

STUDY OF PUBLIC KNOWLEDGE MANAGEMENT POLICIES FOR SMALLHOLDER COMMUNITIES IN AGRICULTURAL CLUSTER AREAS

Veronice^{1*}, Helmi², Henmaidi³, Ernita Arif⁴

- ¹Department of Agriculture Science, Faculty of Agriculture, Andalas University, Padang 25163, Indonesia.
- ²Department of Socio-economic of Agriculture, Faculty of Agriculture, Andalas University, Padang 25163, Indonesia
- ³Department Industrial Engineering, Faculty of Engineering, Andalas University, Padang 25163, Indonesia
- ⁴Department of Communication Science, Faculty of Social and Political Sciences, Andalas University, Padang 25163, Indonesia

ABSTRACT: The purpose of this research is analyze the public policy of Knowledge Management of Smallholder Communities in Agricultural cluster areas. The method used is descriptive method with a qualitative approach. The results of this study indicate that various policies have been issued by the government in the Smallholder Community Knowledge Management in the Agricultural Cluster Area, including through the farmer empowerment and institutional law, the agricultural extension system and extension services by making the Agricultural Extension Agency the center of data in gathering information in the districts

Keywords: *agricultural cluster area; knowledge management, public policy*

I. INTRODUCTION

Government policy factors or known as public policy Knowledge Management (KM) in the community of small holder in agricultural cluster areas have a big part in the success of agricultural development. History shows that in these countries, good public policy is the key to the successful management of the State. However, as long as the government tends to overemphasize policy on the development of the region by prioritizing the development of physical, technological, economic and political infrastructure, while attention to the development of Human Resources and institutions or organizations is still minimal [1]; [2].

One form of solution to improve access to human resources knowledge is through KM. KM is very important in increasing effectiveness, efficiency, added value and innovation in an organization [3]; [4]; [5]. One of them is through KM smallholder community by uniting smallholder through collective action in a regional development including building productive business units and commodities through the use of natural resources together [6].

The KM approach in the development of agricultural cluster areas becomes important if carried out collectively in a community. The collectivity in the agricultural community is characterized by the relationship of attachment and togetherness among smallholder in achieving common goals that are united through farmer groups. Achieving shared goals must be realized in collective action to bring about changes or transformations in agriculture.

Agricultural transformation is not only in the form of mechanization and technology but also involves the management of knowledge in order to increase farmers' incomes. In addition, the form of transformation that occurs is institutional transformation, which makes the position of smallholder switch as the subject of development and sources of agricultural development policy development, so that the KM process of the smallholder community is able to provide a paradigm shift, from farmers as consumers of knowledge to farmers producing knowledge on development agricultural cluster area.

On the other hand, government policies tend to be inconsistent, always changing, and difficult to implement in their entirety. This requires serious attention because basically all development failures originate from two fundamental problems, namely policy failure and institutional failure. Institution or institution is the center of policy theory and institutions are considered as elements in making and forming policy. For example, most policies are determined in the form of rules and regulations which are the main elements in the institution.

Based on this, the condition is interesting to study related to the KM policy analysis of the smallholder community in the agricultural cluster area.

II. MATERIAL AND METHODS

This research uses a descriptive method with a qualitative approach. Qualitative descriptive research is research to describe a situation regarding the social situation of the object of the research study, which cannot be measured by quantification data. Data collection techniques used in this study are scientific literature survey techniques namely the process of placing, obtaining, reading, and evaluating research literature and including also with journals, articles, documents, or visual material relating to the KM public policy of smallholder communities in agricultural cluster areas. The data obtained were then classified and analyzed using theory, and literature relating to KM analysis.

III. RESULT AND DISCUSSION

A. KM Smallholder Community Policy Concepts in Agricultural Cluster Areas (National Policy)

One form of institution that exists in the countryside and is a form of community is a farmer group. Farmer groups are groups of farmers who are formally bound and formed on the basis of equality, interests, common environmental conditions (social, economic, resources), intimacy and harmony, and have leadership to achieve common goals [7].

Based on Regulation of the Minister of Agriculture Number.67 / Permentan / SM.050 / 12/2016, farmer groups have the following characteristics: (a) Mutual acquaintance, intimacy and mutual trust among members; (b) Have the same views and interests in the farming business; (c) Having similarities in tradition and/or settlement, business expanse, type of business, economic or social status, language, education, and ecology; (d) There is a division of duties and responsibilities among members based on mutual agreement. The role of farmer groups that refer to the Ministry of Agriculture is: (a) Learning classes, farmer groups are a forum for teaching and learning for their members to increase knowledge, skills in farming; (b) A vehicle for cooperation, a farmer group is a place to strengthen cooperation among fellow groups.

One of the approaches of farmer groups is done through agricultural extension activities. The function of extension itself is decision making or collective agreement in the group and also relates to a person's opinion of the group.

The Extension Program is part of KM [8]. KM built in this research is a system created to create, document, classify and disseminate knowledge in organizations so that knowledge is easy to use whenever needed, by anyone in accordance with the level of authority and competence including smallholder, extension workers, traders, small industries and other stakeholders involved in the development synergy of disseminating technological innovation in the agricultural cluster area [9]. This synergy is an important issue or issue in agricultural development policies throughout the world today, namely sustainability or sustainability [10] ;[11].

The policy is one of the vital elements in any organization or institution, whether it is government, private, educational institutions, NGOs, donors, or international institutions, even in families or even informal institutions. The policy is the basis for concrete actions on the ground. Policies exist in every institution or organization that can be derived in the form of strategies, plans, regulations, agreements, consensus, and codes of ethics, programs, and projects. The success of a policy is largely determined by the process of its creation and implementation.

KM implemented in agricultural cluster areas has constraints that cause failure. The failure factors of the smallholder community include:

1. Inadequate support (managerial and technical).
2. Hoping that the technology itself is a KM solution.
3. Lack of understanding of the needs of an organization.
- 4 Do not understand the functions and specific limitations of each system.
5. Lack of understanding of the dynamics of knowledge and difficulties in transferring knowledge silently with IT-based systems.

The Government of Indonesia through the Ministry of Agriculture plans to increase the economies of scale of farming. One way is to bring together smallholder groups in the horticultural area into a business entity similar to a cooperative, so that production inputs can be uniformed and regulated, how to cultivate, to post-harvest management, and marketing.

The merger of these smallholder groups in principle aims to streamline the production costs of farmers with optimal quality and productivity, as well as being connected to the logistics and marketing systems. In addition, the Ministry of Agriculture is now also intensively consolidating farmer business institutions in horticultural production areas that are directly connected to the cargo expedition network, warehouses, and online-based marketing systems so that they can spur production growth, improve crop quality, and expand marketing access for horticultural farmers.

In the Regulation of the Minister of State for Administrative Reform and Bureaucratic Reform No. 14 of 2011 concerning the Guidelines for the Implementation of the Knowledge Management Program, the principles of knowledge management consist of three basic processes, namely the acquisition/acquisition of knowledge, sharing of knowledge, and utilization of knowledge. In more detail it is described as follows;

a. Knowledge acquisition/acquisition, which is the process of acquiring or developing intellectual assets, including personal understanding, expertise, experience, and relationships between data. In this process the data is recorded and stored in an organizational knowledge database or knowledge repository. b. Sharing knowledge, which is the process of disseminating and making knowledge available to various groups in need of the user's organization. The sharing process can be formed through social processes in an organizational culture that value knowledge sharing activities. The process can take place traditionally through discussion and colloquium, as well as through modern media based on technology.

c. Utilizing knowledge, which is the process of using knowledge in an organization. This includes applying it to the formation of work guides based on past experience and knowledge. In this process there is also the development and further refinement of the knowledge gained.

In addition, to achieve the above objectives, the government issues a number of policies in the form of regulations (regulations and/or deregulation) that are implemented to facilitate the operational ease of agricultural development in the field.

B. Forms of Public Policy in Agriculture

Here are some examples of policies issued by the government in agriculture is :

1. UU no. 19 of 2013 concerning Protection and Empowerment of Farmers (P3) and their revisions by the Constitutional Court in 2014

The rise of feudalism in this law has become very detrimental to farmers and finally this law has been revised again. Farmers returned to the colonial period by giving tribute to the government so that the increase in welfare that was desirable during this time would disappear again.

Likewise, the organization restrictions that are formed greatly limit the space for farmers to create a new organization or institution.

However, the policy on farmers and organizing farmers lately has experienced a fairly rapid dynamics with the issuance of Law P3, Law No. 16 of 2006 concerning Agricultural, Fisheries and Forestry Extension Systems; UU no. 1 of 2013 concerning Microfinance Institutions; and Permentan No. 82/2013 concerning Guidance for Building Farmers and Farmers Groups. This policy provides limits as well as opportunities for organizing farmers in the future.

Table 1. Amendment to contents 19 of 2013 by the Constitutional Court

Article	Law No. 19 of 2013	Revision by MK
Article 70 paragraph 1	Institutional farmers as referred to in article 69 article 1 consists of: a) Farmer groups, b) Farmers Group Combinations, c) Agricultural Commodities Association, d) National Agricultural Commodities Council	(Canceled)
Article 70 paragraph 2	The farmer is obliged to join and play an active role in the Farmer Institution as referred to in article 70 paragraph 1	Farmers join and play an active role in farmer institutions as referred to in Article 70 paragraph 1

Farmer organizing activities that have been carried out so far have not given optimal results. This is due to the weak understanding of the government or bureaucracy. Policy support and the role of government often do not meet the needs of farmers. The government has not been able to create conditions suitable for the development of farmer organizations. The regulation of farmer organizations in Law No. 19 of 2013 are listed in articles 69, 70, and 71. Since the draft of this Act was compiled in fact there have been many disagreements about the content in the article. For this reason, in December 2014, specifically for Articles 70 and 71 the contents of the Constitutional Court were revoked and changed.

2. Law No. 16/2006 concerning the Agricultural, Fisheries, and Forestry Extension System (SP3K);

Law No. 16/2006 concerning the Agricultural, Fisheries, and Forestry Extension System (SP3K); as well as the laws and regulations below, do not seem to provide space for extension agents to work with farmers' needs. The results of the analysis show that the implementation of the laws and regulations in the field of extension has not

been fully synchronized with UUNo.32 / 2004, especially its derivative products, namely PP No.41 / 2007 and PP No.38/2007. Legislative derivative products in the field of extension have been consistent with Law No. 16/2006 and have supported the achievement of rice self-sufficiency in 2014.

The problem of implementation in the field of agricultural extension is related to the position of the agricultural sector as a 'chosen matter' so that coordination and synchronization between the central and regional development programs are still weak. The impact of the implementation of extension legislation can be seen from the role of counselor/escort that is not yet optimal. Extension officers who directly assist farmers, farmer groups, and farmer groups combined at the village level are around 35,146 people with a ratio of 75.22 villages in Indonesia. Therefore, currently an agricultural instructor on average escorts and assists farmers in 2 to 4 villages.

The national implication is that the intensity of extension extension for farmers needs to be increased, which is oriented towards increasing the capacity of farmers' knowledge, not merely on increasing production.

3. Law No. 23 of 2014 concerning local governments passed through PERPU No. 2 of 2014, the Extension Coordination Agency and the Agricultural, Livestock, Fisheries and Forestry Extension Agency will be merged into the Agriculture Service, so counseling is one of the fields at the Agriculture Service

This fusion becomes something that causes the position of extension workers to become more complicated and unclear. The existence of policies that are constantly changing, causes the position and role of instructors to be vague and results in sustainability in the implementation of tasks in the field.

C. Extension services policy

Agricultural extension services are very important for agricultural development. The extension service is responsible for simplifying research information and delivering that information to farmers in an effective and easily understood way. The extension service is also a feedback mechanism for researchers about problems faced by farmers and new innovations discovered by farmers.

The latest form of extension services issued by the government is the Agricultural Development Strategic Command (Kostra Tani) at the sub-district level consisting of extension workers and various other synergistic elements at the sub-district level. This has the effect of reviving farmer meetings in accordance with Law no 16/2006, namely the BPP as a gathering place for stakeholders at the sub-district level, namely business actors, main actors, and even including officials. The re-functioning of the BPP in the sub-district is due to the fact that from the sub district, all can be excavated properly and become a source of control. Starting from planning, implementation, learning, evaluation and marketing so that the functions of KM smallholders in the region can be realized.

D. Policy Concepts of KM Smallholder Communities in Agricultural cluster areas (Regional level)

The farming community is very dependent on agricultural technology. The ease of doing agricultural work has changed the mindset of farmers. This causes the use of traditional agricultural technology to change into modern agricultural technology.

Along with the development of the farming community also influenced by technological tools, especially the farming community the existence of agricultural technology tools that are very helpful for land management and so on. The existence of technology is very helpful especially agricultural technology. The farming community no longer uses the traditional farming system because it has been replaced by a modern farming system.

To examine the policy of developing agricultural commodities in Solok, it is necessary to look at three factors, namely what is the basis for policy making; how is the implementation and what impact will it have on people's welfare.

1). Policy considerations

Agricultural commodity development policy is certainly based on a number of indicators, including the amount of available potential both in terms of the potential of land resources, farmer resources, capital resources, and infrastructure facilities and infrastructure development. Solok Regency is part of a national agricultural producer whose production is very large and is a supplier to a number of agricultural consumer areas. In terms of land resources, there is also a distribution of agricultural land which is factually already planted and has produced, in addition to that there are still many agricultural lands that have been displaced and undergoing conversion. Farmers' resources are also no less great, in a number of farmers' regions there are quite a lot and some already have sufficient skills and expertise. Thus it is reasonable if the government issues policies for the development of agricultural commodities, both policies in the production sector as well as in processing and post-harvest or policies in the aspect of trading. In connection with the agricultural trade system, the government plans to include agriculture in the commodity futures trading system (PBK), the auction market (PL), and the Warehouse Receipt System (SRG).

2). Policy Implementation The Government has made various efforts including finding the best solution for the development of agricultural commodities through various programs, including agricultural intensification programs, agricultural extensification programs, multi-activity agribusiness programs, and others. While in the downstream part, the government has designed a number of agricultural commodities to be brought into the commodity exchange trading, auction market, and the development of a warehouse receipt system. Followed by the forward auction market, although there is still much to be refined. In the SPOT auction market, mechanisms have not yet been developed as expected, where participation from buyers and sellers has not yet been developed broadly. The auction market activities that have been going on for a long time, are felt by farmers there are still many shortcomings, including the need for storage warehouses.

3). To overcome this problem, Solok Regency currently has regional-based agricultural centers, such as horticultural areas, paddy / secondary crops, and plantation areas. Solok Regency has the potential and resources for agricultural development which is expected to have more added value through agribusiness and agro-industry based approaches and development. This potential is capital in realizing a people's economy to empower and improve the economy of the people of Solok Regency. To achieve these objectives a development planning that is consistent, consistent, and continuous is needed.

IV. CONCLUSION

Agricultural extension is a part of KM. The KM that was built was KM Community of smallholder in the agricultural cluster area by conducting various extension services to increase the effectiveness, efficiency and added value of farmers. However, KM problems that occur in smallholder communities including lack of participation in groups, lack of information sharing, Inadequate support (managerial and technical), Lack of understanding of the needs of an organization, Do not understand the functions and specific limitations of each system can be overcome by the policies issued by the government both central and local governments by collaborating and synergizing between institutions and stakeholders.

REFERENCES

- [1] Iqbal, M., & Anugrah, I. S. (2009). Rancanganbangunsinergikebijakanagropolitandanpengembanganekonomilokalmenunjangpercepatanpembangunanwilayah.*AnalisisKebijakanPertanian*, 7(2), 169-188.
- [2] Farhanah, L., & Prajanti, S. D. W. (2015). Strategies in developing agropolitan areas in Indonesia. *Jurnal Ekonomi Pembangunan*, 16(2), 158-165. doi:10.23917/jep.v16i2.1460
- [3] Bai, 2014. knowledge management in supporting collaborative innovation community capacity building", *journal of knowledge management*, vol. 18 iss 3 pp. 574 – 590.
- [4] Chen, C.J, Huang, J.W., Hsiao, Y.C.2010. Knowledge management and innovativeness: The role of organizational climate and structure. *International Journal of Manpower*, 31(8), 848-870.
- [5] Lerro, knowledge-based capital in building regional innovation capacity", *journal of knowledge management*, vol. 12 iss 5 pp. 121 – 136. 2008.
- [6] Menaouer, B., S. Khalissa, et al. "Towards a New Approach of Support Innovation Guided by Knowledge Management: Application on FERTIAL." *Procedia - Social and Behavioral Sciences* : 260-269
- [7] Setiyanto, A. 2013. PendekatandanImplementasiPengembanganKawasanKomoditasUnggulanPertanian.*Forum Penelitian Agro Ekonomi*, Volume 31 No.2 Desember 2013, hal: 171-195
- [8] Nainggolan, K., Harahap, I. M., danErdiman. 2014. TeknologiMelipatGandakanProduksiPadiNasional. Jakarta: PT GramediaWidiasarana Indonesia.
- [9] Ray, A.C. 2017. Knowledge Management in Agriculture and its methods: A study. *International Journal of Next Generation Library and Technologies* May 2017 Volume 3 Issue 2 (Issn 2395 – 5201)
- [10] Wang, M.-H. and T.-Y. Yang (2016). "Investigating the success of knowledge management: An empirical study of small- and medium-sized enterprises." *Asia Pacific Management Review*.
- [11] Riva'i,RS. 2011. Konsep Dan Implementasi Pembangunan PertanianBerkelanjutan Di Indonesia, *Forum Penelitian Agro Ekonomi*, Volume 29 No. 1, Juli2011 : 13 – 25