to be implemented.

Investment in the plantation manufactory could be one of the other priorities. It is suggested to the private sector to boost economic growth further. Based on a simulated Input Output Table, investment options are also more optimal if disbursed in these two sectors (agricultural and agroindustry) because they can provide results in the form of additional Output as well as greater employment absorption compared to investment disbursement to other sectors with the same amount. It is expected that the economy of Central Kalimantan can be leveraged for its economic growth through increasing agroindustry output because it can reduce unemployment while reducing poverty.

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