Model For The Development of Plantation-Based Growth Poles Village

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Abstract. The purpose of this research is to create a model (based on the experiences of transmigration settlement development) to set up local villages into plantation-based growth pole village in Jambi Province. The research has found that there are five groups of potential industry in the plantation-commodity-based development center villages. These industries are a) the production of flour from grains/seeds/nuts/tubers, crude oil from vegetable and animal; b) the production of tempe and tofu, the production of soy and beans products apart from soy sauce, tempe and tofu, the production of crackers and others alike from cassava and bananas, bread and pastry; c) clay industry; d) furniture industry; e) products from wood, rattan, bamboo, and others alike. Clay industry has the highest competence, followed by other industries. Furthermore, five criteria of village core competence which are the strongest one to support the development of potential industry in rural areas are outside-area/village market, market opportunity to continue developing, local market, availability of infrastructure, and the composition of the local input. For structuring, the elements of the system for growth pole village’s development are: 1) Key objectives: a) Increasing the number of new business and diversification of products; b) Expanding domestic and outside-area market; c) Increasing investor’s interest in investing; 2) Main problems: a) institutional weakness; b) Coordination between related parties is weak; c) Government policies are inconsistent and less supportive; 3) Main actors: a) Local government; b) Financial Institutions; c) Education and Training Institutions; d) Testing, Standardization, and Certification Institutions; 4) Main roles of government: a) Coordinating the related institutions; b) Establishing communication and cooperation for potential industries’ and supporting industries’ actors; c) Collecting and disseminating data and information; d) Improving the system of transportation, communications, and other infrastructures; 5) Main roles of business activity: a) Establishing formal and informal network; b) Communicating with government to publish and revise regulation.

Keywords: Potential Industry, Growth Pole, Core Competence

INTRODUCTION

Transmigration as one of the population programs in Indonesia has been implemented long enough. In its implementation, this transmigration program has shown us good results, thus it becomes one of the prime programs in the development of potential regional resources. Transmigration also becomes {a typical example of strategy} and a valuable learning resource in the development of regions in Indonesia. Especially in plantation...
commodity, transmigration program has been successful in establishing plantation-based growth poles in transmigration settlements (Najiyati, et al, 2006). These growth poles are capable to trigger the production of plantation and increase economic growth in settlement area.

One of the main areas for transmigration settlement in Indonesia is Jambi Province. Based on the data, in 2011, there are 100,260 households (Kemenakertrans, 2012), and Jambi Province has become one of the main areas for transmigration settlement. In addition, Junaidi (2012) found that transmigration settlements in Jambi Province, in particular, the ones with plantation as its main commodity have been also developing into new growth poles, like Rasau Village in RenahPamenang, Merangin District (with palm oil as its main commodity) and RimboMulyo Village in RimboBujang, Tebo District (with rubber as its main commodity).

The success of the development of transmigration settlement can certainly be a valuable lesson in the development of rural areas into growth poles village, not only in transmigration settlements but also in local villages (non-transmigration). However, the experience in getting this achievement has not been used to create an appropriate model that can be applied to local villages.

In Jambi Province, many plantation-based local villages are potential enough to be plantation-based growth poles. Based on the explanation above, creating a model for developing local villages (non-transmigration) into plantation-based growth poles becomes an important thing. This model is also intended to be applied for developing rural areas in Indonesia.

**Objectives of Research**

1. Analyze the potential industries and core competencies of developing industries in transmigration settlements that manage to be plantation-based growth poles.
2. Analyze the elements of system that play a role in realizing the objective of transmigration settlements to be plantation-based growth poles.
3. Analyze the problems, challenges, and obstacles during the development process of transmigration settlements into plantation-based growth poles.

**LITERATURE REVIEW**

One of the fundamental elements in the development of region is the existence of center or pole. In this context, the concept of growth point is the link between the structure of nodal areas that develop by itself and the physical and regional planning. Furthermore,
according to Haruo (2000), to boost growth in developing countries, it is recommended to apply regional development strategy in the form of investment concentrated in some limited growth poles.

Related to the growth point, Friedman and Alonso (1964) refenced in Stimson et al. (2002) set forth a concept that is known as core and periphery interaction. Development is started from few centers of change located in interaction points which have high potential in boundary or communication range area. Those core regions are the main centers of reform or renewal while other territorial regions are periphery regions which are located far from center of change, depended to the core areas.

Theory from Boudeville (1961) referenced in Adisasmita (2008) attempted to explain the impact of the development from the existence of development poles localized in spatial geographic. He defined regional growth pole as a set of growing industries located in an urban area and boost further economic growth through its sphere of influence.

Related to the development of rural areas which will be growth poles, conventionally, Mosher (1974) defined the rural development as the development of farming or agricultural development. According to Hansen (1981), rural development is an effort to increase agricultural production and productivity and prosperity of rural communities. Similar to Mosher and Hansen, Collier et al. (1996) defined it as a change of orientation from agricultural production to largest possible business.

According to Jamal (2009), there are simply three poles of thought that exist in Indonesia, related to the approach of rural development. First group sees rural area and its community as something particular and specific and in the effort to drive the development in rural areas, government intervene as little as possible. Transformation of political power and control of production equipment to the community group that has the biggest production potency but is in weak position are needed. This group demands the rearrangement of land ownership structure, system of mastery, ownership, and share-crop as a basis for rural areas modernization. Industrial activity will be developing as a result of surplus from agricultural industry and the excess labor from agricultural industry will gradually be employed by agro-processing sector and industry.

The second group tends to see the village as something homogeneous and its development needs to be driven by government’s interference at its maximum. This argument is the one who underlies the drafting of various blueprints of rural development and the enactment of various laws that make village as a homogeneous region and practical political activity-free, also becomes ‘tool’ for government in the development. The third group tries to
balance the power of rural communities and government in determining the direction and purpose of social change in rural communities. According to this group, blueprint system in rural development will make it efficient to reach the goal but it doesn’t grow the participation of community.

Mosher (1974) suggested that the village can grow progressively if it has some accelerator components, such as: 1) village must have market towns; 2) it needs to build rural roads (relatively small) to expand and reduce the cost and facilitate information distribution and services; 3) there must have local testing to find the most appropriate way of attempting to local conditions in rural areas; 4) there should be counselor or officer who can help residents to learn about new technologies including the way to make us of those technologies; and 5) credit facilities should be provided to finance production and product marketing.

Mosher’s argument were developed by experts from Indonesia by adding social and institutional aspects on it. Soewandi (1976) argued that to realize the process of modernization of rural areas, there are two main things to be considered: 1) developing new institutions in rural community as supports to the dynamic economic system, which are able to involve villagers as much as possible in their economic system, 2) encouraging the development of non-agriculture sectors to hire the excess labor in agricultural industry. Furthermore, Prabowo (1995) suggested that it is necessary to diversify rural businesses, which beside can boost traditional agricultural production; it is also able to spur the growth of villager’s economic activities in which it could form the basis for sustainable growth and equity. Murdoch (2002) also explained that besides establishing vertical linkages, it also needs to establish horizontal linkages by strengthening local production that has benefits to rural economy as whole by integrating it into a broader economic matter. In this case, the development of rural communities is not restricted to agricultural sector (production) but also to agricultural sector related to the economy of urban areas.

From those various perspectives, it can be concluded that rural development is not solely on production or its farming activity only. Agriculture must be developed in the context of agro-business development as a whole involving various supporting infrastructures, economic systems, social and institutional as well as has a sectorial and regional linkage.

Furthermore, it can be argued that to make village as growth pole, its core competence has to be explored and considered. Core competence as defined by Prahalad and Hamel (1990) is a set of skills and technologies that allow an organization to provide its own benefit.
to its customers. Thus, core competence is a set of organization’s resources and capabilities (assets) that has a high uniqueness needed to achieve organizational goals.

By adopting one village and one product concept developed by Governor Hiramatsu in Oita, Japan, then to raise regional competitiveness, it requires the creation of core competence of the area. It is necessary to do so that all resources and capabilities owned by the region are focus on efforts to creat core competence (Huseini, 2000). The core competence of the region is a unique advantage from one area that can’t be imitated by other areas. These core competences are divided to primary products (human resources), natural resources, regional environment, local culture, and competence of refined products in the form of technology, infrastructure, and products.

One of researches related to growth pole was conducted by Muta’ali (2003). He found that, in Yogyakarta, growth pole village is a village that has some characteristics such as strategic site accessibility, high service hierarchy, and various sectors of development base. The result of the research also showed that villages in Yogyakarta Province have good enough accessibility to the site/area. Its economic activity based on agricultural sector, with the support of the service, trade, and industry sector. Most selected growth pole villages are the capital of sub-district, and there is even one village that is capital of district at a time. Furthermore, Sugiyanto and Sukesi (2010) also found that type of resources potentially supporting economic growth in Lamandau district is plantation, especially palm oil plantation, forest products, and mining (minerals and coal).

RESEARCH METHOD

Location of Research

The research was conducted in two transmigration settlements which have been successful to be plantation-based growth pole. The villages are selected referring to the results of research of Junaidi (2012), they are Rasau Village, Renah Pamenang Sub-District in Merangin District with palm oil as its main commodity and Rimbo Mulyo Village, Rimbo Bujang Sub-District in Tebo District with rubber as its main commodity.

Data

There are primary data and secondary data. Primary data is divided into two kinds of data:

- Residents as respondents, to get an overview of socio-economic conditions of residents in transmigration settlements that have become growth pole village.
• Experts, stakeholders, and key informants (village and sub-district level) associated with rural, transmigration, regional, and plantation development, as respondents.

Data was gathered using structured questionnaire and interview. Secondary data was sources from related institutions / organizations at national, provincial, district, and sub-district level.

Analysis Tools

Analysis of Core Competence at Transmigration Settlement That Has Been Successful to be Plantation-Based Growth Pole

To identify and analyze the characteristics of region core competence, Multi Sectorial Qualitative Analysis (MSQA) was used. Observations on the relationship between selected economic variables (criteria) on various industrial sector/main sector activities developing in selected villages were carried out by using MSQA method. Therefore, before using MSQA, the first thing to do was identifying the existed industrial/main sector activities. Identification was done through observation and interviews with “key-informants” in selected villages.

To use this MSQA method, it used 6 groups of criteria for core competence. There are: 1) Human resources; 2) Natural resources; 3) Regional environment or aspects of government; 4) Local culture; 5) Infrastructure; 6) Market. Based on these criteria, it can be developed to 16 criteria (K1 – K16, see result and discussion). The valuation of core competence was done by the experts (residents, businessmen, and government) in transmigration, regional and plantation development. Each criteria of core competence for each activity of industry/enterprise/business will be given a rank and will be measured in ordinal in three scores: Strong (S) = 5; Medium (M) = 3; Weak (W) = 1

Analyze the elements of system that play a role in realizing the objective of transmigration settlements to be plantation-based growth poles

The elements of system were analyzed and it included the elements of interest, actors, problems/obstacles, role of government, and business activity. To analyze the elements of system that have a role in realizing the objective of transmigration settlements to be plantation-based growth poles, Interpretive Structural Modeling (ISM) was used.

Analyze the problems, challenges, and obstacles during the development process of transmigration settlements into plantation-based growth poles.

To analyze the problems, challenges, and obstacles, indepth interview with key informant in selected villages was used. The analysis was done by qualitative descriptive
Based on the information obtained from key informant. The analysis also comes with the perception/view associated with transmigration areas in their region.

RESULT AND DISCUSSION

Analysis of Core Competence of Potential Industry in Growth Pole Village

Identification of potential industrial core competence area for any potential industrial group in the previous analysis conducted by the Core Competency Model designed by the method MSQA. Based on the core competencies that support the existence of potential industry, it seems that the clay processing industry has a relatively high strength compared to other industries that have the potential to support the growth center in the village. In second place industrial manufacture of tempeh and tofu, food manufacture of soy and beans in addition to soy sauce, tempeh and tofu, manufacture of crackers, chips and the like from sweet potatoes and bananas, bread and pastries wet, followed 1) industrial manufacturing various kinds of flour of grains / seeds / nuts / tubers, industry crude oil from vegetable and animal;, 2) goods from wood, rattan, bamboo and the like 3) Furniture

Table 1 Matrix of opinion of experts on the industries that have the potential to support the village became the center of growth in the Province of Jambi

<table>
<thead>
<tr>
<th>Criteria of Core Competence</th>
<th>Type of Agro-industry business SMEs</th>
<th>Total Akj</th>
<th>Index Klk</th>
<th>Weight wKlk</th>
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Notes:

K1 = Availability of experts
K2 = Availability of other supporting workers
K3 = Salary/Income
K4 = Education, training, research, and development facilities
K5 = Support of natural resources
K6 = Use of input that can be renewal
K7 = Composition of the local input
K8 = Regulation in investment sector
Identification of potential industry of regional core competence for each potential industry group in the previous analysis done with Core Competency Model designed based on MSQA method. Based on the core competences that support the existence of potential industry, it seems that clay industry has a relatively high strength compared to other industries that potentially support growth pole in village. In the second place, there are tempe and tofu industry, production of soy and beans product apart from soy sauce, tempe and tofu, the production of crackers and others alike from cassava and bananas, bread and pastry, followed by 1) flour from grains/seeds/nuts/tubers industry, crude oil from vegetable and animal industry, 2) products from wood, rattan, bamboo, and others alike, 3) furniture.

Furthermore, five criteria of village core competence which are the strongest one to support the development of potential industry in rural areas are outside-area/village market, market opportunity to continue developing, local market, availability of infrastructure, and composition of the local input

**Structuring of The Elements in the System Development**

Identification of elements and sub-elements of development system is based on literature review, field survey, and collection of expert opinion. Development system is outlined by 5 elements with various sub-elements. These elements are: (1) Element of Interest/Objective; (2) Element of Actors; (3) Element of Problems/Obstacles; (4) Elements of Government’s Role; (5) Element of Business Activities.

Based on the structuration with ISM method, then in each element of system of the development of planation-based growth pole village there are elements: Interest/Objective, Actors, Problems/Obstacles, Government’s Role, and Business Activities have been identified key sub-elements and important sub-elements that have strong driver power in development system.
Problems, challenges, and obstacles during the development process of transmigration settlements into plantation-based growth poles.

\textit{a. The phenomenon of yard conversion versus Food Self-Sufficiency and Availability of Raw Materials for Potential Industry}

In all patterns of transmigration, the migrants, in addition of getting business area (business area I or business area II), were also given yards. The yard area is intended for home building and used for cultivation of food crops.

By having yard, migrants are expected to be able to meet their needs of foods from cultivation of food crops, before business area I and II produce products. In addition, by having food crops in yard, it’s expected to make transmigration villages as food self-sufficient regions.

However, current conditions indicate the yards are no longer managed for food crops by the migrants. Yard is converted to plantation area by plant palm oil or rubber. This condition and followed by the conversion of yard became palm oil and rubber plantation in cropping pattern transmigration lead to the increase of regional burden to the achievement of food self-sufficiency.
The phenomenon of land conversion also threatens the sustainability of availability of raw materials to potential industry in village, generally from crops.

b. Land Fragmentation: The Potential of New Poverty and Threat to the Quality of Human Resource in Growth Pole Village

Transmigration settlements in Jambi Province have been relatively in long time, which has been started since 1950. Because of this, in ex-transmigration villages, most of residents are not first generation migrants (original migrants), but it is occupied by second generation (children of migrants) and even third generation. Along with this phenomenon, it is now seen a fragmentation of land (the original land is divided for second and third generation migrants).

Fragmentation of land or shrinkage of agricultural land ownership cause a decline in farmer’s business scale. Small land will be difficult to the use of technology. Some technologies are not efficient to use when it was applied on small land and business management becomes less economical.

The decline of business scale will also affect to the increasing number of farmers without land. This decline will lead to less productive land and it will encourage farmers to sell their land.

Today, in ex-transmigration villages, it starts to be seen quiet number of farmer without land are second and third generation migrants. Beside of that, much of them are started to work as worker/labor in construction work in city.

c. Monoculture Pattern, Price Fluctuations, Replanting, and Poverty Threats

Monoculture pattern applied in transmigration areas is acknowledged as having an impact on the instability of migrants’ prosperity, particularly to migrants on palm and rubber plantations. As we know, rubber and palm oil’s prices have high rates of fluctuation and highly dependent on international demands. In many cases, when there is a decline in price quite dramatically, it has caused negative impacts on residents’ socio-economy life in ex-transmigration villages.

Beside the price fluctuations, problem aroused as a result of monoculture is a matter of replanting. This day, some ex-transmigration villages in Jambi Province has aged more than 30 years, especially for transmigration with rubber and palm oil pattern.

Rubber plant and palm have optimal production time. That’s around 30 years. That’s why in those villages, the need of replanting is an urgent need. However, until now, there is no replanting scheme which can guarantee that there will be no decline in the level of prosperity or welfare at the time of replanting until new plants make a profit. The
absence of replanting scheme becomes a concern because it will impact on public welfare in transmigration villages.

d. Low Leverage of Ex-Transmigration Areas to the Surrounding Areas

Transmigration development in Jambi Province is acknowledged to have helped establish new villages with a rapidly growing economy. Transmigration areas has been also acknowledged to become mayor contributor to own-source revenue (PAD). In addition, the transmigration areas in Jambi Province is recognized to be able to trigger the expansion of new sub-districts and districts. It is known that four out of five new districts in Jambi Province were triggered by the development of transmigration areas.

Nevertheless, in the view of local policy maker, transmigration areas are yet able to become a lever to the development of region and welfare of surrounding community. It leads to a relatively large disparity between transmigration areas with its surrounding areas (non-transmigration). The disparity is happened both in terms of regional growth and welfare. These conditions rise social jealousy and if it continues, there will be conflict between communities.

e. Delegation of Authority of Ex-Transmigration Villages Is Not Completed

The handover transmigration areas after the coaching phase includes the handover of infrastructure on those areas. It means that the responsibility of infrastructure maintenance shifted from central government to local government.

In this context, policy makers in region thought that the delegation of authority has increased the budget in their region. No sense of ownership of transmigration area is an implication of the lack of local government involvement in developing transmigration settlements. As a result, today, despite transmigration areas become major contributors to own-source revenue (PAD) and GDP in several districts in Jambi Province, the maintenance of infrastructure in region (particularly the production road) has not been a priority of regional development expenditure. Later, it can impact on the damage of production road in transmigration areas that hamper the products’ marketing.

CONCLUSION

1. There are five groups of potential industry in plantation-based growth pole village in Jambi Province: 1) the production of flour from grains/seeds/nuts/tubers, crude oil from vegetable and animal; 2) the production of tempe and tofu, the production of soy and beans products apart from soy sauce, tempe and tofu, the production of crackers and
others alike from cassava and bananas, bread and pastry; 3) clay industry; 4) furniture industry; 5) products from wood, rattan, bamboo, and others alike.

2. From those five groups of potential industry, clay industry has the highest competence, followed by: 1) tempe and tofu industry, production of soy and beans product apart from soy sauce, tempe and tofu, the production of crackers and others alike from cassava and bananas, bread and pastry; 2) flour from grains/seeds/nuts/tubers industry, crude oil from vegetable and animal industry, 3) products from wood, rattan, bamboo, and others alike, 4) furniture

3. By observing the index of criteria of regional core competence, it can be said that five criteria of village core competence which are the strongest one to support the development of potential industry in rural areas are outside-area/village market, market opportunity to continue developing, local market, availability of infrastructure, and composition of the local input.

4. In structuration, the elements of the system for growth pole village’s development are:
   a. Important/Key objectives in development system are: 1) Increasing the number of new business and diversification of products; 2) Expanding domestic and outside-area market; 3) Increasing investor’s interest in investing;
   b. Main problems in development system are: 1) institutional weakness; 2) Coordination between related parties is weak; 3) Government policies are inconsistent and less supportive
   c. Main actors in development system are: 1) Local government; 2) Financial Institutions; 3) Education and Training Institutions; 4) Testing, Standardization, and Certification Institutions
   d. Main roles of government in development system are: 1) Coordinating the related institutions; 2) Establishing communication and cooperation for potential industries’ and supporting industries’ actors; 3) Collecting and disseminating data and information; 4) Improving the system of transportation, communications, and other infrastructures.
   e. Main roles of business activity: 1) Establishing formal and informal network; 2) Communicating with government to publish and revise regulation.

5. Problems, challenges, and obstacles during the development process of transmigration settlements into plantation-based growth poles are: 1) There is phenomenon of yard conversion versus food self-sufficiency and availability of raw materials for potential industry; 2) Land fragmentation: the potential of new poverty and threat to the quality
of human resource; 3) Monoculture pattern, price fluctuations, replanting, and poverty threats; 4) Low leverage of ex-transmigration areas to the surrounding areas; 5) Delegation of authority of ex-transmigration villages is not completed.

REFERENCES


