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## **The effectiveness of extension methods for the development of self-reliance of agroforestry farmer groups in accelerating Forestry Development**

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### **Abstract**

*The ability of forestry extension agents, forestry extension materials to be delivered and the intensity of the extension are classified as effective. In terms of developing farmers ' independence and making extension workers more confident in assisting farmers. effective extension of agroforestry farmers, choosing extension materials must be strictly in accordance with the needs of the target in this case the main actors and agricultural businesses. The development of farmer groups is directed at improving the ability of agroforestry groups in carrying out their functions, namely increasing the ability of members to develop agribusiness. The existence of extension workers is the spearhead in the acceleration of Forestry Development has the skills to invite people to be more advanced and creative. The level of understanding of agroforestry farmers and the number of extension workers is still less effective, because the information and motivation of farmers is still lacking and the number of extension workers is not proportional to the number of farmer groups targeted by extension workers. Self-reliance development of agroforestry farmer groups to be achieved in Bongguron Village, Raya District, Simalungun Regency in order to realize independent and dynamic farmer groups, where farmers have discipline, responsibility and are skilled in cooperation to manage their business activities to increase forestry production, for this reason, a market with a high enough price is needed to market the production in order to restore the costs incurred by farmers in running their farming business and increase farmers ' income by increasing productivity so that it can support the acceleration of Forestry Development.*

**Keywords:** *Extension Of Self-Reliance Development Of Agroforestry Farmer Groups, Acceleration Of Forestry Development*

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## **INTRODUCTION**

Extension is an activity that is sought to empower the farming community in improving knowledge and living standards. In a general sense, extension is a social science that studies the system and process of change in individuals and communities in order to realize better changes in accordance with the expected behavior change and improvement of Farmers ' Welfare. Extension is one form of communication in a community empowerment farmers conducted based on the needs of the target not based on the needs of extension. Extension is an equal partner for farmers who have a strategic role in forestry development. In carrying out these roles, extension workers have the main tasks and functions that become a reference in conducting extension

The empowerment strategy emphasizes the real steps of democratic community development, namely the development process that is based on, by, and for the people who walk in the order of the process of changing the structure of society. Empowerment and community development is intended that every Indonesian citizen who enjoys development must be those who produce and those who produce must be those who enjoy. Community empowerment that starts from individuals or groups of people who also really want a change in their social life. At this time very many individuals who have a pattern of thinking that wants to improve the conditions of the environment or the surrounding community, but they also do not know at all how to implement it. Empowerment and how to implement it is a process of

developing the potential and ability of the community, so that there is an increase in good thinking patterns or their capacity to solve problems faced in the field of Forestry they face.

The process of developing group independence is the capacity of farmers known as empowerment. This capacity building process starts from the individual scope which is then expected to spread to a wider scope, namely Community Capacity Building. In empowerment activities, people are given opportunities or opportunities and support and resources to be able to independently control themselves. In order for the entire stage which is the goal of extension activities can be achieved, then before carrying out extension activities both extension agents and extension agencies need to prepare by designing a strategy to mencapai extension program on target, on time and obey the principles. Seeing the condition of the independence of farmer groups with the realization of awareness arising from each individual or group grown from, by and for the main actors. To accelerate the adoption of agricultural technology assemblies in an effort to increase farmers ' productivity and income, it is necessary to immediately carry out the process of technology transfer in the form of information and technology counseling on the results of studies both through publications and meetings. One of the efforts to accelerate the dissemination of technological information to users, namely by streamlining the flow of technological information from technology sources to user farmers. In order for the flow of information to effectively reach user farmers, information must be disseminated to innovator farmers who can serve as channels in the existing social network ties in the community. Dissemination of information through individuals in social networks must be packaged in a variety of media channels of information and communication techniques. The agricultural technology innovation extension system needs to get strong support so that the process of delivering and adopting agricultural technology can take place quickly and under control. The diverse characteristics of farmers demand the importance of a more targeted extension, dissemination with new approaches that are more objective.

Target determination in Bongguron village, Sub-District Raya, Simalungun regency related to extension and diffusion of agricultural innovation can be done with an approach that emphasizes the phenomena that occur or the symptoms that occur in the structure of the farming community. This phenomenon can be clearly described in a series with the effectiveness of extension methods in the atani agroforestry group and support forestry development. An in-depth understanding of the interaction and communication processes that occur in a farmer's social structure, facilitates the implementation of effective and efficient extension both in terms of time and energy which is one of the foundations that is able to support the success of the forestry extension process.

## RESEARCH METHODS

Explanatory descriptive research design. The research location in Simalungun Regency, namely Bongguron village Sub-District. The population in this study were members of agroforestry forest farmer groups that are active as many as 76 people. Member sampling is done by using purposive sampling.

What is meant by the effectiveness of extension is a situation that shows the success rate of agricultural extension by local extension workers in achieving the goals set. Analysis to be used with scoring techniques or scale values with provisions (Sugiyono, 2004). Giving score is divided into several class intervals (effective, less effective, ineffective ) with score for effective criteria 3, less effective 2 and ineffective 1)

$$Interval = \frac{\text{Higt Score} - \text{lowest score}}{\text{Number of classes}}$$

## Categories :

- Score with value = > 3.0 effective category
- Score with value = 2.5-2.9 less effective category
- Score with value = 1.0 – 2.4 ineffective category

## RESULTS AND DISCUSSION

### Internal characteristics of KTH members

Internal characteristics of KTH members include age, formal education, duration of Group membership, training followed and motivation of group members. The condition of the internal characteristics of KTH members is generally at a low level, both in terms of formal education, the length of being a member of the group, the training followed and the motivation of group members, while for the age is at the mid-maturity level.

Table 1 internal characteristics of KTH members

Internal characteristics	Amount	Percentage
Formal education (year)		
Low (2-15)	29	38,16
High (16-25)	47	61,84
Age (years)		
Early adulthood (18-30)	14	18,42
Mid-maturity (31-60)	53	69,74
Very mature (>60)	9	11,84
Duration of Group membership (years)		
New (1-9)	47	61,84
Old (10-17)	29	38,16
Training followed (times)		
Low (0-3)	21	27,63
High (4-7)	55	72,37
Motivation of group members (score)		
Low (15-17)	54	71,05
Height (>17)	22	28,95

Formal education is the length of years of formal education that respondents have attended. Respondents' formal education was low, namely only elementary and junior high school graduates. Education most of the respondents 61.84% can be said to be in the high category because they have 16 to 25 years of education in the sense that respondents graduated from High School and there are those from universities. This shows that the high level of education due to the cost of continuing school and adequate infrastructure and schools far enough from home are still able to pursue higher education.

Groups based on the age of adult humans, namely: (1) age 18-30 years is the early maturity, (2) age 30-60 years is the middle maturity, (3) age more than 60 years is the period of final maturity/very mature. Based on the data obtained, it is known that the age of most respondents 69.74% are in the middle age range of maturity. Most of the respondents up to the age of >60 years are still in the productive age range, which makes respondents to be actively involved in forestry farming activities such as the selection of plant species, provision of seeds, provision of land, planting and maintenance.

The length of time respondents joined the latest group was one year and the longest was 17 years. The duration of being a member of the group will have an impact on the experience you have as a member of the group. The longer you become a member of the group, the more experience you have and the benefits you get.

Participation of group members in agroforestry training in the low category amounted to 72.37%. Respondents followed the training only 1 to 3 times the training and some even never attended the training. The low level of training that followed was due to lack of information on the existence of training activities and the tendency of appointing trainees to the same person, such as group leader or group administrator only.

Based on the results of the study showed that the motivation of group members is low at 71.05%. In some terminologies, motivation is expressed as a need, desire, impulse, instinct and drive, that is, something that forces the human organism to act or act. Motivation there are two types of intrinsic motivation is the motivation that arises from within the person concerned without stimulation or help from others and extrinsic motivation is the motivation that arises due to stimulation or help from others.

### Effectiveness Of Extension

The effectiveness of the role of agricultural extension can be interpreted as an extension effort to achieve maximum results by utilizing existing resources. Agricultural extension implemented to increase the ability of farmers in an effort to obtain results that can meet the wishes of farmers agrovorastri.

Table 2. Extension Support

Indicators	Weight	Category
Extension capabilities	3,10	Effective
Extension materials	3,04	Effective
Farmer's level of understanding	2,98	Less effective
Total extension energy	3,01	Less effective
Extension intensity	3,24	Effective
Amount	14,92	
Average	2,98	

The ability of forest extension workers to carry out extension activities is stated to be effective, this is related to their ability to develop farmers ' independence in agricultural activities. The ability of extension workers to develop farmers ' independence is quite moderate, because the ability of forestry extension workers to grow agroforestry farmer groups still needs to be optimized again. This condition indicates that there should be efforts to improve the competence of forestry extension workers in developing the independence of agroforestry farmers who focus on improving the ability of extension workers to grow farmer groups. The ability of forest extension workers in developing independent farmers is quite effective, seen from the affective and psychomotor aspects but their level of knowledge is sufficient. This means that extension workers have a good understanding in terms of developing farmers ' independence. It is hoped that by increasing the capacity of extension workers, it will make extension workers more confident in providing assistance to farmers, main actors and business actors. The ability of forest extension workers in evaluating extension activities can be seen from their affective and psychomotor aspects. However, their level of knowledge already has a good understanding of the evaluation of extension activities, namely in terms of planning, collecting data and analyzing results, and formulating an evaluation report of extension activities. Their beliefs and actions are quite good in evaluating extension activities. Therefore,

efforts to improve the ability of extension workers in evaluating extension activities can be focused on improving aspects of their knowledge.

Forestry extension materials that will be delivered effective extension to the main actors and agroforestry agricultural businesses, and is expected to provide a positive impact on improving the welfare of the community. In choosing extension materials must be strictly in accordance with the needs of the target in this case the main actors and agricultural businesses. Therefore, the agricultural extension materials to be submitted to the main actors and agricultural business actors must be verified in advance by the competent authorities in the field of agricultural extension. The agricultural extension materials are intended to prevent socio-economic, environmental and Public Health losses. Thus, unverified agricultural extension materials are prohibited from being submitted to the main actors and agricultural business actors. Extension material is as a message that will be delivered by the extension to the target extension. Counseling messages can be Cognitive, Affective, psychomotor and creative messages. There are counseling messages that are advice, prohibition, notification and entertainment. Extension materials are often referred to as agricultural information. Counseling materials, among others, can be in the form of experience such as the experience of farmers who successfully develop certain commodities, market information or policies issued by the government.

The level of understanding of agroforestry farmers is still less effective, even though farmers have a very crucial role in every sector of farmer development itself. Farmers' knowledge is also a benchmark for farmers in terms of increasing one's perception of the field to be run, so to see the condition of agroforestry farmers widely, there needs to be an assessment of the level of previous knowledge that is used as a reference for farmers. The level of understanding of farmers must always be improved both through extension activities will have a positive impact on farmers themselves. Understanding the purpose of the agroforestry system is obtained through socialization and counseling as well as the dissemination of information by word of mouth, farmers have applied government directives to grow coffee on their cultivated land. Farmers combine with annuals, namely types of vegetables. Farmers also grow a variety of other perennials, such as jackfruit, avocado, durian and petai. Based on the commodities planted, the agroforestry pattern applied by the community is agrisilvikultur. With the agroforestry system, farmers not only grow crops that are the main commodity, but also plant types of perennials or trees that can maintain the condition of the land and can also be an additional commodity.

The number of extension workers is less effective, this has become a common problem faced in the implementation of extension this happens because (1) the number of extension workers is not proportional to the extension target, this condition can be seen from the number of forestry extension workers is decreasing while the extension target is so broad. The number of forestry extension workers is currently 56 people to assist 136 villages from 32 sub-districts in Simalungun Regency. (2) the boundary of land ownership is not clear, this situation becomes a problem around the forest area, because there will be a potential for grabbing forest areas as agricultural land. (3) limited facilities and infrastructure of extension. This is because the extension infrastructure in the form of motorcycles and others that come from the assets of the district, these facilities must be returned, because the status of extension into the authority of the provision. (4) forestry development activities are still dominated by men even though gender roles can be carried out in supporting environmental and forestry development programs. The existence of extension workers is very important in an effort to increase agricultural production and productivity, because extension workers who are the spearhead have the skills to invite people to be more advanced and creative.

Extension intensity is very effective, extension plays a role in improving farmers' knowledge. Therefore, the role of participatory farmers and extension workers must synergize well, so that the impact of extension itself can be seen to the maximum. Extension intensity is the frequency of farmers get the information they need the higher the frequency of extension, then the success of agricultural extension delivered the higher. The frequency of farmers in following the extension increased due to the delivery of interesting and not boring and delivered really useful for farmers for their farming business. Extension activities as a means of direct contact with farmers to obtain information must be improved properly and planned. Thus, improving the process of adopting an information and technology can be well accepted as an option for improving the quality of Natural Resources and human resources.

## CONCLUSION

The ability, material and intensity of extension workers have been effective but for the level of understanding of farmers and the number of workers is still less effective. The main factor is the lack of effective understanding of the community due to the visit of extension workers, this happens because of the limited number of extension workers, while the area of work is very wide. Related to this, efforts are needed to increase the number of field extension workers in the field of Forestry, both from civil servants, non-governmental forestry extension workers private forestry.

## REFERENCES

- Departemen Kehutanan Republik Indonesia, Peraturan Menteri Kehutanan No.P.41/Menhut-II/2010 Penyuluhan Kehutanan. Jakarta.
- Handoko, 2001. *Efektivitas Organisasi*. Jakarta: Erlangga
- Hidayat, N. 2003 . *Arah Penyuluhan Kehutanan*. Pusat Bina Penyuluhan Kehutanan. Jakarta
- Riana, Purnaningsih N, Satria A. 2015. Peranan Penyuluh Swadaya dalam Mendukung Intensifikasi Kakao di Kabupaten Sigi Provinsi Sulawesi Tengah. *Jurnal Penyuluhan*. 11(2):201-211.
- Ruhimat, 2015. Tingkat Motivasi Petani dalam Penerapan Sistem Agroforestry. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan*. 12(2). 1-11
- Sarintan Efratani Damanik, 2019. Pemberdayaan Masyarakat Desa Sekitar Kawasan Hutan, *Uwais Inspirasi Indonesia*.
- Sarintan Efratani Damanik, 2019. Perencanaan Pembangunan Kehutanan Uwais Inspirasi Indonesia.
- Sarintan Efratani Damanik, Triastuti, Rozalina, Aqsal Wibiandra, 2022. The Role Of Forestry Extension Agents In Community Empowerment Farmers Group Pasar Village, Forest Management Unit IV Balige District Toba Regency, *International Journal Of Humanities*

Suryani A, Fatchiya A, Susanto D. 2017. Keberlanjutan Penerapan Teknologi Pengelolaan Pekarangan oleh Wanita Tani di Kabupaten Kuningan. *Jurnal Penyuluhan*. 13(1): 50-63.