Model of Fisheries Business Management Integrated that Sustainable and Accelerating Economic Growth Wakatobi District

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Abstract. *In Wakatobi regency especially in Kaledupa District as research location, the number of cultivation fishery and capture fishery business is seaweed commodity business as many as 814 people, Mixed fish commodity as many as 14 people, Tuna commodity as many as 20 people, Octopus commodity as many as 20 people, culinary industry commodity 43 people and fish trade commodities as many as 4 people. The research objectives are (1) to examine the value added value created by the six commodity sectors according to the primary input and the use; (2) To examine the direct linkage of forward and backward; (3) To examine direct and indirect linkages forward and backward; (4) Review the magnitudes of income multipliers; (5) Review the highest ranking of income generating companies in 6 commodity sectors. The results of the analysis found that: (1) According to the Primary Input, the amount of value added created by the six commodity sectors each production cycle is the first sector of Rp 6.55354 billion; Sector 2 of Rp4,420,000; Sector 3 of Rp. 4,895,000; Sector 4 of Rp. 4.349.998; Sector 5 of Rp.1.862.500; And sector 6 of Rp. 47.000.000 and overall Rp. 6.616.067 .; (2) According to Usage, the amount of economic growth created by 6 commodity sectors are: sector 1 amounting to Rp 7,123,340,000; Sector 2 amounting to Rp 4,900,000; Sector 3 of Rp. 5,425,000; Sector 4 of Rp. 4.93 million; Sector 5 of Rp.3,000,000; And sector 6 amounting to Rp.12.465.845.000; As well as the overall commodity sector is Rp. 19.607.440.000/ production cycle; (3) future direct linkages are sector 1 of 67,91%, sector 2 is 15,11%, sector 3 is 20,61%, sector 4 is 17,09%, sector 5 is 17,33% and sector 6 Rp. 7,10%, (4) direct relation backward that is sector 1 equal to 4,77% ,, sector 2 equal to 9,79%, sector 3 equal to 7,92%, sector 4 equal to 9,73%, sector 5 equal to 47, 89% and sector 6 of 65.04%; (5) direct and indirect linkages are sector 1 of 176,59%, sector 2 is 118,37%, sector 3 is 125,06%, sector 4 is 120,70%, sector 5 is 120,89% and Sector 6 of Rp.108,59%; (6) direct and indirect linkages of sector 1 is 105.12%, sector 2 is 113.87%, sector 3 is 109.98%, sector 4 is 111.63%, sector 5 is 160.83% and Sector 6 by 168.78%; (7) income multiplier that is sector 1 equal to 39,56%, sector 2 equal to 18,59%, sector 3 equal to 18,24%, sector 4 equal to 20,37%, sector 5 equal to 26,04% and sector 6 17 , 21%; (8) The highest rank of revenue multiplier type 1 is first sector 1 95,12%, second sector 3 is 90,92%, third sector 4 is 89,58%, fourth sector 2 is 87,81%, fifth sector 5 Equal to 62,17% and rank six is sector 6 equal to 59,24%.*

Keywords: value added, linkage, revenue multiplier, pre-eminent sector

I. Introduction

In the master plan of acceleration and expansion of Indonesia's economic development (MP3EI), the Sulawesi Corridor is a national fishery production center. In Southeast Sulawesi the fishery and capture fisheries production centers are in the waters of the Wakatobi Islands (Banda Sea and Kaledupa Reef). Wakatobi Islands is a row of small islands lined up from north to south ranging from Wanci Island, Kaledupa Island, Tomia Island and Binongko Island. The four islands form a district called Wakatobi Regency with 8 sub districts: (1) Wangi-Wangi District, (2) Wangi-Wangi Selatan District, (3) Kaledupa Sub district, (4) South Kaledupa Subdistrict, (5)) District Tomia, (6) District Tomia East, (7) District Binongko and (8) District Togo Binongko. Seaweed cultivation business center in Wakatobi Regency is Kaledupa District with fishermen number of 814 people and spread in 16 villages namely (1) Waduri Village as many as 53 people, (2) Balasuna Village as many as 40 people, (3) Ollo Village as many as 30 people , (4) Desa Laulua as many as 12 people, (5) Lefuto village as many as 59 people, (6) Samabahari village as many as 116 people, (7) Lagiwae Village as many as 40 people, (8) Sombano Village as many as 92 people, (9) Horuo Village as many as 20 people, (10) Mantigola Village as many as 60 people, (11) Darawa Village as many as 116 people, (12) Lentea village as many as 52 people, (13) Langge Village as many as 30 people, (14) , (15) Peropa village of 38 people and (16) Desa Tampara 16 People. Furthermore, in Kaledupa Sub-district there are also 54 fisheries businessmen who include: (1)

businessmen catching fisheries with fishing gear nets that produce mixed fish are as many as 14 people consisting of 7 people from Samabahari Village and 7 others from Mantigola Village; (2) businessman of catch fisheries with fishing gear which produces Tuna fish is 20 people consisting of 10 people from Samabahari village and 10 others from Mantigola Village; (3) fishery businessman with fishing gear for Octopus Fishing Fishing is 20 people consisting of 10 people from Samabahari Village and 10 others from Mantigola Village. Fisheries Businesses The cultivation and capture fisheries that number 148 people mentioned above, in conducting the production process and transactions of fishery commodities in the local market Wakatobi and inter island market Bau-Bau is always associated with the culinary industry sector and trade sector. The number of culinary industry business people in kaledupa district as many as 2 people and trade business as much as 2 people with the center of activity in the port area of Buranga Village. All of these business actors in the process of producing and transacting goods and services within the development area of Wakatobi Regency certainly creates added value of Bruta (Economic Growth) both from the side of the primary input and from the usage side. It also creates revenue multipliers for the management and the linkages between economic sectors both forward and backward. Taking into account such conditions, the authors are interested in assessing the magnitude of the creation of gross value added by business actors, revenue multipliers and interconnection among commodity sectors described through the objectives of this study.

Objective (1) Assess the amount of added value created by the 6 commodity sector by primary input and use; (2) To examine the direct linkage of forward and backward;(3) To examine direct and indirect linkages forward and backward; (4) To examine the magnitude of income multipliers of 6 commodity sectors; (5) Assessing the highest ranking of income generating developers in 6 commodity sectors.

II. Research Method

Research Methods to obtain data on factors of production of modan goods and factors of production of working capital, amount of production, price, quantity of goods sold to consumer of market inter commodities sector, to consumer of local market, to consumer of inter island market and to consumer of inter-country market is survey.

1. The analytical method used to obtain the data amount of Gross Value Added (growth) of the primary input side and from the use is in use IO Model, 6 Sector Commodity Transaction Production Process and Inter-Sector Commodity Market, Local Market, Inter-Island market and Inter-Country Market (Export) as shown in Table 1. Here.

Table 1. Model IO; 6 Commodity Sector Conducting Commodity Production and Transaction Process in Inter-Sector Market, Local Market, Inter-island Market at current prices in 2016.

Commodity Sector	1	2	3	4	5	6	TPA	C. -PL	C-PAP	C- PAN (Export)	Final TP	Total P. (Output)
1	X11	X12	X13	X14	X15	X16						
2	X21	X22	X23	X24	X25	X26						
3	X31	X32	X33	X34	X35	X36						
4	X41	X42	X43	X44	X45	X46						
5	X51	X52	X53	X54	X55	X56						
6	X61	X62	X63	X64	X65	X66						
IT Between												
Salary / Wages												
Profit												
Depreciation												
Tax												
NTB												
T. Input												

Table Description. IO
Toward Bottom: Economic Growth Review from Primary Input side:

X11, x21, x31, x41, x51, x61: Sector 1 Transactions with other Sectors.

TIAntara: Total Input Between Commodity Sector.

Salary / Wages: Salary / Labor Wages.

Profit: Operating Income

Depreciation: Depreciation of Capital Goods

Tax: Commodity sales tax

NTB: Gross Added Value (Salary + Profit + Depreciation + Tax)

T.Input: Total Input (TIAntara + NTB)

Right Tread: Economic Growth Study from the Usage side

X11, x12, x13, x14, x15, x16: Sector Transactions 1 with other Sectors.

TPA: Total Demand Between the commodity sector.

C.-PL: Consumption in Local Market.

C.-P.AP: Consumption in Inter-island Market.

C-PAN: Consumption in Inter-Country Markets (Exports)

TPAkhir: Total Final Request (CP.L. + CP.AP + CP.AN)

TP (Output): Total Demand (Output) (TPA + TPAkhir)

2. The analytical method to get the data amount of direct relevance to the forward and backward between the commodities sector in Table 2 below.

Table 2. Domestic Transactions Between 6 Commodity Sectors Closed Leontief IO Model (Matrix A)

	1	2	3	4	5	6	Ket. Directly forward
1	X11	X12	X13	X14	X15	X16	
2	X21	X22	X23	X24	X25	X26	
3	X31	X32	X33	X34	X35	X36	
4	X41	X42	X43	X44	X45	X46	
5	X51	X52	X53	X54	X55	X56	
6	X61	X62	X63	X64	X65	X66	
Tap. Straight back							

Based on Table 2. Matrix A obtained information:

a. **Directly ahead linkages** is Used Formulas:

$$F_i = \frac{\sum_{i=1}^{n} x_{ij}}{X_i} = \sum_{j=1}^{n} a_{ij}$$

Where :

F_i = direct linkage to the front *(direct forward linkage)*

x_{ij} = Number of output sector i that Used by sector j.

X_i = total output of sector i

a_{ij} = technical coefficient matrix elements

b. **Directly backward linkages** is to use the formula:

$$B_j = \frac{\sum_{i=1}^{n} x_{ij}}{X_j} = \sum_{i=1}^{n} a_{ij}$$

Where :

B_j = direct linkage to the rear *(Direct backward linkage)*

x_{ij} = Number of sector output i that Used by sector j.

X_j = Total input sector j

a_{ij} = Elements of matrix of technical coefficients

(Budiharsono.2001)

3. The analytical method to get the data amount of direct and indirect linkages forwards and backwards between the commodities sector as shown in Table 3.

Table 3: Inter-6 Sector Commodity Transactions, Open Leontif IO Model (IA) $^{-1}$ (Matrix B)

	1	2	3	4	5	6	Description. Direct Forward
1	X11	X12	X13	X14	X15	X16	
2	X21	X22	X23	X24	X25	X26	
3	X31	X32	X33	X34	X35	X36	
4	X41	X42	X43	X44	X45	X46	
5	X51	X52	X53	X54	X55	X56	
6	X61	X62	X63	X64	X65	X66	
Ket. Directly Backward							

Based on Table 3. Matrix B obtained information:

a. **Direct and Indirect linkages Forward** formula is used:

$$FLTL_i = \sum_{j=1}^{n} C_{ij}$$

Where :

FLTL $_i$ = Direct and indirect to the front
C $_{ij}$ = element of the Leontief inverse matrix open.

b. **Direct and indirect linkages backward** is to use the formula:

$$BLTL_j = \sum_{i=1}^{n} C_{ij}$$

Where :

BLTL $_j$ = Direct and indirect to the back
C $_{ij}$ = element of the Leontief inverse matrix open.

4. The analytical method to obtain the amount of multiplier data as follow:

Table 3. Inter-6 Sector Commodity Transactions, Open Leontif IO Model (IA) $^{-1}$ (Matrix B).

	1	2	3	4	5	6	Direct Forward
1	X11	X12	X13	X14	X15	X16	
2	X21	X22	X23	X24	X25	X26	
3	X31	X32	X33	X34	X35	X36	
4	X41	X42	X43	X44	X45	X46	
5	X51	X52	X53	X54	X55	X56	
6	X61	X62	X63	X64	X65	X66	
Directly Backward							

Table 4. Wage / Salary Matrix (Matrix C)

Commodity sector						
1	2	3	4	5	6
Wages / Salaries	Wages / Salaries	Wages / Salaries	Wages / Salaries	Wages / Salaries	Wages / Salaries

Table 5. Multiplication Results (Matrix B) x (Matrix C) or Matrix D

sector	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
Income Multiplier	A	B	C	D	E	F

5. The analytical method for getting data ranking Matrix is the leading sectors share Wages / Salaries (matrix C) Income multiplier matrix (matrix D) are presented in Table 6.

Table 6. Matrix Ranking Income Multiplier Type 1 (matrix E).

.sector	Wages / Salary	Income Multiplier	Income Multiplier Type 1	Ranking
1	2	3	4 = (2) / (3)	5
1				
2				
3				
4				
5				
6				

III. Result And Discussion

1. Discussion of the analysis process to obtain: (a) the amount of data or the Gross Value Added Growth Works 6 Sector Commodity according Primary Input; (b) the amount of pertumuhan Economic Data Creation 6 Sector Commodity according to usage; (c) Data linkage directly forward and rearward 6 commodity sector in the process of production and transaction of goods in the market between the commodity sector.Ad. A). Analysis to obtain the amount of Gross Value Added by primary input is the first analysis of the depreciation of capital goods production factors to obtain the amount of the fee (Fixed Cost); Second analysis of expenditure amount of purchasing factor of consumables consumables to obtain variable cost scale (VC); Total Revenue third reduction analysis with Total Cost to gain massive profits $(\pi = TR-TC)$; The results are presented in Table 7. below:

Table 7. Quantity Data Gross Added Value Creation 6 Sector Commodities according to Primary Input Wakatobi Regency every Cycle Production Year 2016

Primary Input Components	Commodity Sector					
	Seaweed	Fish C.	Tuna	Octopus	Industry	Trading
	1	2	3	4	5	6
Wages / Salaries	1.681 million	800 .000	800,000	800 .000	400 .000	17 .500.000
Profit	2.242.614.496	2.744.208	3,683,152	3 .202.760	1 .445.537	12 .942.897
Depreciation	2,273,758,504	630 .792	140.598	100 .738	6 .963	6 .057.103
Tax	356,167,000	245 .000	271,250	246 .500	10 .000	10 .500.000
NTB	6,553,540,000	4,420,000	4,895,000	4 .349.998	1 .862.500	47 .000.000

Description Table 7:

According to Primary Input of Gross Added Value of Creation: Sector 1 of Rp. 6.553.540.000/ production cycle; Sector 2 of Rp. 4.420.000 / production cycle; Sector 3 of Rp. 4.895.000 / production cycle; Sector 4 of Rp. 4349998 / production cycle Sector 5 Rp. 1.8625 million / production cycle Sector 6 Rp. 47,000,000 / production cycle. And overall 6 commodity sectors created NTB at Rp.6616067498 / production cycle

Ad. B) .Analysis to obtain the magnitude of the Economic Growth of Creation of 6 commodity sectors according to the use is to analyze the value of the commodity purchased by consumers in the Local market, the consumer in the inter island market and the consumer in the inter-country market (Export). The results of its analysis are presented in Table 8. below.

Table 8. Data of commodity selling values purchased by consumers in the Local market, consumers at Inter island market and consumer in the inter-country market (Export) every Production Cycle Time Year 2016

Commodity Sector	Consumers according to use in Final Demand Market *(Final Demand)*			
	Local Market	Inter-island Market	Market A. Country	Total P. End
	1	2	3	4
Sector 1	7123.340.000		0	7123.340.000
Sector 2	4.900.000		0	4.900.000
Sector 3	5,425,000		0	5,425,000
Sector 4	4.930.000		0	4.930.000
Sector 5	3,000,000		0	3,000,000
Sector 6		12,465,845,000	0	12,465,845,000
NTB	7,141,595,000	12,465,845,000	0	19,607,440,000

Description Table 8:
According to the Usage of Creation Economy Growth: Sector 1 of Rp. 7.123.340.000/ production cycle; Sector 2 of Rp. 4.900.000 / production cycle; Sector 3 of Rp. 5.425.000 / production cycle;Sector 4 of Rp. 4.93 million / production cycle Sector 5 Rp. 3,000,000 / production cycle Sector 6 Rp. 12,465,845,000 / production cycle. And overall 6 commodity sectors create economic growth of Rp. 19.607.440.000/ production cycle.

Ad. C). The analysis process to get a direct link to the front and to the rear 6 commodity sector in the process of production and transaction of goods in Wakatobi by using analytical tools Closed the Leontief IO Model. The results of his analysis are presented in Table 9. below.

Table 9. Data linkage directly forward and rearward 6 commodity sector analysis results Closed Leontief IO Model In Wakatobi District each Year Production Cycle 2016. (Matrix A)

Commodity Sector	1	2	3	4	5	6	Ket. L. Going Forward
1	0.041876	0	0	0	0	0.63725864	0.679135
2	0.001053	0.019242	0,02765	0.017039	0.084444	0.00172549	0.151153
3	0.002569	0.01707	0.018433	0.048174	0.117611	0.00229505	0.206153
4	0.000751	0.004067	0.011982	0.017444	0.1335	0.00316433	0.170908
5	0.000903	0.045918	0.013825	0.004564	0.10373	0.00443371	0.173374
6	0.00055	0.011662	0.007373	0.010142	0.039683	0.00161251	0.071022
Ket. L. Going Back	0.047702	0.097959	0.079263	0.097363	0.478968	0.65048973	

Description Table 9:

The magnitude of a direct link to the future; Sector 1 amounted to 0.679135 or 67.91%; Sector 2 of 0,151153atau 15.1153%; Sector 3 of 0.206153, or 20.6153%; Sector 4 of 0,170908atau 17.0908%; Sector 5 of 0,173374atau 17.3374%; Sector 6 of 0,071022atau 7.1022%;

The magnitude of direct backward linkage; Sector 1 of 0,047702atau 4.7702%; Sector 2 of 0,097959atau 9.7959%; Sector 3 of 0,079263atau 7.9263%; Sector 4 of 0.097363 or 9.7363%;Sector 5 of 0.478968, or 47.8968%; Sector 6 of 0.65048973 or 65.048973%;

2. Discussion Process Analysis to get the data amount of direct and indirect linkage to the front and to the rear 6 commodity sector in the process of production and transaction of goods in Wakatobi by using analysis of Leontief IO Model Open Identity Matrix ie subtracting the A matrix. And further analyzed to obtain Matrix Inverse (AI) or (A $^{-1).}$ The results of his analysis are presented in Table 10 below.

Matrix A

0.041876	0	0	0	0	0.63725864
0.001053	0.019242	0.02765	0,017039	0.084444	0.00172549
0.002569	0.01707	0.018433	0.048174	0.117611	0.00229505
0.000751	0.004067	0.011982	0.017444	0.1335	0.00316433
0.000903	0.045918	0.013825	0.004564	0.10373	0.00443371
0.00055	0.011662	0.007373	0.010142	0.039683	0.00161251

Matrix I

1	0	0	0	0	0
0	1	0	0	0	0
0	0	1	0	0	0
0	0	0	1	0	0
0	0	0	0	1	0
0	0	0	0	0	1

Matrix (IA)

0.958124	0	0	0	0	-0,63725864
-0.001053	0.980758	-0.02765	-0.017039	-0.084444	-0.00172549
-0.002569	-0.01707	0.981567	-0,048174	-0,117611	-0,00229505
-0,000751	-0,004067	-0.011982	0.982556	-0.1335	-0.00316433
-0,000903	-0.045918	-0.013825	-0,004564	0.89627	-0,00443371
-0,00055	-0.011662	-0.007373	-0.010142	-0.039683	.99838749

Table 10. Data amount of direct and indirect linkage to the front and to the rear 6 commodity sector analysis results Leontief IO Model Open in Wakatobi every time cycle Production in 2016 or Matrix (IA) $^{-1}$

	1	2	3	4	5	6	Ket. L. & No L. Going forward
1	1.044152	0,009572	0.005824	0.007483	0.032297	0.66666667	1.765994
2	0.001324	1.025127	0.030603	0.019792	0.103691	0.0032101	1.183747
3	0.002947	0.024821	1.022175	0.05127	0.144333	0.00507721	1,250624
4	0.001001	0.011807	0.014996	1.019462	0.155134	0.00461394	1.207014
5	0.001173	0.053044	0.01746	0.007059	1.124337	0.00589611	1.20897
6	0.00067	0.014391	0.008756	0.011251	0.048559	1,00233879	1.085965
Ket.L. & T.L. Backwards	1.051267	1.138762	1.099815	1.116317	1.608352	1.68780282	

Description Table 10:

The magnitude of direct and non-direct linkage; Sector 1 amounted to 1.765994 or 176.5994%; Sector 2 amounted to 1.183747 or 118.3747%; Sector 3 of 1.250624 or 125.0624%; Sector 4 of1.207014 or 120.7014%; Sector 5 of 1.20897 or 120.897%; Sector 6 of 1.085965 or 108.5965%;

The magnitude of direct backward linkage; Sector 1 amounted to 1.051267 or 105.1267%; Sector 2 amounted to 1.138762 or 113.8762%; Sector 3 of 1.099815 or 1,09,9815%; Sector 4 of1.116317 or 111.6317%; Sector 5 of 1.608352 or 160.8352%; Sector 6 of 1.68780282 or 168.780282%;

3. Discussion Process Analysis to get the data amount of income multiplier is to multiply matrix (IO Model Leontif Open $^{(IA)\ \wedge\ -1}$) with matrix Wages / Salaries and h acyl its analysis are presented in Table 1 1. follows.

Wage / Salary Matrix

1	2	3	4	5	6
0.376368	0.163265	0.165899	0.182556	0.161905	0.102007

Matrix (IA) $^{-1}$

	1	2	3	4	5	6
1	1.044152	0,009572	0.005824	0.007483	0.032297	0.66666667
2	0.001324	1.025127	0.030603	0.019792	0.103691	0.0032101
3	0.002947	0.024821	1.022175	0.05127	0.144333	0.00507721
4	0.001001	0.011807	0.014996	1.019462	0.155134	0.00461394
5	0.001173	0.053044	0.01746	0.007059	1.124337	0.00589611
6	0.00067	0.014391	0.008756	0.011251	0.048559	1,00233879

Table 11. Data scale multiplier Revenue *(Income Multiplier)* were obtained from the results multiplication (Matrix wages / salaries) to (matrix (IA) $^{-1}$)

	1	2	3	4	5	6
1	0.392986	0.001563	0.000966	0.001366	0.005229	0.06800498
2	0.000498	0.167368	0.005077	.003613	0.016788	0.00032745
3	0.001109	0.004052	0.169577	0.00936	0.023368	0.00051791
4	0,000377	0.001928	0.002488	0.186109	0.025117	0.00047066
5	0.000442	0.00866	0.002897	0.001289	0.182035	0.00060145
6	0.000252	0.00235	0.001453	0.002054	0,007862	0.10224604
PP	0.395664	0.18592	0.182458	0.20379	0.2604	0.17216849

Description Table 11:

Magnitude Multiplier Revenue *(Income Multiplier);* Sector 1 of 0.395664, or 39.5664%; Sector 2 amounted to 0.18592 or 18.592%; Sector 3 of 0.182458, or 18.2458%; Sector 4 of 0.20379 or20.379%; Sector 5 at 0.2604 or 26.04%; 6 sector amounted to 0.2604 or 26.04%;

4. Discussion Process Analysis to get the highest rank or seed sector is a component of wages / salaries divided by Revenue Multiplier components which result is called a Type 1 Income Multiplier. The results of this analysis are presented in Table 1 2. following

Table12. Data from the analysis of the components division wages / salaries by component Multiplier Revenue and generating Type 1 revenue multiplier information And Ranks.

Commodity Sector	Wage	PP	PP-Type	Ranking
	1	2	3 = (1) / (2)	4
1	0.376368	0.395664	0.951233	1
2	0.163265	0.18592	0.878147	4
3	0.165899	0.182458	0.909244	2
4	0.182556	0.20379	.895803	3
5	0.161905	0.2604	0.621755	5
6	0.102007	0.172168	0.592486	6

Description Table 12:

Description column 3:

- Revenue Multiplier Type 1 Sector 1 is equal to 0.951233, 0.878147 of Sector 2, Sector 3 amounted to 0.909244, Sector 4 of 0.895803, Sector 5 at 0.621755 and sector 6 of0.592486 every time cycle.

Description column 4

- Which occupies the first rank Income Multiplier Type 1 is the first sector amounted to 0.951233, rank two is Sector 3 of 0.909244, third is the fourth sector amounted to0.895803, is ranked fourth Sector 2 amounted to 0.878147, the top five is the Sector 5 of 0.621755 and ranked sixth is 6 sector amounted to 0.592486 .

IV. CONCLUSION

1. According to the Primary Input, value added created by the sector 1 is Rp 6.55354 billion / cycle, sector 2 Rp 4.42 million / cycle, sector 3 Rp. 4.895.000 / cycle, Sector 4 of Rp.4.349.998 / cycle, sector 5 of Rp.1.862.500 / cycle and sector 6 of Rp. 47.000.000 / cycle and overall commodity sector is Rp. 6.616.067 / production cycle.

2. According to the use of NTB created by the sector 1 is Rp 7.123.340.000/cycle, sector 2 Rp 4,900,000 / cycle, sector 3 Rp. 5.425.000 / cycle, sector 4 of Rp. 4.930.000 / cycle, sector 5 of Rp. 3.000.0 00 / cycle and sector 6 Rp. 12,465,845. 000 / cycle and overall commodity sector is Rp. 19.60744 billion / production cycle.

3. In the production process activities and transactions of goods and services between the commodity sector to create direct linkages to come, ie one sector amounted to 67.91% ,, 2 sector amounted to 15.11%, sector 3 sebesar20,61%, amounting to 17.09% 4 sectors, sectors 5 by 17.33% and sector 6 of Rp. 7.10%.

4. In the process of production process and transactions of goods and services between commodity sectors, there is a direct correlation between sector 1 of 4.77%, 2 sectors 9,79%, sector 3 is 7,92%, sector 4 is 9,73% Sector 5 of 47.89% and sector 6 of 65.04%.

5. In the process of production process and transactions of goods and services between commodity sectors created direct and indirect linkages are sector 1 of 176.59%, sector 2 of 118.37%, sector 3 of 125.06%, sector 4 of 120.70 %, Sector 5 of 120.89% and sector 6 amounting to Rp.108.59%.

6. In the process of production process and transactions of goods and services between commodity sectors created direct and indirect linkages of sector 1 of 105.12%, sector 2 of 113.87%, sector 3 of 109.98%, sector 4 of 111.63 %, Sector 5 of 160.83% and sector 6 of 168.78%.

7. In the process of production process and transactions of goods and services between commodity sectors are created income multiplier which is 39.56% of the sector 1, sector 2 by 18.59%, amounting to 18.24% in sector 3, sector 4 by 20.37%, amounting to 26.04% sector 5 and sector 6 Amounting to 17.21%.

8. The highest ranking income multiplier type 1 between the commodity sector is the first sector 1 at 95.12%, the third sector amounted to 90.92%, the third sector 4 amounted to 89.58%, all four sectors 2 at 87.81% fifth, fifth sector by 62.17% and ranked sixth is 6 sector amounted to 59.24%.

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