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Research Article

Clove-Based Local Economic Development in Lede Sub-District, Taliabu Island District North Maluku Province

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A B S T R A C T

This research is intended to identify and describe the system clove agribusiness and its economic prospects in supporting economic development local community in Lede District, Taliabu Island Regency, North Maluku Province. Study done with descriptive descriptive method. The results of this study suggest that Lede District is one of the sub-districts which is the basis development of clove farming in Taliabu Island district. Clove Commodity developed involving 95.8% of farmer households in the Lede District area development area of 3,620 hectares of land, with a level of productivity per hectare every year reached 642 Kg, the accumulated annual production reached 1,694 tons. Commodity Cloves have potential economic value and have contributed to Household customers and quality of welfare of clove farmers with an average Annual compensation for each clove farmer's family reaches a nominal value of Rp. 36,489,344, in words the other amount far exceeds the established poverty line indicator. For realizing efforts to develop a local economy based on clove commodities, it is necessary the intervention of various parties, especially the local government and the private sector, both on interventions on the scale of on-farm and off-farm activities, especially in a number of interventions related to infrastructure and superstructure of supporting activities agricultural production, capital, to aspects of marketing management and efforts increasing the economic added value of the developed clove commodity.

1. INTRODUCTION

The poor population in rural areas based on BPS data in 2021 (https://www.bps.go.id/) is still 12.53% compared to the urban poverty rate of only 7.60%. From the aspect of the economic sector developed, Sjaf (in Ahram et.al., 2019: 246) argues that of the 74,754 villages in Indonesia, 73.14 percent are villages with agricultural typology. In other words, rural areas dominated by the development of the agricultural economic sector occupy the highest percentage of the national poverty rate. National economic sector GDP data illustrates that the contribution of the Agriculture, Forestry and Fisheries sector in 2022 is still quite high, amounting to 12.40% with a growth rate of 4.51% between the fourth quarter of 2021 and the fourth quarter of 2022 (Yoy), even the agricultural sector is the only one of the five main pillars of GDP that grew positively during the pandemic throughout 2020 with a growth rate of 2.19%, which includes the plantation sub-sector with an increase in growth of 0.17% (https://news.detik.com/). In contrast, from the aspect of employment, the latest publication in February 2022 (BPS; https://www.bps.go.id/), the main sector of Agriculture, Forestry and Fisheries is still the sector with the highest level of employment, namely 29.96% of the total workforce.

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Indeed, the spirit of autonomation through development policies with a decentralized nature increasingly provides opportunities for each region to innovate in terms of government policies as well as open interaction space for various institutions and institutions and local communities in producing various concepts of development planning based on the identification and utilization of local resources by optimizing economic sectors that are considered to have a greater economic impact in driving progress, reducing poverty and inequality, and improving the welfare of local communities. The high poverty rate in rural areas, the high contribution of the agricultural sector in the structure of the national economy, and the massive absorption of labor in this sector can be a number of fundamental reasons for the importance of organizing regional economic development based on local agricultural commodities.

Taliabu Island Regency is one of several regions with the dominance of the economic structure in the Agriculture, Forestry and Fisheries sectors in Indonesia, with an average contribution (percentage) between 2018 and 2021 of 54.7% with a growth rate in 2021 of 2.2%. The Open Unemployment Rate (TPT) in Taliabu Island in 2022 is 2.56%, on the other hand, the level of labor absorption as quoted from the BPS publication on the state of North Maluku employment (https://malut.bps.go.id/), the absorption of the agricultural sector from the total workforce working in the Taliabu Island district is 50.81%. The poverty rate in Taliabu Island Regency is still quite high compared to the average poverty rate of North Maluku Province in 2021 and 2022, which can be seen in Table 1.

Table 1. The poverty rate in Taliabu Island Regency and North Maluku Province in 2021 and 2022

Region	Year	Poverty Line (Rp)	Poverty Level (%)	Poverty Depth Index	Poverty Severity Index
Pulau Taliabu District	2021	425,241	7.49	0.57	0.1
	2022	448,745	6.88	0.83	0.17
Maluku Utara Province	2021	489,375	6.89	0.97	0.2
	2022	514,383	6.23	0.91	0.19

Source: BPS (2021) and BPS (2022)

On the composition of household expenditure as a partial picture to assess the level of economic welfare of the population in a region (https://sirusa.bps.go.id/), on food and non-food expenditure in per capita/month in 2020 in Taliabu Island district can be seen in Table 2.

Lede sub-district is one of the sub-districts in Taliabu Island Regency, with an economic structure that is also dominated by the development of the agricultural sector, especially in the clove plantation sub-sector. Clove farming activities in Lede sub-district involve most farmers in each village and have become the main source of income for the population. The development of clove farming in Lede Sub-district is in the form of smallholder plantations (PR). As far as observed, the increase in the yield of agricultural activities is limited to conventional methods based on the knowledge and experience of farmers or through the expansion of clove plantations (extensification).

Table 2. Household Expenditure per capita per month in Taliabu Island Regency in 2022

Expenditure	Value	Percentage
Food (average)	504,143	59.42
Non Food (average)	344,232	40.58
Expenditure group		
	500.000 – 749.999	39.98
	750.000 – 999.999	19.53
	1.000.000 – 1.499.999	19.10

Source: BPS (2020); BPS (2022)

Although with a fairly large development area with large annual production yields, the impact of clove economic benefits tends not to last long by comparing local economic activity, especially in the Lede sub-district area, between the harvest and post-harvest periods. The increase in local economic activity only occurs during the harvest period until between 2-3 months in the post-harvest period. Likewise, the better quality of welfare on average is only enjoyed by a small part of the clove farming community, especially by farmers who have a plantation area above the average farmer. Optimizing the economic value of cloves should contribute further to a number of parties and other interrelated local economic sectors (multiplier effect).

Cloves are a plantation commodity with a fairly available domestic market share as well as high export market demand, as through research by Nurhayati etc. (2018), and Hidayah etc., (2022) which concluded the high competitiveness of Indonesian cloves in the global market, as well as its prospects for improving export performance in the agricultural commodity sector. Clove is also an agricultural commodity that has high economic value, with a promising net income cumulation for clove farmers (Dilapanga. et.al., 2020).

Economic development to realize welfare cannot be encouraged simultaneously with development activities in all available economic sectors because it will clash with limited local resources and capabilities. There needs to be choices in encouraging the optimization of economic sectors, by determining for example between 1 to 2 dominant economic sectors or those that can be considered as basic economic sectors with broader multiplier effects and reaching out to every available economic sector where

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there is involvement of other individuals who are not clove farmers. Such selection and sorting will make it easier in terms of policy planning, especially by local governments in encouraging and optimizing the benefits of economic sectors. As Sjafrizal (2017: 154) concluded that in the event that the economic structure of a region is dominated by agricultural activities, the direction of development should also be adjusted to the economic structure of the region. More or less the same conclusion is also outlined by Tarigan (2018: 66) with the need to determine sectors and commodities that are expected to grow quickly in a region. These sectors and commodities must be base sectors or have domestic and export market prospects, and can be developed on a large scale or the volume of production meets market demand requirements.

From the above description, the next research question can be formulated as follows; How is the clove agribusiness and its economic prospects in Lede District, Taliabu Island Regency, North Maluku Province?

In summary, the purpose of this research is to identify and describe the clove agribusiness system and its economic prospects in supporting local economic development in Lede District, Taliabu Island Regency, North Maluku Province.

2. METHOD

This research was conducted in Lede sub-district, Taliabu Island district, North Maluku province. Lede sub-district is one of the total 8 sub-districts in Taliabu Island district. The selection of the research location was based on considerations, 1) Lede sub-district is one of the sub-districts with the largest clove development in Taliabu Island district, 2) the welfare level of the population tends to be better than the average population in each sub-district in Taliabu Island district. The total number of informants involved in this study was 68 informants, determined by purposive sampling technique consisting of 60 informant farmer samples (spread across 5 villages in Lede sub-district), 4 village heads, the sub-district head, the head of Bappeda, and the head of the Agriculture Office. The research approach used is descriptive qualitative with a case study model with a research implementation time of 45 calendar days (1.5 months) from September 1 to October 15, 2022.

3. RESULTS AND DISCUSSION

Lede Sub-district has an area of 183 km² with a land area of 74.73 km² or about 41% of the total area, which consists of 5 (five) villages namely Lede, Langganu, Balohang, Tolong, and Todoli villages, with the total population of Lede Sub-district in 2022 is 8,125 people (Disdukcapil Taliabu Island, October 2022). The economic structure of the community in Lede Sub-district is dominated by the agricultural sector with several plantation commodities developed as can be seen in Table 3.

Table 3. Main Plantation Commodities of Lede Sub-district

Commodity	Area (Ha)				Production (Ton)	Yield (Kg/Ha)	Total Farmers (KK)
	TBM	TM	TTM	Total			
Cloves	950	2.640	30	3.620	4.641	1.758	1.900
Coconut	107	430	6	543	538	1.253	345
Nutmeg	60	122	7	189	59	487	160
Chocolate	75	205	19	299	237	1.158	175
Cashew	272	115	28	415	60	523	285
Total	1464	3.512	90	5.066	5.535	5.179	1.982

Source: Infographic of Lede Sub-district in 2021 (updated October 2022)

Of all the agricultural commodities developed, clove is a plantation commodity that is developed in all villages and involves most of the farming community in each village in Lede Sub-district.

Facilities and infrastructure to support clove economic activities in Lede Sub-district have not been fulfilled optimally. The facilities and infrastructure in question certainly include a number of institutions as a means of financing, physical facilities to support the accessibility of production agricultural activities to marketing.

3.1. Agricultural Land Tenure Status

Agricultural land by each farmer household in Lede Sub-district is mostly not only located on one stretch of land, but spread across several plantation areas. Most of the clove plantation land in the Lede sub-district area is a forest area, between Convertible Production Forest (HPK) and Permanent Production Forest (HPT). Only a small part is counted in the area of Other Use Areas (APL). Land tenure is mostly based on sale and purchase letters and legalized by the government at the local village level. From the research conducted, there is no accurate data available that can explain the amount of farmers' clove plantation land in the Lede sub-district area identified as APL (Areal Others User) or HP (Production Forest/ HPK and HPT) areas. The description of clove farmers' land tenure status in Lede sub-district can be described in Table 4.

Table 4. Percentage of Land Tenure Status of Clove Farmers

Legalization Land Tenure	Percentage	Area Status	Land Tenure History
Certified	10 %	Other Use Areas (APL)	Sale - Buy / Barter / Profit Sharing / Inheritance
Registered at Village Government Level	55 %	Other Use Areas (APL) Production Forest (HP, HPK, HPT)	Sale - Buy / Barter / Profit Sharing / Inheritance
Not registered	35 %	Other Use Areas (APL) Production Forest (HP, HPK, HPT)	Sale - Buy / Barter / Profit Sharing / Inheritance

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According to Perhutani, there are ±12 million hectares of state land in the form of forest areas that are illegally cultivated by farmers (https://www.perhutani.co.id/). Forestry statistics do not yet provide comprehensive data on the status of agricultural land involving smallholder plantations.

3.2. Clove Farming System

Clove farming developed by farmers is monoculture, although there are various types of plantation crops developed, usually each stretch of land only contains 1 type of plantation crop. Clove farming development involves a number of activities and financing. From time to time, the tendency for mutual cooperation in every stage of agricultural activities began to disappear, replaced by the imposition of a wage system. The mutual cooperation that is still found is usually only in the opening of new lands in land burning activities which tend to involve more farmers, while in other stages of activities it is usually carried out by individual farmers or by hiring other farmers, starting from planting to plant maintenance both at pre-production age and at production age which is usually carried out in the run-up to annual harvest activities.

The procurement of plant seeds is mostly provided by individual farmers or purchased from other farmers and a very small amount is obtained from local government assistance. The use of herbicides in clove farming activities in Lede Sub-district has only begun to be carried out around the last 10 years, and even then only by a small number of farmers. The method generally used in plant maintenance is still the traditional way of weeding or pulling grass and shrubs around the plant using a machete or grass sickle (ofu: local term), and some others use a lawn mower.

Cumulative financing in the form of capital allocated by farmers from land clearing activities until clove plants enter production age, which is based on the calculation of 1 hectare of land with a planting distance of 10 meters x 10 meters of clove seedlings.

Clove plants begin to be productive at the age of 3-5 years (this condition is also influenced by the age of seedlings and the quality of land fertility), until at the age of planting between 8-10 years each hectare of plants will produce an average of 300 Kg of dried clove seeds per hectare. At the age of over 15 years, each hectare of clove plants can produce dry clove seeds up to more than 1,000 Kg/Ha in the big harvest season.

Clove harvesting activities take place for 3 (three) months, between July-September each year. Not all harvesting needs are available locally, some of which must be accessed by farmers from outside the region. The limited availability of harvest input needs at the local scale is one of the obstacles. Food needs (especially rice and packaged foodstuffs) will be purchased directly from outside the region, especially in areas that are closer and with the availability of access to freighter transportation that has a fixed route, namely in the Central Sulawesi, Southeast Sulawesi and North Sulawesi regions, as well as the supply of labor, which mostly consists of seasonal migrant workers. Through the research conducted, the number of pickers needed during the big harvest season, which usually takes place in even-numbered years in the sub-district. The total need for clove pickers in even-numbered years is 14,480 people, most of whom are seasonal migrant workers.

The acquisition of clove seeds during each harvest period each year tends to vary. In the Lede sub-district area, the terms "big harvest" and "small harvest" are known. The big harvest period usually takes place in even-numbered years, while odd-numbered years are the small harvest period. Therefore, every year the yield will be different, which is described in Table 5.

Table 5. Acquisition of Clove Seeds during the Big Harvest and Small Harvest Periods

Description	Big Harvest	Small Harvest
Average dry clove seed yield (Kg)	1700	680
Average Land Ownership (Ha)	2.7	
Average Land Productivity Kg/Ha/Year	642	
Price received	Low	High
Price Information	Know: 1.6% Don't Know: 98.4%	Know 1.6% Don't Know: 98.4%

When compared to pre-production activities in the clove farming system, the allocation of capital requirements during the harvest period is much higher. Through a number of interviews conducted with farmer informants, the capital requirement during the harvest period is close to half of the total harvest income, as can be described in Table 6.

Table 6. Capital and Average Income of Big Harvests

Description	Total
Average Total Income of Big Harvest (Rp)	117,821,339
Average Amount of Capital Required (Rp)	56,050,847
Average Total Net Income	61,770,492
Net Income capital ratio (%)	52% : 48%
Percentage of Capital Source	
Individuals	88.34
Credit	3.33
Loans	8.33

The percentage of the fulfillment of capital needs originating from individual farmer informants with a total of 88.34%, the small amount comes from farmer savings, while the large amount comes from the sale of dried cloves during the harvest to meet a number of needs during the harvest period or to facilitate the need for loan money for workers. The largest part of the capital provided is the wages of clove pickers.

Farmed cloves are marketed in the form of dried cloves (raw). Cloves that are marketed to local traders (intermediary traders) in the village are usually in relatively small quantities of around tens of kilograms. Usually, the marketing of cloves to traders in the village is done to meet the needs of the daily period at harvest time or other urgent needs, while large quantities of cloves will be marketed outside the region. The destination cities for marketing cloves outside the region are generally in Luwuk City, Central Sulawesi Province and in Manado City, North Sulawesi Province.

As an annual plantation crop, the maintenance carried out every year on productive age cloves is relatively small when compared to the results obtained. The average annual yield of cloves by taking into account the acquisition during the big harvest period and the small harvest period and its comparison with the average annual maintenance costs, can be shown in Table 7.

Table 7. Comparison between Managing Costs and Average Annual Yields

Description	Total
Large Harvest Period Earnings (Rp)	61,770,492
Small Harvest Period Earnings (Rp)	24,708,196
Average Income/Year (Rp)	43,239,344
Annual Maintenance Cost (Rp/Ha)	2,500,000
Average of landvsize holding (Ha)	2.7
Accumulated Annual Net Income (Rp)	36,489,344
Accumulated Monthly Net Income (Rp)	3,040,778
Net Income - Maintenance Cost Ratio (%)	85.4% ; 15.6%

From the interviews conducted with farmer informants regarding the income of each farmer household from the clove harvest every year and income from other economic activities, the author can display in Table 8.

Table 8: Accumulated Income of Informant Farmer Households

Household Net Income/ year	Total	Percentage
Income from Clove Farming Business	Rp. 43.239.344	67%
Income from other economic business	Rp. 21.262.295	33%
Total Revenue	Rp. 64.501.639	

3.3. Analysis of Economic Opportunities of Clove Agribusiness in Lede Sub-district

According to data available from the sub-district government, the area of clove farming covers up to 3,620 hectares of land with a productivity level of 4,641 tons of cloves per year. When compared with the results of research conducted by the author by calculating the average land productivity level of the farmer informants interviewed, there seems to be a slight difference in annual production capacity, as can be shown in Table 9.

Table 9. Annual Cloves Production in Lede Sub-district

Description	Total
Total Land Area of Producing Crops	2,640 Ha
Total households of clove farmers	1,900 KK
Average Productivity/Ha/Year	642 Kg
Total Annual Production of Cloves in Lede Sub-district	1,694 Ton

The national clove production in 2020 reached a total of 133,604 tons (FAO: https://databoks.katadata.co.id/), with the annual clove production in Lede Sub-district of 1,694 tons, the clove production in Lede Sub-district as a percentage is still 1.26% of the total national clove production. By calculating based on the assumption that the average price of cloves in the last 5 years is Rp. 85,000.00, the nominal value of money generated by clove farmers in Lede Sub-district with a total of 1,900 farmer households each year is Rp. 143,990,000,000, or each farmer household from the clove agricultural activities developed is able to accumulate income worth Rp. 75,784,210.00 each year. If inclusive relations are built in local economic activities, each KK of clove farmers is assumed to drive the local economic market every month with a cumulated expenditure circulating in the form of money worth Rp. 6,315,350.00.

In terms of market opportunities, cloves are a commodity that has a wide market share. This is evidenced by the high level of domestic consumption (95% of national production) and the wide open export market. According to FAO (https://dataindonesia.id/), national clove production in 2021 reached 73.01% of total global clove production. With the accumulation of high domestic demand, it also affects the level of demand fulfillment from the global market, besides cloves are native to Indonesia (Maluku) with the quality of cloves (in the Maluku region) which is known to be the best in the global market. As revealed in Audina and Prasetyo's research (IJCCS Journal: ttps://repo.stis.ac.id/) the competitiveness of Indonesian clove exports in the international market is included in the strong category because it has a comparative advantage of commodities above the world average.

Cloves are also an agricultural product that has added value, with a variety of research that has been conducted such as in Saiful Hadi's research (Journal of Renewable Nature, State University of Semarang, Vol. 1 No. 2), clove plants not only produce clove seeds but clove leaves and handles can also be utilized as raw materials for essential oils with eugenol content between 2-6% and high levels of eugenol concentration between 89-95%. Likewise, as quoted from Assegaf, etc., (in Saleh, etc., 2018: 132) on the development of clove agribusiness in North Maluku, concluded that on average each clove tree can produce 0.72 Kg of dry leaves per week, or 2.9 Kg/tree per month. With the calculation of each hectare of land of 100 clove trees, then every month the potential for dry clove leaves per hectare is 290 Kg or a total of 3,480 Kg / hectare every year. With a producing land area

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of 2,640 hectares in Lede sub-district, the potential of dried clove leaves every year in Lede sub-district can reach 9,187 tons. It is known that the potential of clove oil from clove leaves is 2% (Saleh, etc., 2018: 132), so the potential of clove oil that can be produced in Lede Sub-district from dried clove leaves can reach 459 tons annually.

On the aspect of linkage impact, further analysis needs to be conducted on the clove commodity as a producing sector (good sector) and also other supporting sectors (service sector) (Hadiutomo, 2021: 114-116). This needs to be done to further examine how the impact of the producing sector or the basic sector, namely the clove commodity in Lede Sub-district, influences other economic sectors, both in the upstream sector which can be calculated as an input to the producing sector (up-stream agribusiness) to the downstream sector (down-stream agribusiness) such as in advanced processing or in the trade implications caused as clove output and also input for other sectors in the clove agribusiness domain (Krisnamurti, 2020: 5-6).

3.4. Analysis of Barriers in Clove Agribusiness in Lede Sub-district

Farmers' Land Tenure Status

Based on the research conducted, the status of clove plantation lands in recent years has become a polemic in the issuance of land titles (certificates) for land controlled by farmers as well as conflicts between farmers and iron ore mining companies operating in the Lede sub-district area (PT. Adidaya Tangguh). These facts have the potential to continue to cause conflicts that will ensnare and harm farmers in the future, so there needs to be immediate efforts to resolve them. Various legal and administrative remedies as mentioned in the various provisions in the previous discussion above, should be the responsibility of the local government to be implemented immediately. Judging from the substance of the problem and its coherence with the provisions of laws and regulations, there are 2 options that can be an alternative to resolving the status of land tenure of farmers' clove plantations, the first option is to change the mapping of forest areas so that there are steps to convert or change the function of forest areas, and the second option can be done through the Social Forestry policy.

Capital in Clove Production Activities

In clove farming activities, the need for large amounts of capital occurs in the period leading up to the clove harvest. The level of need in each clove farmer household varies, depending on the size of the clove plantation area owned. Most of the capital available in clove farming activities comes from each individual farmer household. The acquisition of this capital comes from a small portion of farmers' savings and a large portion from the marketing of dried cloves harvested during the harvest period. In reality, the price of clove commodities during the harvest period tends to be lower than the price level several months after harvest. In addition, capital obtained by farmers through village traders or farmer financiers has a relatively higher rate of return. On the other hand, capital available at banking institutions is still less attractive to farmers because access and affordability in terms of time and cost are considerations for farmers, especially with the complexity of banking bureaucracy in providing credit services to farmers. This condition is certainly detrimental to farmers. In principle, access to capital must be available with easy access, low cost and low risk.

Existence of Farmer Institutions

Farmer institutions in the form of farmer groups or financial institutions that involve farmers as members or managers have not been formed at all. On the other hand, the existence of farmer institutions is something very basic in agricultural activities. As expressed by Wedy Nasrul (2012) about the importance of the existence of agricultural institutions as a group or organization in driving agribusiness in rural areas. The same thing has also been emphasized by the government as stipulated in Law No. 19 of 2013 on Farmer Protection and Empowerment and MOA No. 67 of 2016 on Farmer Institutional Development, on the need for the existence of agricultural institutions. From the author's research, the lack of understanding by farmers about the purpose and benefits of agricultural institutions, coupled with the lack of programs targeting the aspects of socialization, education and empowerment from the local government through the relevant regional apparatus are obstacles to the formation and existence of local agricultural institutions.

Farmers' Counseling and Empowerment

In Lede sub-district, there is only 1 agricultural extension worker, which according to farmers has not provided benefits and support for the implementation of clove farming activities in Lede sub-district. Empowerment as revealed by Padmowiharjo, can be interpreted as a process of capacitation or capacity building of human resources through the process of non-formal education, the concept of empowerment also includes counseling and mentoring (Padmowiharjo, IPB Extension Journal, March 2006, Vol. 2, Number 1). This is something that is substantive in the implementation of agriculture in rural areas, so that farmers can become the main actors with qualified human resource capacity in their involvement in activities that are not only on-farm but more than that.

Limited Allocation of Clove Picker Workers

The existence of labor is a fundamental input factor in production activities, including clove agricultural production. The high level of demand in the labor aspect is not linear with the availability of local labor. The agricultural sector of each village in Lede sub-district is dominated by the clove plantation sub-sector which involves most of the farmer households. As a district dominated by clove plantations, the scarcity of clove pickers also occurs in several sub-districts and villages. The clove harvesting period tends to take place simultaneously in each sub-district and village in Taliabu Island District, making it impossible to transfer clove pickers between each sub-district and village.

Limited Supporting Infrastructure

The most important supporting infrastructure needs in clove farming activities in Lede sub-district are production roads. The available production roads are dominated by surface soil material, which is not suitable for traffic especially with the harvesting period which often coincides with the rainy season every year (July-September). The available concrete production roads are not balanced with the area of farmers' clove plantations. Moreover, farmers' clove plantations are spread across many plantation centers.

Dependence on Climate/Weather

Drying cloves in hot weather with wet / raw cloves to dry lasts for 3-4 days. Erratic weather conditions (rainy season) sometimes cause cloves cannot be dried for days, especially with the narrow availability of wet clove storage space so that cloves will be stacked in a narrow space. This condition, according to the farmers' experience, can cause the cloves to spoil quickly so that they no longer have a selling/economic value. In this regard, there have actually been a number of innovations carried out related to clove drying methods that do not need to depend on climate and solar heat, such as in research conducted by Johanes and Winarto (Proceedings of the National Seminar on Applied Technology SV UGM 2016, accessed at https://repository.ugm.ac.id/) with a clove drying model that uses metal plate material with LPG heating. These kinds of solutions certainly need counseling and assistance, in addition to resource issues both human resources and in the aspect of capital / costs that must be intervened, especially with policies through assistance or subsidies from local governments.

Fluctuations in Clove Prices

Pre-harvest clove prices tend to be high, while post-harvest clove prices tend to be low. This kind of risk is often experienced by clove farmers in Lede Sub-district, resulting in less income for farmers. In addition to the imposition of labor wages that are usually based on the prevailing price of cloves at pre-harvest. So that the tendency of clove prices to decline in post-harvest tends to be very detrimental to farmers.

Commerce

The clove commodity is marketed in the form of dried cloves (raw) by farmers, a small amount to intermediary traders in the village and a large amount to collectors outside the area. There are a number of considerations for farmers towards the tendency of marketing cloves to collectors outside the area, including:

a) The price of the clove commodity is relatively higher than the price level at intermediary traders in the village;
b) The marketing of cloves to certain cities outside the region is also utilized by farmers to buy a number of clothing, food and shelter with better availability and relatively cheap prices;
c) The availability of support for transportation access to some of the closest cities to clove marketing destinations;
d) Closer proximity and ease of commodity distribution.

Farmers are highly dependent on a few nearby towns as local clove marketing destinations for a number of considerations as mentioned above. At a certain point, farmers are helpless to face the risk of fluctuating clove prices and tend to accept the price level set by wholesalers. The distribution and marketing of cloves outside the region actually has other implications, apart from the above factors that farmers consider. Two things can be inferred as economic risks associated with the prevailing clove trading system: (1) Allocation of additional distribution costs to be incurred by farmers; (2) Economic activity occurs in other areas, otherwise there is no local impact.

Local economic activity, which in turn can develop the local economy, must stand in the context of inclusiveness of economic activity. Regional relationships in economic activity cannot be denied as there is interdependence between regions due to the variety of economic sectors produced by each region. Minimizing the cost of distribution of clove commodities as well as the local economic development steps that are the goal need to start by making improvements to the available trade system variables. In other words, the capital generated from the clove commodity should be optimized to increase local economic activity, with the impact of backward linkage from the input aspect as well as forward linkage as a further impact or multiplier effect of clove farming activities developed by farmers. This effort can be done by realizing 2 determining factors, namely: (1)The availability of local-scale commodity markets through various strategies such as increasing the ability of local investors or attracting private investment and or utilizing Perusda that has been formed with capital intervention through participation funds sourced from the APBD. Such efforts are carried out with the guarantee of competitive price levels and certain policies that protect price stability and minimize the impact of price fluctuations, such as the implementation of a warehouse receipt system; (2) Intervention in optimizing the role of the local private sector as a provider of various input factors in clove farming activities or other needs.

This kind of step is very likely to cover the leakage of local resources and change the prevailing trade structure, with the opportunity for higher intensity of local economic activity. Through this kind of trading mechanism, the economic impact of cloves can spread at the local scale to various other economic sectors (multiplier effect).

4. CONCLUSIONS

The Lede sub-district area is one of the areas with a dominant level of clove plantation development in the Taliabu Island district. The clove commodity is an economic sector that has the opportunity to be developed as a base sector in Local Economic Development (PEL). This is

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supported by several indicators such as the high economic value of cloves in household income, plantation area and high productivity levels, labor absorption levels, broad market prospects for both domestic and export markets, potential for increasing economic added value and opportunities to encourage the realization of linkages between economic sectors locally. However, there are still a number of obstacles in the clove farming activities carried out, including the dominant land tenure status of farmers who do not have legalization based on the provisions of the Law, limited capital, especially during the clove harvest period, the absence of local farmer institutions, the lack of intervention in counseling and assistance, limitations on the fulfillment of the allocation of clove pickers and high dependence on migrant workers, lack of availability of supporting infrastructure, especially production roads, dependence on climate and weather, especially in the process of drying cloves, unpredictable fluctuations in clove prices every year and trade channels that have not benefited farmers.

Further research is needed to determine the magnitude of the economic implications of both backward and forward linkages generated from the clove commodity in each sector of the local economy, as well as the need for intervention of various parties such as local government and the private sector with their respective roles to increase the economic potential of cloves in an effort to realize clove agriculture as a basic sector in local economic development.

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