



Institutional Strengthening of the Maju Mandiri Farmers Group in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency: Analysis of Farmer Participation and Empowerment

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ABSTRACT: This study aims to analyze the institutional strengthening of farmer groups in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency in responding to technological and marketing developments. The main focus of the study is how farmer groups can increase their capacity by increasing access to technology and efficient marketing channels. The research method used is descriptive with a quantitative approach, through observation, interviews, and documentation. The results show that institutional strengthening through information and communication channels, marketing channels, and technology implementation can improve the performance of farmer groups. By utilizing more modern information and communication technology and more structured marketing channels, farmer groups are able to increase their income and the efficiency of their farming businesses. This study provides recommendations for strengthening the institutional capacity of farmer groups by integrating technology and more efficient markets to improve the competitiveness and welfare of farmers in rural areas.

Keywords: Strengthening Institutions, Farmer Groups, Technology, Marketing, Agriculture.

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INTRODUCTION

Farmer groups are institutions formed to unite farmers in agricultural activities horizontally, and can be formed based on commodities, agricultural areas, and gender. The development of farmer groups is motivated by the fact that farmers often face weaknesses in accessing various business services, such as financial institutions, marketing, agricultural production input providers, and information (Saptana, 2004). Suradisastra (2001) explains that farmer groups not only unite farmers horizontally, but also vertically, to optimize agricultural activities in the community. However, in the development of farmer institutions, often there is a mistake in the approach, where the institutions formed are more focused on the distribution of aid or ease of control for program implementers, rather than on empowering the farmers themselves.

In Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency, the existing farmer groups have not yet fully realized their role as a forum for agricultural activities. These groups are still in the development and institutional strengthening stages. Therefore, strengthening farmer group institutions is essential to enable them to function more effectively in responding to agricultural developments and optimally contribute to sustainable agricultural development planning.

Conceptually, the established farmer institutions can have a single or multiple roles. In the agribusiness context, various rural institutions function to support economic activities, such as farmer groups, cooperatives, and agribusiness groups. The development of agribusiness systems in rural areas is inseparable from efforts to provide production inputs (seeds, fertilizers, and medicines), capital, labor, farm management, and the processing and marketing of agricultural products (Syahyuti et al., 2008).

The problem faced by farmers is that existing institutions, such as farmer groups, are often ineffective in providing access to necessary agricultural business services. Strengthening these institutions aims to create a well-developed concept for increasing agricultural productivity and farmer competitiveness, which is increasingly necessary in the era of globalization and free trade. Strengthening farmer capacity within institutions will encourage increased institutional effectiveness and, in turn, increase farmer competitiveness in the agribusiness system.

The position of farmer institutions as part of the social system facilitates social interactions that influence farming communities. Agricultural institutions, as strategic points in driving the agribusiness system in rural areas, need to be well-managed to improve the professionalism and bargaining power of farmers (farmer groups). Currently, the portrait of farmer institutions in Indonesia is still far from what is desired (Suradisastra, 2008).

LITERATURE REVIEW

Strengthening Farmer Institutions

Strengthening farmer group institutions is a crucial aspect in increasing farmers' capacity to compete in Indonesia's agribusiness system. This strengthening is essential in facing the increasingly intense challenges of globalization and free trade. Active farmer participation in their institutions will

enhance the capacity of farmer groups to manage their farming businesses more efficiently and professionally. According to Suradisastra (2008), farmer institutions play a strategic role in rural agribusiness systems because they facilitate social interaction among farmers and serve as a platform for improving their quality of life through natural resource management and technology.

The Role of Farmer Groups in Agricultural Development

Farmer groups, as social institutions, play a crucial role in increasing agricultural productivity. Farmer groups can serve as a forum for farmers to share experiences, solve problems together, and access various agricultural services, such as production inputs, technology, and agricultural marketing (Mosher, 1968). These groups also accelerate the diffusion of agricultural innovation and technology, which in turn increases the efficiency and effectiveness of farming (Mardikanto, 1996). Developing farmer groups through an approach based on strengthening managerial and social capacity will strengthen their role in agricultural development.

Agricultural Technology and Farmer Empowerment

The use of appropriate agricultural technology significantly impacts agricultural productivity. Technology can include modern agricultural tools, efficient cultivation techniques, and information systems to improve yields and product quality. Along with the development of information technology, the use of computers, the internet, and other telecommunications devices can increase farmers' access to market information and the latest technology (Purbo, 2003). The application of this technology not only increases agricultural yields but also helps farmers manage their farms better and more efficiently. Therefore, strengthening farmer group institutions must also be accompanied by increased access to relevant technology and training.

Marketing of Agricultural Products

Agricultural product marketing plays a crucial role in ensuring the success of farming businesses. Efficient marketing channels can reduce the number of intermediaries and increase fairer selling prices for farmers. According to Kotler (2006), there are two main types of marketing channels used in agricultural product distribution: direct marketing channels and those through intermediaries. Direct marketing channels allow farmers to sell their products directly to consumers, while channels through intermediaries can increase costs and reduce farmers' profits. Therefore, strengthening farmer group institutions in the marketing process is crucial to increasing distribution efficiency and ensuring stable prices.

Social Capital in Institutional Strengthening

Social capital, which encompasses social networks, norms, and trust among individuals within a group, plays a crucial role in enhancing the institutional capacity of farmer groups. Putnam (2005) states that strong communication networks and interactions among farmer group members can improve farmer productivity and well-being. Strong social capital facilitates

faster and more effective information exchange, enabling farmers to adopt new technologies and improve their farming performance. Therefore, it is crucial for farmer groups to develop social capital that can support the sustainability and success of their agricultural businesses.

Strengthening Farmer Capacity through Education and Extension

Agricultural education and extension play a vital role in building farmer capacity. Effective extension can increase farmers' knowledge of new technologies, efficient cultivation techniques, and profitable marketing strategies. According to Soeharto (2005), agricultural extension based on social capital can help farmers better understand the importance of collaboration in improving agricultural yields. In this regard, the role of extension workers as facilitators is essential in introducing technological innovations and motivating farmers to improve the quality and quantity of their products.

METHODOLOGY

Time and Place of Research

This research was conducted in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency. This location was selected based on the consideration that the village has adequate natural resources for agriculture and is a suitable area for conducting an analysis on strengthening farmer group institutions.

Population and Sample

The population in this study consisted of eight farmer groups in Bonto Tallasa Village. The location was selected using purposive sampling, considering the village's high agricultural potential and developing institutional capacity. The sample consisted of 22 members of one of the farmer groups, the Maju Mandiri Farmers Group. The sampling method used was a census, which surveyed all members of the farmer group involved in the study.

Data Collection Techniques

To collect the data needed in this study, the author used three main techniques, namely:

- **Observation:** Using the participatory observation method, where researchers are directly involved in farmer group activities, such as meetings, discussions, and other agricultural activities, to directly observe institutional dynamics and the application of technology in farmer groups.
- **Interviews:** Researchers conducted guided, open-ended interviews with members of farmer groups and other relevant parties, such as group leaders and agricultural extension workers. These interviews aimed to gather in-depth information regarding institutional strengthening, marketing flows, and responses to implemented agricultural technologies.
- **Documentation:** Secondary data was collected through documents related to farmer institutions in Bonto Tallasa Village, such as farmer group administrative records, annual reports, and data related to agricultural and marketing activities.

Data Analysis Techniques

The collected data was then analyzed using a descriptive approach to provide a clear picture of the condition of farmer groups, institutional strengthening, and responses to technology and marketing. This analysis aimed to understand the factors influencing farmer group management in Bonto Tallasa Village.

In addition, this study used qualitative analysis to evaluate how social interactions and communication between farmer group members influence institutional effectiveness and increase farmers' capacity to respond to market and technological challenges. This analysis was conducted by reviewing the results of interviews and field observations.

RESULTS AND DISCUSSION

Strengthening Farmer Group Institutions

Within a society, there are various institutional potentials, because basically there is always interaction between individuals or between patterned community groups. Various forms of institutional potential that exist in society, among others: interaction between farmers as producers and traders (consumers), interaction between farmers in marketing and purchasing products, interaction between farmers and external parties (supervisors, financiers, traders).

Farmer organizations and institutions are recognized as crucial for agricultural development. However, reality shows that farmer organizations remain weak and that there are significant obstacles to developing them within farming communities. Excessive government or political intervention often results in these organizations working not for farmers but for the interests of the government or its administrators. The primary goal of rural development is to achieve a robust rural economy capable of independent and sustainable growth. These goals are pursued in stages, including improving the quality of community mindsets, enhancing the capabilities of village government officials, strengthening government and community institutions, developing community socioeconomic capabilities, developing rural facilities and infrastructure, and strengthening technology in village development.

Thus, this institutional potential can be utilized as capital for the formation and development of farmer institutions. A sense of mutual assistance must be fostered to prevent this social capital from eroding community progress. Farmer institutions in the form of "farmer groups" are a reliable alternative platform for farmers to gather and collaborate to improve their businesses.

There are several things that must be characteristics of a group, namely: each group member must be aware of being part of the group, there is a reciprocal relationship between fellow members and there is a factor that is shared by the members so that the relationship between them becomes stronger. To support institutional capacity building, as outlined in the development plan, institutional strengthening is necessary. Institutions serve as a liaison or bridge for information between the government and the community, as well as conveying community aspirations for development. Given the limited knowledge of organizational management within each institution, institutional capacity

building is one way to better understand institutional organization, its roles, and functions. This increased knowledge will enable institutions to collaborate effectively with each other across village institutions.

Therefore, institutional strengthening requires a process to achieve optimal results. Therefore, efforts to achieve this maximum empowerment can be achieved by contributing to farmer groups by strengthening or implementing communication and collaboration, thereby creating a space that can inspire farmers to maintain their interest.

The flow applied in creating the Strengthening of Farmer Groups in Responding to Technology and Marketing in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency,

The Strengthening Flow of the Maju Mandiri Farmers Group Institution

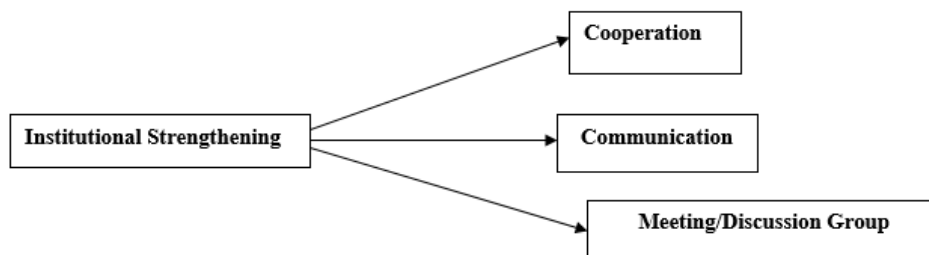


Figure 1. Strengthening Farmer Groups in Responding to Technology and Marketing in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency. Analysis of Farmer Participation and Empowerment

Based on Figure 1, the strengthening carried out Basically, it is a combination of two or more people who interact to achieve a common goal, where the interaction that occurs is relatively fixed and has a certain structure. In this case, what is meant by the structure of a group is the arrangement of stable internal relationship patterns, which consist of: (1) cooperation, (2) communication, (3) meetings/discussion groups that maintain, justify and glorify the structure.

So, to get maximum results in Responding to Technology and Marketing, it is necessary to strengthen things that can provide constructive contributions, therefore there are several stages in the flow of providing strengthening in order to create institutional comfort and peace.

Strengthening Farmer Group Institutions in Responding to Information/Communication Flows

Information is anything that has meaning and value for the recipient of the information. Communication is the process of exchanging information between two or more people so that the information obtained can be understood.

Information is a collection of interrelated data that has been processed in a complex manner. In other words, information is the result of processed data. Recorded and interrelated data are collected and then processed to produce precise and accurate information. Furthermore, the information becomes data that will be processed and will become other information. Communication is the

process of conveying information in the form of messages, ideas, or concepts from one party to another so that there is a mutual influence between the two. There are two types of communication: verbal and nonverbal. Verbal communication is communication that uses words, either spoken or written. Nonverbal communication is a substitute or support for verbal communication.

Information technology is excellent for efficiency in building networks between media outlets. Furthermore, it will facilitate the media's streamlining of internal processes. For example, the use of the internet on mobile phones, computerized broadcasts, and news databases can be used to build knowledge sources for farmers accessing various information. In short, the media can provide a visual depiction of development, particularly in agriculture itself (Purbo, 2003).

Institutional Strengthening in Responding to Information and Communication Flow in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency.

Information and Communication Flow

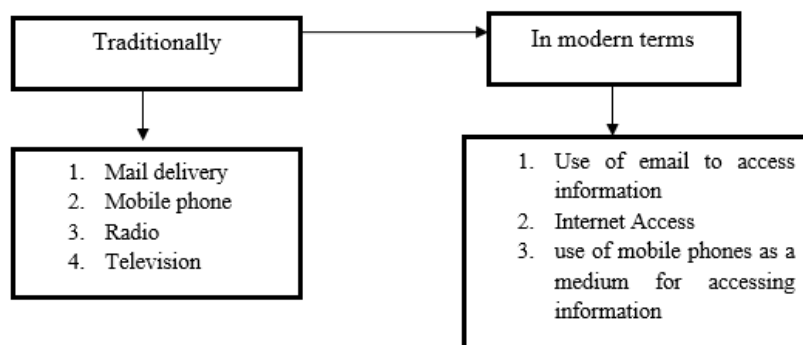


Figure 2. Information and Communication Flow In Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency. Analysis of Farmer Participation and Empowerment

Based on the description in Figure 2, it explains that the flow of information and communication carried out by the Maju Mandiri Farmers Group, in this case, the flow of information and communication that is still traditional includes sending letters, mobile phones, radio, and television, now the Maju Mandiri Farmers Group does it via email, internet access via computer or telephone. Thus, in responding to technology, the flow of communication and information can be created automatically.

The independent advanced farmer group in implementing changes in traditional methods to modern use, this was done with the help of local government officials, namely internet cars, with this treatment they did in accessing information and communication so that new things that had developed related to agricultural problems could be reached.

The use of email, internet access via computer, or telephone by the community or independent advanced farmer groups has enabled them to access advanced information long before the advent of internet access. Now, these groups are able to apply this information to the community, especially to their own members.

The rapid development of information and communication technology has provided many conveniences for humans, especially in communicating and obtaining information without time constraints. Today, almost all human activities are connected to information and communication technology devices, wherever they are.

The rapid development of information and communication technology demonstrates that the global information and communication industry is now truly moving toward highly complex mobility, transcending the boundaries of space and time. Therefore, we need to understand the existence of various information and communication technologies so that we can utilize them to develop our individual potential.

According to Suddin, Chairman of the Maju Mandiri Farmers Group, strengthening farmer groups through information/communication channels, in this case, involves developing information and communication technology. For example, computer literacy and internet access are valuable assets and contribute positively to the development of information access in various current developments.

According to (Laswell, 2001), the components of communication are as follows:

- The sender or communicator is the party who sends a message to another party, namely the communicant.
- A message is the content or intention that the communicator will convey to the recipient.
- A channel is the medium a communicator uses to send a message to a recipient. In face-to-face communication or conversation, the channel can be air that carries sound vibrations.
- The recipient or communicator (receiver) is the party who receives the message from another party.
- Feedback is a response to the communication of messages or the content of the message conveyed.

In general, it can be concluded that information technology is defined as technology for obtaining, processing, storing and distributing various types of information files by utilizing computers and telecommunications which are born from strong drives to create new innovations and creativity which can overcome all laziness and slowness in human performance.

Strengthening Farmer Group Institutions in Responding to Marketing Flows

Many manufacturers don't sell their products directly to end consumers. Distribution costs are often a key factor in choosing not to distribute directly to end consumers, especially in underserved markets. Between producers and consumers, there are a group of intermediaries who distribute products between them. These intermediaries are often referred to as marketing channels. Marketing channels are interdependent organizations involved in the process of making products and services available for use or consumption by consumers. These devices serve as the flow of products from producers to consumers after production.

These product marketing intermediaries are diverse and typically tiered. The first tier is typically occupied by regional representatives, typically handled

by the product owner themselves. Then there are sole agents, who cover smaller marketing areas. It's important to remember that agents are also representatives, as they can act as intermediaries. This is usually followed by regular traders who sell more than one product. At this level, the product usually reaches the end consumer, but some are distributed to smaller chains, such as small shops, where it can then be used directly by the end consumer.

Thus, in this case, the Farmers Group serves as a platform for marketing channels, acting as a strategic intermediary for conducting more effective transactions. According to Kotler (2006), in his book "Marketing Management," there are two strategies frequently used by companies in managing marketing channels, particularly in creating new ones: push and pull strategies. The use of these strategies depends on the company's decision, particularly on the popularity of the company's products.

The push strategy in its implementation is to try to persuade intermediaries to market their products by providing certain facilities, for example discounts on product purchases.

The pull strategy in its implementation is by building product positioning through promotions to consumers through farmer groups.

The Role of Marketing Channels

Several factors motivate the decision to delegate some of one's sales tasks to an intermediary. However, the benefits of this decision include:

- Many producers do not have the financial resources to carry out direct marketing so they can only focus on production.
- Manufacturers who do establish their own channels can often earn greater profits by increasing their investment in their core business rather than spending on marketing their products.
- In some cases direct marketing is not possible at all selling retail directly to consumers.

Channel Level

Producers and consumers are indeed the main components of a marketing channel. However, we need to know the number of intermediaries that lead a product to the consumer to determine the channel level. According to Kotler (2006), there are two types of marketing channels, each with four channel levels:

- Consumer Marketing Channels have four levels, namely level zero, level one, level two, level three.
- Industrial Marketing Channels have four levels, namely levels zero, one, two and three.

Thus, based on the results from respondents, it was suggested that marketing or distribution channels are interdependent activities that facilitate the distribution of products from producers to consumers. Therefore, to be more effective and reduce the marketing flow, it can contribute to greater profits compared to using a long channel. Therefore, the role of farmer groups, in this case the Maju Mandiri Farmers Group, is as a distribution medium, facilitating the farming community in the process of distributing products more effectively.

Marketing Channel Chart

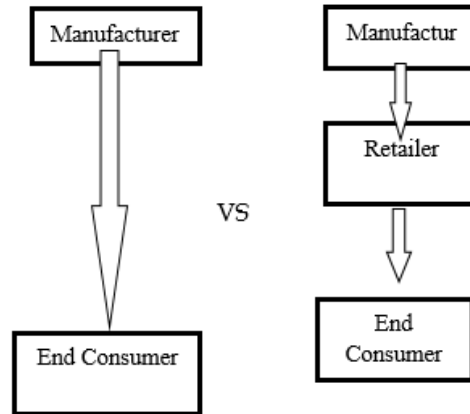


Figure 3. Marketing Flowchart for Strengthening Farmer Group Institutions in the Market Flow in Bonto Tallasa Village, Uluere District, Bantaeng Regency.

Strengthening Farmer Group Institutions in Responding to Technological Flows

The progress and development of farmers in a region is highly dependent on the motivation provided by extension workers. Likewise, the active participation of farmer groups in providing information on the application of the latest technologies to farmers is fundamental to advancing the agricultural business sector. The Food Security and Extension Agency has created a program for extension workers to play an active role in providing information on the latest agricultural technology developments.

So that the Maju Mandiri Farmers Group is able to take steps to implement technology in this case starting from the processing process to post-harvest. Thus, in managing agricultural land, the community is no longer a problem at the land preparation stage, because there is technology that helps the completion process, for example, transporting production results which usually requires extra human labor, but with the application of this technology that is able to help the community of farmer groups, especially to simplify the process.

Consequently, institutional strengthening in the flow of information and communication is closely linked to technological strengthening, as the two streams are interdependent and mutually dependent. Therefore, in responding to advanced technology, it is natural for independent, advanced farmer groups to take a stance and participate in responding to it. Farming communities are now able to adapt to existing developments, particularly through the continuous application of technology.

The necessary technological tools include sustainable cultivation and farming practices, proper harvest handling, processing/post-harvest practices, and the development of a robust distribution system. The success of these technologies is measured by the standards of agricultural products. Good agricultural products meet the criteria for quality, quantity, and continuity. Technologies that recycle, utilize, and diversify local resources are part of the technology strengthening strategy.

Today, the tide of globalization is intensifying. Modern technological discoveries are becoming increasingly prevalent. A wide variety of electronic devices are spread throughout the world. Things that were once considered a

dream are now a reality. The application of modern technologies in all sectors of life provides convenience and benefits to humans in carrying out their activities. The primary purpose of technological discoveries is to assist humans and facilitate their activities, making every activity more effective and efficient.

Agricultural equipment is currently still considered traditional, especially in Bonto Tallasa Village, Uluere District, Bantaeng Regency. Currently, in an effort to strengthen farmer groups in the technological flow, the implementation, introduction, and even trial of agricultural technology are being carried out by farmers, especially the Maju Mandiri farmer group, to better understand the world of technological developments and enable them to carry out their activities without any obstacles. With the presence of these modern tools and machines, agricultural activities become more effective and efficient.

Strengthening the Institutional Capacity of the Maju Mandiri Farmers Group in Responding to Technological Developments

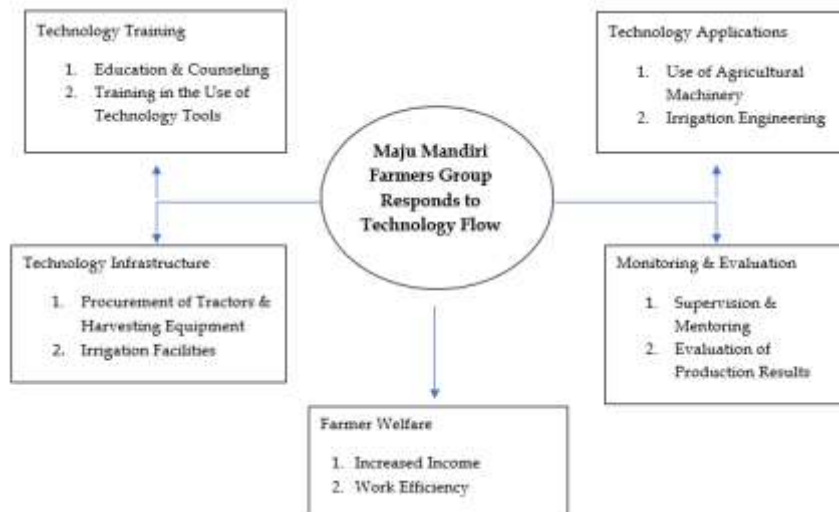


Figure 4. Chart Strengthening the Institutional Capacity of the Maju Mandiri Farmers Group in Responding to Technological Developments Farmer Groups in the Market Flow in Bonto Tallasa Village, Uluere District, Bantaeng Regency

Based on Figure 4, the attached chart illustrates "Institutional Strengthening of the Maju Mandiri Farmers Group in Responding to Technological Flows," which explains the steps taken by the farmer group to improve the capacity and quality of agricultural products through institutional strengthening and technology implementation. The following is a complete explanation of each element in the chart:

Technology Training

- a. **Education & Counseling:** Providing farmers with knowledge and skills regarding agricultural technologies relevant to their conditions. This extension program aims to increase farmers' understanding of modern agricultural practices and efficient farming methods.
- b. **Modern Equipment Usage Training:** Training to introduce and teach farmers how to use modern agricultural tools and machinery, such as tractors and

harvesters. This training aims to enable farmers to adopt technologies that can improve work efficiency and agricultural yields.

Technology Infrastructure

- a. **Procurement of Tractors & Harvesting Equipment** Farmer groups are involved in procuring modern equipment such as tractors for soil cultivation and harvesters for agricultural produce. Using these tools allows farmers to work more quickly and effectively, reducing reliance on manual labor.
- b. **Irrigation Facilities** Providing adequate irrigation facilities is crucial for increasing agricultural productivity. With an efficient irrigation system, farmers can better manage their water supply to their crops, especially during the dry season.

Technology Applications

- a. **Use of Agricultural Machinery:** Farmers are starting to use agricultural machinery such as tractors and harvesters, which are more efficient than manual methods. These machines can speed up production and increase agricultural yields.
- b. **Irrigation Engineering:** The application of irrigation techniques for watering plants more efficiently, reducing water waste, and ensuring that plants get the right amount of water according to their needs.

Monitoring & Evaluation

- a. **Supervision & Mentoring:** Regular monitoring of the implementation of agricultural technology and extension services provided to farmers. This also includes mentoring to ensure farmers are implementing the technology correctly.
- b. **Evaluation of Production Results:** Conducting an evaluation of agricultural results after the application of technology to assess whether the results achieved are optimal and in accordance with the desired objectives, such as increasing productivity and quality of agricultural results.

Farmer Welfare

- a. **Increased Income:** One of the goals of strengthening farmer group institutions is to increase farmer income. With optimal harvest yields and greater work efficiency, farmers can increase their income.
- b. **Work Efficiency:** The use of modern technology and tools can increase the efficiency of farmers' work, reduce the time and costs incurred in the agricultural process, and reduce dependence on manual labor.

Thus, from the respondents' statements, it is stated that they will always get used to being more familiar with the use of tools that are currently advanced compared to the tools that are still used, therefore the application of technology in Bonto Tallasa Village has begun to apply and adapt to new technologies, as a result, technological advances applied in agriculture in Bonto Tallasa Village feel more comfortable and easy and their management is easier. Especially by looking at the potential of agriculture and soil fertility. Accelerating the application of agricultural technology is the most applicable and most logical effort if Bantaeng

Regency begins to weave the application of new technology. This provides the greatest opportunity for the people of Bantaeng Regency, especially in Bonto Tallasa Village, to be able to align with existing developments and be far from the zone of decline in the agricultural sector.

CONCLUSIONS

Based on research conducted in Bonto Tallasa Village, Ulu Ere District, Bantaeng Regency, strengthening the Maju Mandiri farmer group's institutional framework in response to technological advances has proven effective in increasing farmer capacity. This institutional strengthening is carried out through three main channels: technology training, technology infrastructure, and technology application.

1. The technological training provided to farmers, including extension and training in the use of modern tools, has increased farmers' understanding and skills in managing their farming businesses more efficiently.
2. Technological infrastructure, procurement of tractors and harvesters, and adequate irrigation facilities have increased work efficiency and enabled farmers to maximize agricultural yields.
3. The application of technology, such as the use of agricultural machinery and more efficient irrigation techniques, also contributes to increased crop yields and work efficiency.
4. Regular monitoring and evaluation ensures that the technology is implemented correctly and produces optimal results.

Overall, the implementation of more modern agricultural technology in Bonto Tallasa Village has improved farmers' incomes and their well-being. Farmers can now work more efficiently, produce better yields, and have broader access to the latest information and technology. Thus, strengthening farmer group institutions can boost farmers' competitiveness in the market and improve their quality of life.

RECOMMENDATIONS

1. Strengthening Education and Counseling:
2. Infrastructure Development
3. Increasing Market Access
4. Strengthening Cooperation Between Farmer Groups
5. Government Support for Empowerment.

FURTHER STUDY

1. Technology Extension Program Enhancement
2. The Role of Social Capital in Empowering Farmer Groups
3. The Influence of Education and Training on Technology Implementation

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REFERENCES

- Bappenas. (2004). *Strengthening Agriculture*. Jakarta.
- Basuki, R. (2006). *Agricultural Institutions: University of Indonesia*. Jakarta.
- Bryanto, L. (2000). *Community Empowerment*. Rineka Cipta. Bandung.
- Daniel, M. (2004). *Community Institutions*. CV Yasaguna. Jakarta.
- Department of Agriculture. (2003). *Agricultural Institutions*. Jakarta.
- Darwis, E. (2003). *Farmer Behavior*. Surakarta: Erlangga.
- Hasyim, M., & Zakaria, S. (2002). *Farmer Groups*. Bandung: Jati Putih.
- Hamdani, C. (2012). *Farmer Empowerment Strategy*.
<http://ppmkp.bppsdp.deptan.go.id/index.php/artikel/umum/48strategi-pemberdayaan-petani>. (Accessed on July 10, 2014).
- Jumiati, D., Puspitasari, D., & Sahlan, S. (2022). *Institutionalization of the rice-cattle integration system (1st ed.)*. CV Azka Pustaka.
<https://www.penerbitazkapustaka.co.id>
- Kotler, P. (2006). *Marketing Channel Levels*. Bumi Aksara. Jakarta.
- Marimin, M., & Maghfiroh, M. (2010). *Agricultural Institutions*. Gajah Mada University.
- Mosher, AT (2001). *Agricultural Education*. Rajawali Press. Jakarta.
- North, DC (2005). *Agricultural Institutions: An Economic Perspective*. Jakarta.
- Purbo, S. (2003). *Agricultural Technology and Information*. Jakarta.
- Putnam, RD (2005). *Communication and Interaction in Society*. Open University. Jakarta.
- Ridwan, H. (2005). *Farmer Institutions. Spreading Self-Reliance*.
- Soeharto, P. (2005). *Communication in Agricultural Extension*. Gembilan.
- Soekartawi, A. (1988). *Basic Principles of Agricultural Communication*. University of Indonesia.
- Suradisastra, K. (2008). *Strengthening Farmer Institutions*. Bumi Aksara. Bandung.
- Syahyuti, D. (2003). *Farmer Empowerment: Concept and Implementation*. Muara Mulia. Bandung.
- Saptana, W. (2003). *Farmer Groups and Natural Resource Management*. Wedia Irama. Jakarta.
- Thamrin, A. (2001). *Agricultural Business Experience: Perspectives and Practices*. Media Cipta. Jakarta.
- Tubs, S.L., & Moss, S. (1996). *Human Communication: Basic Principles*. Translated by Dedy Mulyana and Gembirasari. Bandung: PT Remaja Rosdakarya.
- Laswell, H. (2001). *Communication in Agricultural Extension*. Open University. Jakarta.
- Yogasuria, E. (2010). *Communication in Agricultural Extension*.
<http://d/komunikasi-dlm-penyuluhan-pert.htm>.