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# Programme And Model For Institutional Development of Tobacco Area Based On Farmer Corporation In East Java

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#### **ABSTRACT**

Tobacco as one of the plantation crop commodities can contribute to state income, but on the other hand there are many things that become obstacles for farmers in increasing production and business income, there is no government support in controlling tobacco marketing patterns, there is no cooperative relationship between farmers and tobacco companies that mutual benefits, as well as some problems in tobacco farmer institutions. Research purposes To find out the current condition of East Java tobacco farmers, model for the tobacco area based on farmers' corporations in East Java and program in realizing a model for developing tobacco plantation areas based on smallholder corporations in East Java. The research objectives are: (1) to determine the current condition of tobacco farmers in East Java, (2) to develop an institutional model for tobacco plantations based on farmers' corporations, and (3) to develop programs to realize a model for developing tobacco plantation areas based on farmers' corporations. The data analysis method used in this study is trend analysis, description analysis. Research Results: Program implementation requires coordination and cooperation of various parties related to tobacco. Furthermore, at each stage of implementation, it is necessary to carry out periodic evaluations to find out the shortcomings so that adjustments and improvements can be made at the next stage and it is necessary to follow the rules that have been agreed upon in the memorandum of agreement.

Keywords: Tobacco, programs, models, institutions, corporations

# 1. INTRODUCTION

Tobacco is an important commodity in the Indonesian economy because it is not only a source of income for farmers but also provides income for the State. Tobacco (*Nicotiana tobacum.l*) is an annual plant, but in agriculture it is included in the classification of plantation crops and not food crops. Tobacco commodity in East Java is included in the main commodity. It has an area of 114,334 ha with a production of 130,143 tons (in 2018). The production contributes to the national by  $\pm$  51%. These conditions indicate that the position of East Java tobacco is very important to support the tobacco industry in Indonesia. In 2018 the tobacco area increased by 15.42%, while its production increased by 31.78%. This shows that tobacco plants as raw materials for the cigarette industry have a very large appeal and are cultivated by most of East Java's tobacco farmers.



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Tobacco commodity is mostly marketed in regional, national and international markets, especially in several cigarette factories such as Gudang Garam, Sampoerna, and Djarum. Specifically, Pamekasan tobacco has a distinctive taste and is usually used as a mixture of other types of tobacco. Although tobacco plants are widely cultivated by farmers because they have an expensive price, in the process of growing them there are also some problems. Complex problems occur in the field, both in terms of cultivation and marketing techniques.

Problems that affect tobacco business in East Java can generally be divided into external and internal problems.

- 1. External problems in tobacco business in East Java cannot be separated from the development of tobacco regulations at global, national and regional levels. At the global level, the FCTC (Framework Convention on Tobacco Control) has been created which is an urge to develop health demands.
- 2. Internal problems are divided at the on-farm, off-farm and institutional levels. At the on-farm level, it includes land degradation in tobacco-producing areas, diminishing water supply, tobacco cultivation outside specific locations, increasingly narrow and uncertified land tenure, inadequate provision of production facilities, and incompatibility with the demands of cultivation technology. At the off-farm level, including the development of market tastes, conditions for tobacco imports that have no substitutes, trade between regions that can make it difficult to maintain the location of certain types of tobacco, increasing consumer demand, demands for low tar and nicotine content., and other hazardous chemical content, the registration of cigarette machines in the industry has not been regulated, the number of illegal cigarettes, the workforce involved in tobacco agribusiness on-farm and off-farm has not been fully recorded and the dependence of IHT (Tobacco Products Industry) on imported "sauce". still 100%.

Partnerships are one of the ways it has been done, but there are two sides to the knife. First, there is market certainty for farmers, farmers get fertilizer and seed loans but some farmers do not agree because farmers feel they have lost their land rights . As we know, there are many forms of partnerships with producers and strict terms and conditions, including delayed picking times, being unable to plant other commodities, and the high level of uncertainty in tobacco harvesting.

The partnership can continue to be carried out because there is a positive impact from this pattern, but the government must seek a pattern that can strengthen the bargaining position of farmers against their partners. One way that can be done in accordance with PERMENTAN Number 18 of 2018 concerning Guidelines for the Development of Corporate-Based Agricultural



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Areas is to direct and strengthen tobacco farmer groups towards corporations that are not only legal entities, but have the power to minimize group control and dependence on partners/manufacturers.

# 2. RESEARCH METHODS

# **Determination of Respondents**

Respondents were determined intentionally, namely as many as 2 APTI administrators and 2 tobacco farmers in 20 areas of tempting centers in East Java. Determination of respondents using purposive random sampling method with the consideration that the population tends to be homogeneous.

# Data analysis method

The analytical method used is descriptive analysis. The descriptive method according to Nazir (1993) is a method in examining the status of a group of people, an object, a set of conditions or a system of thought, or a class of events in the present. The purpose of this descriptive research is to make a systematic, factual, and accurate description of the factors, properties, and relationships between the investigated phenomena.

### 3.RESULTS AND DISCUSSION

#### Conditions and Perceptions of Tobacco Farmers in East Java

Tobacco farmers in the study area are dominated by groups with more than 15 years of experience. This means that they already have a lot of experience in the tobacco sector, both in planning, managing, harvesting, post-harvesting, and the tobacco trading system. Although the conditions are not always the same, the reasons for farmers to cultivate tobacco plants are motivated by several factors, namely:

#### 1. Tradition or inherited work.

The results of the interviews obtained are, farmers who have tried several businesses or planted other commodities think that the results are not satisfactory, so they return to the tradition that has been carried out for growing tobacco commodities.

# 2. The traditions of the local community.

Farmers with backgrounds in this category find it difficult to be different from their surroundings, because they feel that they will face many obstacles, for example: in processing and selling their produce, they have to do it themselves or create an uncertain network. In this



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area, tobacco yields already have a definite network, so that when farmers grow the same commodity as their environment, these obstacles can be minimized.

#### 3. Personal Motivation

With their limited level of education and skills, they choose to become tobacco farmers because they think that becoming a tobacco farmer does not require a high level of education or skills.

Another indicator is from the economic aspect. Tobacco farmers earn less than Rp. 5,000,000 per harvest. This income is used to meet the needs of his life and family (3 - 4 people) until the next harvest.

Farmer's income is the net income obtained from growing tobacco. Income is the nominal amount obtained by farmers from tobacco cultivation (rupiah per hectare). It is calculated based on the difference between revenue and production costs incurred by respondents for tobacco cultivation in the last planting season. Many of them do not have other jobs so they do not have additional income. Some farmers who have additional work only earn less than Rp. 1,000,000/month, but among them there are those who also have additional income above Rp. 1,000,000.

The perception of farmers discussed in this report is the perception of the condition of tobacco marketing in East Java which can be explained as follows:

# 1. Determination of quality and price in the tobacco trade system

Based on the experience of tobacco farmers, they cannot determine the selling value of the quality of the tobacco they produce. Although they have tried to select the seeds – plant – manage – harvest the produce, and process the harvest as well as possible, they cannot determine the type of quality in the transaction process with other parties.

Determining the type of tobacco quality will greatly depend on the concept that is owned or the decision of the collector or grader as a representative of the manufacturer. For example: based on experience, knowledge, and process, farmers assume that the tobacco they produce is of good quality (F) but it may change at the collector level. They said that farmer's tobacco is only considered in category E or D by stating classic reasons. Based on the results of the questionnaire submitted that farmer's experience in determining the quality of tobacco is never right.

The tobacco trade system has the character of a fancy product, which means that quality determines the price. This condition shows that if productivity increases but if the quality is low it will not provide adequate benefits.

The local government stated that the tobacco market was an abnormal market, unlike the market in general. The prevailing market mechanism is oligopsony. This is because the sellers are more



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than the buyers (cigarette factories). In addition, trade in agricultural or plantation products usually has a time limit that is not too long. The tobacco trading season usually occurs from August to September, so farmers must immediately sell their harvests as soon as possible. This causes the bargaining position of farmers to their tobacco products to be weak. Farmers cannot determine the price of the tobacco they produce for themselves.

The problem in determining quality and price in the tobacco trade system that has occurred so far is that there is no standard or special regulation from the local government that can be used as a guide for all stakeholders so as not to harm any side.

# 2. Transactions and parties involved in tobacco trading

The transaction system that occurs between the seller and the buyer is to bring samples then after there is an agreed price determination, so the farmers will bring all of their harvests to the buyer. However, there are some farmers who carry out direct transactions by bringing the tobacco in its entirety to the buyer with all costs incurred as a result of the transaction being borne by the farmer. The method of payment is by paying a down payment (DP), then the settlement process is carried out after the tobacco is received in its entirety.

In the tobacco trade system in East Java, the system that occurs is that farmers cannot relate or sell directly to factories, so they must go through intermediaries. The intermediaries are namely collectors, middlemen, craftsmen, and traders. The various trade system mechanisms based on the number of intermediaries involved are:

- a. Farmer leaf collector chopper collector skipper grader
- b. Farmer chopper collector skipper grader
- c. Farmer a middleman skipper grader
- d. Farmer a middleman grader
- e. Farmer trader grader

Another party involved in the tobacco trade system is the grader. A grader is a person who is appointed directly based on the trust of the manufacture in the area. Having a role as the person in charge of the quality of the tobacco that will enter the factory to suit the needs. They will check the incoming tobacco manually and organoleptically so that a good physical and psychological condition will be a very important asset in carrying out its role. Another role is to determine the category of quality and price of tobacco that enters through intermediaries.

Each manufacturer has between 5 - 10 graders. In carrying out their duties, they will deal directly with intermediaries to build a network with people who have membership cards. Manufacturers will buy tobacco from the community according to their needs.



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The government's role in the tobacco trade system is considered to have not been accepted by the farming community. This is evidenced by the absence of intervention in the tobacco trading system that occurs in the market, both in determining price, quality and reducing the number of unexpected market chains. The current role of the government is as a facilitator, providing information to the community through farmer groups about the quotas set by the manufacturer at the beginning of the growing season and urging the community to grow tobacco according to market needs and maintain product quality. In addition, it also appeals to manufacturers to be able to buy tobacco from the community at a reasonable price with the aim that the welfare of farmers can be better guaranteed.

The role of the government as a mediator when problems occur between factories and farmers, for example: when the manufacturer has closed the receipt of tobacco supplies from farmers while there is still tobacco that has not been sold due to unequal harvest times, the government will ask the manufacturer to buy the tobacco. Furthermore, manufacturers will open themselves specifically to these farmers. But the local government still cannot guarantee that manufacturers will buy at the same price as before closing.

From the various experiences of farmers related to the tobacco trade system in East Java, they firmly consider that the existing policies are still not good and hope that there will be changes that are more in favor of the welfare of farmers. The active role of various stakeholders in protecting farmers is needed.

# Institutional Tobacco Areas Based on Farmers' Corporations in East Java

Based on internal and external factors as well as the strategy for developing a corporatebased tobacco plantation area in East Java, the efforts that can be made in real terms will depend on several factors, including:

- 1. Implementation of the process of cultivation activities carried out by farmers goes well and correctly
- 2. The need for the presence of a company or union
- 3. The existence of the ability and seriousness of companies and cooperatives through good and correct business partnerships, namely being able to cooperate and assist farmers in carrying out the production process and harvesting and post-harvest processes
- 4. Production supply planning is needed to ensure the continuity of a good partnership
- 5. shorten the distribution chain and marketing in the trading system

The establishment of business institutions in the tobacco agribusiness sector is intended to overcome problems in developing tobacco farming at the farmer level. The form of the institution can work well if there is mutually beneficial and mutually supportive cooperation from several



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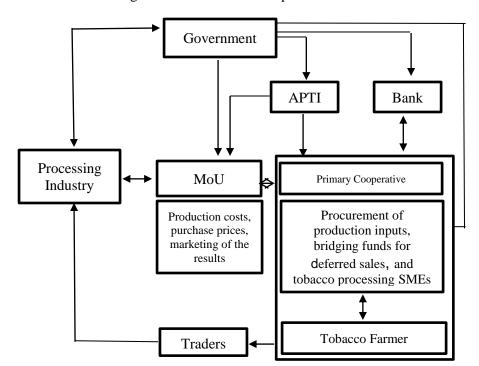
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related matters, for example, the integrated partnership model which is a collaboration that involves large (core) businesses and farmers by involving banks as credit providers in bond as outlined of agreement.

In a partnership, the relationship between cigarette companies and farmers has equal legal standing. The partnership is carried out accompanied by guidance by the company, the provision of production facilities, technical guidance, and marketing of the products, or in other words a partnership based on the principle of mutual interest between all parties who partner and provide mutual benefits.

Each party has a role in the partnership in accordance with its field of business. The cooperative relationship between farmers, traders, and the cigarette industry in the partnership are made into a mutually beneficial and mutually beneficial form of cooperation. This partnership cooperation then becomes integrated with the participation of banks that provide loan assistance to finance farmers' businesses. A partnership pattern must be formed in an effort to improve the quality of tobacco products and trust in the development of APTI and the government.

This institutional model is directed at increasing the bargaining position of farmers and increasing welfare through a deferred selling system and also the development of a farmer's industry in order to increase the added value of production at the location of farmers in carrying out tobacco farming activities. Based on the problems that occur can be described as follows:



**Figure 1.** Integrated Institutional Development of Tobacco Plantation Areas Based on Farmers' Corporations



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# Figure 1. can be described as follows:

#### 1. Farmer

As needed, farmers who can participate in this project can consist of:

- a. Farmers who will use their agricultural land for planting tobacco plantations,
- b. Farmers who already have a business but are in a state that needs to be improved, so they need capital assistance.
- c. Farmers who have permanent membership as tobacco farmers who will be issued by APTI The land area or business scale can vary according to the area or scale owned by each farmer. Each farmer group will appoint a chairman and a secretary who also serves as treasurer. The task of the chairman and secretary of the group is to coordinate the implementation of activities that must be carried out by its member-based on pre-determined plans, in establishing relations with outside parties, both with cooperatives or other agencies deemed necessary, must be in accordance with the results of member agreements. The group leader is obliged to hold regular group meetings whose time is determined based on group agreement.

In this institutional model, the process of empowering tobacco farmers has a very large role. This is directed at facilitating farmers in managing all their capabilities and resources through joint action and networking, thereby encouraging economic, social and ecological ability and independence. Empowerment through APTI group dynamics is carried out so that farmers receive training in farming management, protection and ease of accessing business assistance through cooperatives that collaborate with banks.

The institution is expected to be able to free farmers from the snares of moneylenders. APTI has partnered with the "Bank Mandiri" through tobacco farming loans which provide loans with low-interest rates. Although there is still interest, the amount of interest will be able to be returned to farmers in the form of SHU. In addition, it is hoped that this institution will be able to improve the bargaining position of farmers in determining tobacco prices because there is a program for the deferred selling system to increasing the selling price. In addition, the tobacco processing industry which includes cigarette manufacturers and traders is not arbitrary in determining prices.

This program is also expected to be able to build a tobacco processing industry that is able to have a major impact on improving the welfare of farmers as a result of the existence of profit-sharing from the cigarette factory as a shareholder.

### 2. Cooperative

The capital of agricultural activities in Indonesia is a problem that is always faced by the average farmer, including in tobacco farming activities so that efforts to release farmers from



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loan sharks are through cooperatives, government assistance, and APTI which is in partnership with Bank Mandiri in providing loan assistance with low interest.

The cooperative also strives to provide for the production needs of tobacco farmers which are expected to be able to meet the needs of farmer members. In addition, the cooperative also assists farmers in providing bailout funds for the tobacco sale delay system, and the cooperative is able to build its tobacco processing industry.

The existence of a cooperative that is a legal entity has the ability and facilities that are quite good for the purposes of managing the loan funds of its members, as well as supporting production processing activities in order to provide added value for improving the welfare of members

# 3. Indonesian Tobacco Farmers Association (APTI)

APTI is a professional organization with a regional scope, independent, and on the basis of the similarity of professional activities and functions in the tobacco sector which has a vision and mission to empower tobacco farmers. APTI will act in the struggle to push tobacco prices to be higher than production costs so that farmers do not always lose each time for their harvest.

APTI's main program focuses on improving the quality of life of tobacco farmers in the hope that tobacco farmers will become independent. The success of empowerment carried out by APTI is also supported by the participation of stakeholders because the process of empowering farmers is a long action and requires synergy between the parties involved. The parties involved include the government, tobacco farmers, and APTI.

Related to the process of empowering tobacco farmers, the existence of APTI is a liaison between farmers and the government, farmers and banks, farmers and the cigarette industry. APTI in an effort to empower farmers can be interpreted as part of an effort to make the lives of tobacco farmers towards a better and more advanced state, namely more empowered and prosperous.

# 4. Tobacco Processing Industry

The tobacco processing industry or cigarette factory in this institutional form must be willing to cooperate in establishing mutually beneficial partnerships in the form of a memorandum of agreement. This institution will be able to shorten the tobacco marketing chain and reduce third-party play in the tobacco marketing process. In order to provide good support for the cooperation system, cigarette companies are also expected to provide business technical guidance and assist in the procurement of production facilities for farmers' needs.

If the tobacco company does not have adequate capacity to provide business technical guidance, these efforts will continue because it will be taken over by APTI and the government through



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farmer cooperatives by involving Field Agricultural Extension Officers (PPL) approved by the government.

In the context of developing cooperatives that are able to provide support for improving the welfare of farmers so it is necessary to involve technical personnel who have skills that are able to guide farmers at the costs charged to the cooperative. These technical personnel will be given an honorarium by the Cooperative in accordance with the standard which is then charged to farmers based on the sales proceeds proportionally according to the products produced. The higher the production produced by farmers, the greater the honorarium received by technical personnel. This condition turned out to be able to have an impact on improving their performance.

#### 5. Bank

The existence of a bank in this institution is to help with investment costs or working capital from tobacco farming activities based on the feasibility of a business in partnership between farmers and the cigarette industry, so that banks need to make observations on the feasibility of aspects of cultivation/production needed, including financial feasibility.

The bank in conducting the evaluation must ensure how credit management and other requirements are needed so that it can support the success of the project and minimize the possibility of credit arrears from tobacco farmers.

In the implementation process, the bank must be able to regulate farmers in disbursing credit and use it only to develop tobacco farming, from upstream to downstream, as well as provide detailed explanations in the process of paying installments for loan repayments and interest so that there is no misperception.

Base on these conditions, it is necessary to make a cooperation agreement with the tobacco industry, farmers, farmer groups, and cooperatives. In the implementation process, the core company gets money from the sales of the farmers which are mutually agreed upon by the bank according to the agreement made by the cooperation between the farmers/cooperatives.

#### 6. Trader

The existence of traders in this corporate-based tobacco plantation area development model still has the opportunity to gain profits in the tobacco trade system. This is due to the limited condition of cigarette factories in the area. However, the trading system will not be able to provide space for traders to arbitrarily control tobacco prices at the farmer level.

In addition to efforts to establish an institutional development of a corporate-based tobacco plantation area which includes farmers, cooperatives, entrepreneurs/exporters, and banks, comprehensive long-term planning is also needed to be able to rise and compete in the market.



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This condition is intended to drive the tobacco agribusiness system in tobacco potential areas in East Java so that it can contribute to the economic recovery of tobacco farmers.

To achieve this goal, it is necessary to support a focused, integrated, and sustainable research program. In addition, the research is designed based on market orientation to create an agrotechnological cluster that can be commercialized.

# Program Support in Realizing a Tobacco Plantation Area Development Model Based on Farmers' Corporations in East Java

In realizing the model of developing tobacco plantation areas based on farmers' corporations in East Java, it is necessary to support programs that can be operationalized, including:

# 1. Medium Term Program

The medium-term program is a program to solve problems whose results need to be obtained immediately or the results become the basis for implementing the next program.

a. Increasing the capacity of human resources and farmer institutions.

Farmers are one of the main actors in the tobacco system. Increasing the capacity and ability of farmers and farmer institutions will greatly affect the changes and progress to be achieved. So far, most of the farmers cultivate tobacco according to the habits that have been passed down from generation to generation. To produce good tobacco without causing land degradation, it is necessary to change the habits of farmers towards the application of good cultivation methods. Extension and training are good means to change the pattern of farmers' habits. Farmers need to be introduced to good cultivation methods that do not cause environmental damage. Inappropriate or excessive use of pesticides can have a worse impact on the environment, farmers' health and the tobacco products produced. For this reason, farmers also need to be given training on how to control pests and diseases.

Farmers are one of the main actors in the tobacco system. the capacity and ability of farmers and the improvement of farmers will greatly affect the changes and progress to be achieved. So far, most of the farmers cultivate tobacco in accordance with the habits passed down from generation to generation. To produce good tobacco without causing land degradation, it is necessary to change the habits of farmers towards the application of appropriate cultivation methods. Extension and training are good means to change the pattern of farmers' habits. Farmers need to know how to cultivate well so as not to damage the environment. Inappropriate or excessive use of pesticides can have a negative impact on the environment, farmers' health, and the tobacco products produced. For this reason, farmers also need to be



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given training on how to control pests and diseases. Extension and training need to be combined with practice in the form of demonstration plots carried out by farmer groups.

In this activity, it is also necessary to conduct trials on new technological innovations based on land conservation. This activity is expected to be more easily accepted by farmers, so it needs to be carried out in several tobacco development centers to make it easier for farmers to follow. At certain times, field meetings can also be held to discuss and solve various problems encountered by farmers in the field.

Meanwhile, other problems such as capital and production facilities need to be trained and fostered to improve overall management capabilities from the planning process to the evaluation process.

b. Improving the quality of tobacco raw materials based on environmental sustainability The agroecological conditions of tobacco production centers vary widely so that it can be ascertained that the level of productivity and quality of tobacco also varies greatly, so it is necessary to develop a land map to determine the most suitable area. This adjustment is made in order to produce the expected level of productivity and quality of tobacco. Thus, there is a guarantee that in certain areas tobacco plants are suitable for cultivation, and farmers will get high profits.

# c. Use of superior and pure local varieties

The use of superior varieties is expected to suppress the presence of mixed varieties. These efforts are carried out by paying attention to the quality of production which is expected to increase the selling value and satisfaction of buyers (cigarette industry). Therefore, every potential area needs to have the same effort in reusing the best local tobacco. The varieties produced and in accordance with the raw materials for the kretek cigarette industry need to be developed and seeds provided for a continuous distribution.

#### d. Technological innovation development

The development of technological innovation is needed to anticipate the problems that develop around tobacco cultivation and the decline of land fertility. Technological innovation is expected to provide solutions for efforts to maintain and increase the production and quality of tobacco products and maintain the carrying capacity of the land.

# e. Geographical Indication Protection

Several tobacco centers in East Java are known as products with distinctive quality. Even in certain areas produce tobacco at very high prices. Tobacco as a unique product needs legal protection to avoid counterfeiting. For this reason, it is necessary to propose to get protection as a product with geographical indications from the Ministry of Law and Human Rights. The



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area that produces the typical product can also be protected from its use for other purposes so as to reduce or eliminate the area. In line with the product, the area can also be requested for protection rights as an area with geographical indications

f. Rebuilding partnerships between the kretek cigarette industry and farmers

Partnerships between tobacco companies and farmers need to be built with strong systems and regulations. The government must immediately encourage and facilitate other companies to partner with farmers and need to make general guidelines on partnerships. In its implementation in the field, it can be wider in accordance with the agreement between partner companies and partnering farmers. To complete the partnership, local governments need to establish a communication forum chaired by APTI. Through this forum, all tobacco stakeholders can communicate information and tobacco problems that arise, as well as find solutions.

One thing that is very important in this partnership is that the company can provide information about the tobacco needed, both in quantity and quality. As a complement, the company needs to provide technicians or field officers who provide information and guidance to farmers regarding their needs. Thus, farmers can plan the amount and quality of tobacco that will be produced

g. Improvement of the tobacco trading system

Tobacco trade is classified as a free market. Until now, the tobacco marketing chain is too long because they have to go through small collectors, new wholesalers can enter the purchasing warehouse. Furthermore, from the warehouse purchases are sent to the cigarette industry in need. In the future, it is necessary to establish regional tobacco companies that can monitor and direct tobacco marketing patterns. Institutional farmers who exist are assisted and strengthened to be able to manage farming to market the results. The local tobacco team is also tasked with connecting tobacco companies with existing farmer institutions. Strengthening farmer institutions is also directed to gradually realize a marketing system that is more profitable for all parties. At the right time, it is necessary to establish a "trading house" where transactions between companies and farmers or farmer institutions are formed.

h. Preparation of regulations on tobacco

To ensure that the implementation of the program is carried out according to the plan, it needs to be supported by laws and regulations. Some of the regulations needed include: regulations on tobacco trade and migration from other regions, regulations on commodity zoning, land conservation, Tobacco Development Team and other regulations as needed.



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Considering that East Java is the largest national production center for tobacco commodities, it would be better if the regulation is a provincial level regulation, which means that there is a need to support the governor's regulation on tobacco.

# 2. Long term program

The long-term program is a program to implement or continue the results achieved by the medium-term program. Some other programs require a long time or must be carried out continuously, among others:

# a. Tobacco spread seed supply

Provision of seeds must be carried out regularly so that farmers can use bina seeds, namely seeds that have been released by the Minister of Agriculture. In the early stages of breeding seeds can be carried out by the district and provincial Plantation Offices. If there is guidance for innovative farmer groups or farmers, it is possible that they will be able to become seed breeders. Thus the task of the Department shifted to builder of breeders. This program will last as long as farmers continue to grow tobacco and the kretek cigarette industry still requires East Java tobacco as raw material.

In addition to farmers or farmer groups, seed breeding can be carried out by tobacco companies, especially those implementing partnerships with farmers. Thus, the company can guarantee that the tobacco produced by partner farmers is truly in accordance with the needs of the kretek cigarette industry

# b. Research collaboration

To improve and improve the tobacco system, it is necessary to support technological innovation. To obtain new technological innovations, research needs to be done. Therefore, it is necessary to conduct research collaboration, both with Departmental Research Institutes and Higher Education Research Institutes that have an interest in tobacco. The duration of the program depends on the technological innovation to be obtained. Agronomic, postharvest, or socioeconomic research requires a relatively short period of time. Breeding research to improve varieties takes a long time and is continuous. Research on the use of tobacco derivative products needs to be carried out to obtain added value from tobacco which so far has not received enough attention, including the use of nicotine for pesticides and others.

# c. Increasing the level of public health

One of the important issues surrounding tobacco is the perceived counterproductiveness of tobacco with public health status. Therefore, in addition to curative efforts, preventive efforts against the side effects of cigarette smoke must also be prioritized. Several things that



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can be implemented are through the establishment of non-smoking areas or special places for smoking (smoking areas) as well as the provision of medical materials and equipment for the treatment of diseases caused by the side effects of smoking.

d. Improvement of facilities and infrastructure

Increasing the production and quality of tobacco products needs to be supported by adequate facilities and infrastructure so that they are able to support the production and post-harvest processes. These facilities and infrastructure are needed to improve tobacco cultivation and improve the post-harvest process so as to improve the quality of tobacco products.

# 4. CONCLUSION

The implementation of the development of tobacco plantation areas based on smallholder corporations in each production center in the region is directed and controlled directly by the Regent, All agencies related to tobacco management that are supported by all elements of society and the business world are required to implement priority programs in the model for developing tobacco plantation areas based on smallholder corporations in accordance with the stages., Agencies related to tobacco management are required to ensure consistency between planning in each agency and the model for developing tobacco plantation areas based on smallholder corporations. In order to increase the effectiveness of the implementation of the tobacco plantation area development model based on smallholder corporations, the agencies related to tobacco management are required to monitor and evaluate every year the elaboration and implementation of priority tobacco management programs At the end of each fiscal year and final stages, an evaluation of the successful achievements that have been determined is carried out as a means to determine the progress of the implementation of the priority programs that have been previously determined, so that they can be used as material for consideration in planning the next year's program.

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