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STRATEGY OF FARMER INSTITUTIONAL TRANSFORMATION TO ACCELERATE AGRIBUSINESS BASED RURAL ECONOMIC DEVELOPMENT

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ABSTRACT

Farmers Institutions with its various functions, can be a place and means of coordination between subsystems in the agribusiness system. Various stimulation efforts, facilitation with various policy instruments have been implemented by the government to encourage the transformation of farmer institutions into farmer's economic institutions; But so far it has not worked as expected. The Objectives of this research is to formulate the strategy priority of farmers institution transformations into economic institutions so that they can contribute in accelerating agribusiness-based economic development in rural areas. The research was conducted by interviewing experts who were involved directly and/or influential in making policy, understanding and having experience in the development of farmer institute in Agriculture Extension Center-Ministry of Agriculture, Indonesia. Experts were selected by purposive sampling method. Data collection was conducted from August 2015 to February 2016. Data processing used descriptive technique and Analytical Hierarchy Process (AHP). The research conclusion pointed out that the main strategy in the transformation of farmer institution into economic institution based on rural agribusiness was by changing behavior of farmers and entrepreneur capacity in order to be able to develop productive business managed jointly in the business scale to fulfill the need of market which was profitable and efficient. The main actors of driving the movement were the policy makers at the district/city level (BP4K).

Keywords: farmers Institution, economic institutions, transformation strategies, analytical hierarchy process.

INTRODUCTION

Indonesia is the fourth most populous country in the world after the PRC, India and the United States. Indonesian statistical data released by the Central Bureau of Statistics (2015) recorded the

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

number of Indonesian population in 2010 reached 237,641,300 people with a population growth rate of 2010-2014 by 1.40%. One of important potentials of the Indonesian population associated with the economy is the large number of youth or productive ages. The number of working age/productive population in 2014 (15-59 years) reached 161,666,594 people or about 64% of the population. This population group of productive age is one of strengths of this nation.

Considering the large number of productive age population in Indonesia which is often referred to as a demographic bonus, economic strengthening should be a major concern especially in the creation of employment opportunities. One of sectors that has been the basis of the country's economy is agricultural sector. The creation of the widest possible employment opportunities in the agricultural sector can be a strength for this country in addressing and utilizing the demographic bonus. Employment opportunities for the productive aged population are still widely open in the agricultural sector.

The agricultural sector in question is in a broad sense, including agriculture development with the agribusiness paradigm; that viewing agriculture as a coordinated system from upstream to downstream. This is important, given that agriculture as an on-farm activity is increasingly pressured to face the increase of land conversion and environmental degradation. Agribusiness development can be one way in economic development especially for rural communities.

Efforts, stimulation and policy instruments are implemented to overcome obstacles and respond to challenges in encouraging economic strengthening in the agricultural sector. The challenges faced in the agricultural sector mainly come from the characteristics of farmers, such as, small-scaled businesses, scattered locations, limited business capital, and farmer institutions that have not functioned as economic institutions, and their supporting institutions.

Institutionalization is one of important factors in the development framework of agribusiness system and effort. Institutional agriculture with various functions, can be a place or a means of coordination between subsystems in the agribusiness system. Such institutions can be in the form of formal bodies such as the Agency for Logistics Affairs, banking institutions, and agricultural insurance agencies, or in the form of informal institutions initiated by farmers such as farmers' /traders associations, farmers groups and *gapoktan*. From formal aspect, institution is a portray/description of formal institution regulation aspect consisting of jurisdiction, regulation, sanction and monitoring limit (Utami et al., 2011)

Syahyuti (2006) stated that institutional development is one of the main components in the overall design of Agriculture, Fisheries and Forestry Revitalization (RPPK) in Indonesia on 2005-2025. The institutional approach has also been a central component of agricultural and rural development. However, farmer institutions tend to only be positioned as a tool for

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Volume:03, Issue:03 "March 2018"

implementing projects, not as an effort for more basic empowerment. In the future, in order to participate as a participatory community, institutional development must be designed as an effort to improve the capacity of the community itself to become self-sufficient.

Therefore, institutional agriculture function and role should continue to be developed in supporting the strengthening of national and community's economy. One of agricultural institutions in the development of agribusiness systems and business are farmer group and *gapoktan*. The functions of farmer groups and gapoktan are expected to be the support of economic activities in rural areas. In order to realize it, the farmers and *gapoktan* are required to transform themselves to be adaptive on becoming institutions that meet the evolving needs. This is meant by institutional transformation.

Gapoktan transformation into an economically strong institution and the basis of economic development of farmers in rural areas has been driven by the government through various programs and instruments. This is conducted to obtain an institutional development framework that support the farmers interest. Anantanyu (2011) concluded that the strategic policies of farmers institutional development can be realized by increasing extension support, role of outsiders, group dynamics, capacity of farmers, and participation of farmers.

Basically, stimulation efforts by the government through community institutions are intended to improve the welfare of the community (farmers) in rural areas. However, the results of previous studies indicate that government stimuli with various programs have not been optimally achieved because the farmers institutions have not been steady.

The portray shows that there is a problem on the farmer institution in Indonesia that result in less effective execution of the farmer institution development into farmers economic institution. The existing economic institutions of farmers have not played a significant role in mobilizing rural economy, especially those based on agribusiness. Various programs to transform farmer institutions into farmer economic institutions to improve agribusiness-based rural economy has not reached its objectives.

Based on the problems described, the question that will be answered in this research is how the strategy to transform the farmers institutions into economic institutions to accelerate agribusiness-based economic development in rural areas. The Objectives of this research is to formulate the strategy priority of farmers institution transformations into economic institutions to contribute in accelerating agribusiness-based economic development in rural areas.

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

METHODOLOGY

The research was conducted in the Ministry of Agriculture, in this case is the Agricultural Extention Center as a regulator of agricultural groups transformation into economic institutions and policy makers in the development of farmers' economic institutions. The regulation includes the Regulation of the Head of Agricultural Extension and Development Agency Number: 90/Per/Sm.820/J/12/12 on the Implementation Guidance for the Development of Farmers' Economic Institution.

The study was conducted from August 2015 to February 2016. The data was collected through interviews with experts who were directly involved and/or influencial in policy making, understanding and experience in the development of farmer institutions. Experts were selected by purposive sampling method with the consideration that experts were competent and experienced people and policy makers. Primary data was obtained through direct interview with expert/policy maker by using questionnaire instrument. Secondary data was obtained from Agricultural Data and Information Center, Agricultural Extention Center, Central Bureau of Statistics, literature study and other relevant sources. Data analysis was conducted to determine the strategy priority of farmers institution transformation into economic institutions using Analytical Hierarchy Process (AHP) method with Software Expert Choice 2000 assistance. Expert Choice was chosen for its friendly supporting software and contributed greatly to the success of the AHP method (Ishizaka 2009).

RESULTS AND DISCUSSION

The prioritization of farmer institutional transformation strategy into economic institution involves policy makers from various stakeholders from the central level (Ministry of Agriculture), provinces, districts/municipalities, sub-districts and farmer institutions that focus on long-term goals that is to accelerate agribusiness based economic development on rural areas. Strategy priorities are developed in order that the objectives of the rural economic development acceleration based on agribusiness can be achieved.

Vertical Analysis

Vertical data processing aims to see the effect of each element at a certain hierarchical level toward the main target or focus. Vertical processing can indicate an alternative priority strategy of farmers institution transformation into economic institutions that can be selected based on the greatest weight of each element of the hierarchy. Here's an overview of the results of the vertical analysis:

a. Element of Actor Influence

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

Actors are the parties involved and play a role in decision-making for farmers institution transformation into economic institutions. These actors include: Head of Agricultural Extension and Development Agency (PPSDMP), Head of Agricultural Extension Coordinating Board (Provincial), Head of Agricultural Extension Agency, Fisheries and Forestry (regency/city), Head of Extension Office in sub-district, and chairman of *Gapoktan*/farmers group. The role of the actors is very important and gives a big influence in realizing the farmers institution transformation into economic institutions.

The result of the research with vertical data processing shows that the most involved and influential actors' priority in farmers institution transformation into economic institutions is the Head of Agricultural Extension Agency, Fishery and Forestry/Institution in charge of agricultural extension of regencies/cities) with the weight of 0.315. The priorities of the next actors are Chairperson of Gapoktan/Poktan (0.302), Head of PPSDMP Agency (0.226), Head of Extension Office in sub-district (0.121), and Head of Agricultural Coordination Board (Bakorluh) (0,037).

The level of expert consistency in conducting judgment in filling the questionnaire can be seen from the inconsistency value of the output of expert choice. The inconsistency value of the data processing result is 0.09 (less than 1), meaning that expert judgment is consistent in filling out the questionnaire, in other words there is no deviation in comparing the element/actor element with the focus element.

Based on the results of in-depth interviews conducted with experts, it is identified that the Head of Executing Agency of Agriculture, Fisheries and Forestry/institutional in charge of agricultural extension of districts/cities in many places called BP4K, plays the most important role in realizing the farmers institution transformation into economic institutions. This is because the programs designed and developed by the Head of Implementing Agency for Agricultural Extension, Fisheries and Forestry/Institution in charge of the agricultural extension of the district/city are in direct contact with the farmers institution as the main actors of agricultural institutions in rural areas.

The programs are based on the advantages and potentials of their respective areas and local wisdom so that they are specific and specific such as location specific, cultural specific, and social specific. Therefore, the various BP4K programs have become very decisive in the effort to realize the farmers institution transformation into economic institutions in the region.

In addition, BP4K's important position in the farmers institution transformation into economic institutions is also supported by the extension resources available in BP4K, which are dominated by experts of agricultural extension workers. This is very necessary because expert of agricultural extension workers are assessed to have more comprehensive and visionary skills in

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

designing strategic extension programs, in addition to agricultural extension experts are also well aware of the conditions in the field. This is in contrast to BP3K inhabited by skilled agricultural extensionists who focus more on the technical and operational side. BP4K as the implementer of the extension program that interacts with the farmers institution at all times becomes very important position in the transformation of farmer institution into economic institute in their respective areas so that it can become the determinant toward the acceleration of agribusiness based rural economic development in its area.

b. Elements of Objectives Influence

The results of data processing at the level of destination shows the level of influence of goals to be achieved on the institutional transformation strategy of farmers into economic institutions to accelerate the agribusiness based rural economic development. The results of vertical processing at the destination level are presented in Table 1.

Tabel 1: Priorities of Influential Goals in Farmers Institutional
Transformation into Economic Institutions

Objectives	Score	Percentage	Priority
To establish an agribusiness-based economic institution that can access business capital	0,389	38,89%	1
Managing farming through the development of business networks and partnerships with other business actors	0,158	15,83%	4
Encouraging the agribusiness-based farmers' institutionalization with favorable economic scale	0,211	21,10%	3
Improve the bargaining position in partnering with other parties	0,242	24,18%	2

Based on Table 1, the main priority objective of farmers institution transformation into economic institutions is to establish an agribusiness-based economic institution that can access capital business (0.389). Priorias subsequently succeeded in increasing the bargaining position in business partnership with other parties (0.242), encouraging agribusiness-based farming institutions with favorable economic scale (0.211), and managing farms through the development of business networks and partnerships with other business actors (0.158). The function of the group to transform into economic institutions needs to establish a legal entity, particularly in accessing business capital.

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

Capitalization of farmers' institutional business during this time generally comes from government assistance either through APBD or APBN in the form of social assistance. Related to that, the farmer institution must have legal entity. If you do not have a legal entity then the opportunity to get help or grant will be closed and difficult to materialize. This is reinforced by Law No. 23 of 2014 on Regional Government which brings the consequence that every beneficiary (aid) must be an institution already incorporated or already registered as an institution to Kemenkumham. District and provincial governments no longer provide assistance to public institutions that do not have legal entities because they are stuck in Article 298 paragraph 4 and 5 of Law No. 23 of 2014 and confirmed by Circular Letter of the Minister of Home Affairs Number 900/4627/SJ dated August 18, 2015.

The results of Saptana et al. (2013) states that the institution of farmers/gapoktan needs for institutional transformation into institutional legal entities with notarial deeds such as business entities owned by farmers. Legal entity is an organization or association established by an authentic deed. Forms of institutional institutions of farmers such as cooperatives and limited liability company (PT).

c. Elements of Factor Influence

Elements of factors influencing the transformation of farmer institutions into economic institutions to accelerate the agribusiness based rural economic development are presented in Table 2. The entrepreneurial capacity entrepreneurial capacity factor becomes the first priority factor with a weight of 0.386. The next factor according to priority is managerial capacity and leadership of farmer institution with weight 0,245, mindset, insight and behavior of farmer with weight 0,181, agribusiness/partnership network between main perpetrator with business actor 0,110 and motivation and work ethic of farmer institute 0,077.

Based on Table 2 it can be seen that the main factor in consideration in realizing the farmers institution transformation into economic institutions is the entrepreneurial capacity of farmer institutions. Entrepreneurship is a mental attitude and soul that is creative, active, creative, empowered in developing his business to increase his income from the business or activities in effort.

Volume:03, Issue:03 "March 2018"

Table 2: Priorities of Influential Goals in Farmers Institutional
Transformation into Economic Institution

Factor	Score	Percentage	Priority
Mindset, insight and behavior of farmers	0,181	18,10%	3
Motivation and work ethic of farmer institution	0,077	7,70%	5
Managerial capacity and leadership of farmer	0,245	24,50%	2
institutions			
Entrepreneurial capacity of farmer institutions	0,386	38,64%	1
Agribusiness network/partnership between principal	0,110	11,06%	4
actors and business actors			

According to Schumpeter (1934), entrepreneur is an innovator who implements changes in the market through new combinations. The new combination can be either: introducing new or new products, introducing new production methods, opening new markets, obtaining new sources of supplies from new materials or components, or running new organizations in an industry. Schumpeter associates entrepreneurship with the concept of innovation applied in the business context as well as linking it to a combination of resources.

The fact mostly encountered is that farmer groups generally only produce to fulfill their own needs, and it will be sold only if there is a surplus after their needs (semi-commercial). This causes a number of farmer institutions in both *gapoktan* and farmers group are not able to become a reliable economic institution as source of economic development in rural areas. Therefore, the Government as a regulator is expected to encourage and facilitate the growth of entrepreneurial institutions. In addition, more training or other non formal education is necessary to be held to inspire the spirit and explore the entrepreneurial talent of farmer institution so that they are able to transform into economic institution having good entrepreneurship capability. The role of agricultural extension is also important in this case, so that agricultural extension is not only held on cultivation techniques material, but also need to be developed with agribusiness based education material.

d. Elements of Alternative Strategies

The strategic alternatives contained in the hierarchical structure in this study are the basic strategies formulated by policy makers (BPPSDMP Ministry of Agriculture) as contained in the Regulation of the Head of Agricultural Extension and Development Agency No. 90/Per/Sm.820/J/12/12 on the Implementation Guidelines for the Development of Farmers' Economic Institutions. The result of weightedness synthesis using expert choice shows that the

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

most important strategy alternative and the main priority in the framework of farmers institution transformation into economic institutions to accelerate the agribusiness based rural economic development is to change the farmers behavior in order to develop productive business managed jointly in the scale of business to (0.366). The successive alternative strategies are the facilitation of growth and strengthening of the farmers 'economic institutions based on the improvement of farmers' institutional capacity (0.264), facilitation of agribusiness networking/partnership among key actors and business actors (0.199), And empowerment of agricultural enterprises through the development of market-oriented and economic-scale enterprises (0, 170) as the last priority of alternative strategies.

The results of this study indicate that changing the farmers behavior to work in a farmer institution is very important. This is because in the development of productive business managed jointly in a farmer institution (gapoktan, poktan, cooperative, etc.) in the scale of business will provide assurance for farmers to meet market needs continuously. Continuous supply is one of the necessary conditions if you want to expand into the agricultural (business) industry. In addition, joint efforts in a farmer institution will lead to more efficient farming activities.

One form of institutional development of farmers into economic institutions proposed by experts from the results of the interview is the Farmers Owned Enterprises (BUMP). BUMP can be developed for farmers whose business is progressive and farmers who have the desire to advance and grow business.

Horizontal Analysis

Horizontal processing is performed to see the priority of an element against another element at one level above it in the hierarchical structure. The horizontal processing of this research consists of: processing between elements of objective (third level hierarchy) on the elements of actors (second level hierarchy), processing of factor elements (fourth level hierarchy) toward objective elements (third level hierarchy), and processing of alternative strategy elements (The fifth level hierarchy) of the factor element (fourth level hierarchy).

a. Elements of objectives to the Actor

The results of analysis on objectives priority of the five actors playing role in the framework of transforming the farmers' institutions into economic institutions are presented in Table 3. Based on the priority weight values for each actors it is identified that three actors (Head of BPPSDMP, Head of Bakorluh, and Head of BP4K) have a priority to establish an agribusiness-based farmers economic institution with legal entity that can access business capital. The three actors seem to prioritize to encourage farmers to form legal entities in their farmers' institutions, thus facilitating

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

access to capital assistance in the form of social funding from central and local government budgets.

Table 3: Horizontal Processing Weight on Objectives Element (Third Level Hierarchy)

Against the Actor Elements (Second Level Hierarchy)

	Actor				
Objectives	Head. BPPSDMP	Head. Bakorluh	Head. BP4K	Head.	Chairman.
•				BP3K	Gapoktan/
					Poktan
To establish an agribusiness-	0,688	0,548	0,505	0,360	0,051
based economic institution					
that can access business					
capital					
Managing farming through the	0,143	0,109	0,064	0,106	0,295
development of business					
networks and partnerships					
with other business actors					
Encouraging the agribusiness-	0,088	0,274	0,288	0,413	0,134
based farmers'					
institutionalization with					
favorable economic scale					
Improve the bargaining	0,101	0,070	0,143	0,120	0,520
position in partnering with					
other parties					

Meanwhile, the head of BP3K has the priority to encourage the farmers' institutions by agribusiness-based enterprises on a profitable economic scale. Here shows that the Head of BP3K actor prioritize to improve the efficiency of agricultural business. The head of *Gapoktan/Poktan* actor has priority to improve the bargaining position in partnering with other parties. This shows that at the institutional level of farmers, the problem of weak bargaining position remains a top priority. On the other hand, the formation of legal entities remains the lowest priority for farmer institutions. Based on the results of the interview, it is identified that the farmers feel that the formation of farmers institutions with legal status has not been necessary, because most of the farmers' institutions are not oriented towards the establishment of economic institutions.

b. Elements of Factors to Objectives

Volume:03, Issue:03 "March 2018"

The factor priority (level four) that affects the objective (level three) to realize the farmers institution transformation into economic institutions is presented in Table 4.

Table 4: Horizontal Processing Weight on Factor Elements (Fourth Level Hierarchy) on the Objectives Element (Third Level Hierarchy)

	Objectives			
	To establish an	Managing	Encouraging the	Improve the
	agribusiness-	farming through	agribusiness-	bargaining
	based economic	the development	based farmers'	position in
Factor	institution that	of business	institutions with	cooperation with
	can access	networks and	favorable	other parties
	business capital	partnerships with	economic scale	
		other business		
		actors		
Mindset, insight, and	0,343	0,066	0,096	0,070
behavior of farmers				
Motivation and work	0,087	0,080	0,072	0,064
ethic of farmer				
institution				
Managerial capacity and	0,202	0,254	0,310	0,251
leadership of farmer				
institutions				
entrepreneurial capacity	0,302	0,400	0,420	0,458
of farmer institutions				
Agribusiness	0,067	0,200	0,104	0,129
network/partnership				
between principal actors				
and business actors				

Based on Table 4 it is identified that the main influencing factor to achieve all objectives in the farmers institution transformation into economic institutions is entrepreneurial capacity of farmer institutions. To become an economic institution, farmer institutions must have a strong institutional capacity.

c. Elements of Alternative Strategies to Factors

An alternative priority strategy (level five) influencing factor (level four) to realize the farmers institution transformation into economic institutions is presented Table 5. Based on the factors affecting the farmers institution transformation into economic institutions, alternative strategies that can be applied today are changing the farmers behavior In order to develop productive

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

enterprises managed jointly in the scale of business to meet the needs of a profitable and efficient market.

Table 5: Horizontal Processing Weight on Alternative Strategy Elements (Fifth Level Hierarchy) on Factor Elements (Fourth Level Hierarchy)

	Factor				
	Mindset,	Motivation	Managerial	The	Agribusiness
	insight,	and work	capacity	entrepreneurial	network/partnership
Alternative Strategy	and	ethic of	and	capacity of	between principal
	behavior	farmer	leadership	farmer	actors and business
	of farmers	institution	of farmer	institutions	actors
			institutions		
Change the farmers	0,564	0,583	0,529	0,241	0,097
behavior in order to					
develop productive					
enterprises that are					
managed together in					
units of business scale to					
meet the needs of a					
profitable and efficient					
market					
Facilitate the growth and	0,178	0,132	0,137	0,405	0,275
strengthening of farmer's					
economic institutions					
based on the					
improvement of					
institutional capacity of					
farmers					
Empowerment of	0,155	0,157	0,145	0,176	0,182
agricultural business					
through the development					
of types of business-					
oriented and economic-					
scale business					
Facilitate the formation	0,106	0,132	0,195	0,179	0,445
of					
agribusiness/partnership					
networks among key					
actors and business					
actors					

ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

CONCLUSION

The main priority alternative strategy in the transformation of farmer institution into economic institution to accelerate the development of agribusiness based on rural economy is changing the farmers behavior in order to develop productive business which is jointly managed in the business scale to fulfill the need of the market which is profitable and efficient. Realization of farmers institutional transformation into economic institutions is performed by prioritizing the most involved and influential actors such as the Head of Agricultural, Fisheries and Forestry Extension Agency at the district/city level (BP4K).

The government as a regulator is suggested to always encourage and facilitate the growth of insightful and entrepreneurial institutions. Furthermore, it is suggested to conduct training or other non formal education more intensively to inspire entrepreneurship spirit from farmer institution, so that they are able to transform into institutional agriculture having good entrepreneurship capability. Agricultural extension also has an important role, that it is expected to develop agribusiness-based materials so that agricultural extension is not only focused on the cultivation techniques material.

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ISSN: 2455-8834

Volume:03, Issue:03 "March 2018"

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