Study of the Program to Increase Tobacco Commodity Production in Karanganyar Regency

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ABSTRACT

The plantation sector, with tobacco as one of the leading commodities, has an important role in the Indonesian economy. Karanganyar Regency is one of the main tobacco-producing areas in Central Java. This study aims to evaluate the tobacco production improvement program in Karanganyar Regency using the CIPP (Context, Input, Process, Product) approach. Data were collected through in-depth interviews with tobacco farmers and key informants, as well as structured questionnaires to 83 farmers. The results of the analysis show that the program to increase tobacco production in Karanganyar Regency is effective as a whole. This program is contextual, has adequate inputs, processes that are well implemented, produces useful products, and has a positive impact on farmers. Although this program is effective, there are several things that need to be improved, such as intensification of extension, increased assistance, and easy access to production facilities for farmers such as fertilizers, pesticides, and quality seeds. These efforts are expected to increase tobacco production in Karanganyar Regency in a sustainable manner and improve the welfare of farmers.

KEYWORDS

CIPP; evaluation; production improvement program; tobacco commodities

1. INTRODUCTION

The agricultural sector is a sector that has an important role in building the Indonesian economy. The agricultural sector consists of sub-sectors of food, horticulture, plantations, fisheries, food crops, forestry and livestock. The plantation subsector is the subsector that has the largest export value among other subsectors. Based on data from the Central Statistics Agency (BPS), the plantation subsector to Gross Domestic Product (GDP) in 2019-2023 has an average contribution value of 3.808 percent. Meanwhile, the food crop subsector contributed 2.318 percent, livestock 1.516 percent, and forestry 0.602 percent. The plantation subsector has superior commodities, including tobacco, coffee, cocoa, oil palm, rubber and others.

Tobacco is an important commodity in Indonesia with high economic value. Tobacco plays an important role in supporting the Indonesian economy, such as providing jobs, a source of income for farmers, a source of foreign exchange, and supporting agribusiness and the tobacco agroindustry. Tobacco makes a significant contribution to the national economy. Tobacco is the main raw material in the cigarette industry. The existence of the cigarette industry is able to be the largest contributor to state revenue from excise, which is 96%, which can be seen from the achievement of excise revenue in 2021 reaching Rp. 180 trillion and increasing in 2022 to Rp. 203 trillion (Dahiri, 2022).

Based on BPS data in 2023, it can be seen that Indonesia's tobacco export volume experienced a significant decrease in the January-October 2023 period compared to the same period the previous year. This decrease in volume also had an impact on the value of tobacco exports which decreased by 21.11%. The decline in the planting area and productivity of asepan tobacco in Karanganyar Regency during the period 2020 to 2023.

Tobacco is a plant that is suitable for growing in various regions in Indonesia, including Central Java. Tobacco production in Central Java has shown an upward trend in recent years, with Karanganyar Regency as one of the main producing areas. The most widely produced tobacco varieties in Karanganyar Regency are rajang tobacco and asepan tobacco.

Based on BPS Karanganyar Regency data in 2023, the planting area and productivity of asepan tobacco in Karanganyar Regency have decreased during the period 2020 to 2023. This decline is caused by several factors, including: High rainfall before harvest which causes low production quality, low knowledge of tobacco farmers related to land and tobacco crop management, lack of ability and skills of tobacco farmers in managing potential and Natural Resources (SDA), tobacco farmers do not take advantage of the facilities provided to increase tobacco production. The decline in the planting area and productivity of asepan tobacco has an impact on the decrease in tobacco selling prices, a decrease in the income of tobacco farmers, and the possibility of a tobacco crisis in the future.

The Karanganyar Regency Government is an important bridge in the institution as a liaison related to education to the community. According to Riris (2022), agricultural extension workers in addition to playing a role in helping to increase agricultural production and productivity also provide motivation, education, support and help farmers solve problems.

The Karanganyar Regency Agriculture, Food and Fisheries Office has a program to increase tobacco production by providing facilities and infrastructure assistance to tobacco farmers. This program is in the form of providing seeds, fertilizers, and planting machinery directly to farmers. However, even though this program has been running, tobacco production in Karanganyar Regency has actually decreased from 2020 to 2023. This shows

that the program has not been effective in increasing tobacco production. Therefore, it is necessary to evaluate the program to find out whether the program is in accordance with the strategic planning and sustainability of the government's program. This evaluation is important to ensure that the program can achieve its goal, which is to increase tobacco production in Karanganyar Regency.

2. METHODOLOGY

The location in this study was carried out using the purposive sample method , which means that the location was chosen intentionally. The purposive sample method is a sample withdrawal method that is carried out by selecting subjects based on certain considerations so that researchers can obtain quality data. This consideration is because Karanganyar Regency is one of the areas that receive facilities and infrastructure assistance from the State Budget, several locations that have the potential to be developed are in Jenawi District, Jumapolo District, Kerjo District, Jatiyoso District, Ngargoyoso District, and Colomadu District, Karanganyar Regency with a planting area of 136.45 (Ha) and a total production of 109,160 kg in 2023. The plantation subsector showed a positive performance where the growth of the plantation subsector in Karanganyar Regency was relatively faster than the growth of the plantation subsector in Central Java Province. Karanganyar Regency as one of the districts that develops tobacco commodities.

This study uses qualitative research with an evaluation approach using the CIPP (Context, Input, Process, Product) model. This research is included in the category of Formative Evaluation Research, which is an evaluation carried out during the implementation of the program to find the strengths and weaknesses of the ongoing program. The population of this study is all tobacco farmers in Karanganyar Regency which totals 481 people. The sample of this study was taken using the purposive sampling method with the calculation of the Slovin formula and proportional sampling. The number of samples in this study is 83 farmers spread across 6 sub-districts in Karanganyar Regency. Can be seen in the Table 1.

Table 1. The Number of Sampling

No	District	Number of Farmers
1	Jenawi	261
2	Tawangmangu	27
3	Ngargoyoso	30
4	Kerjo	102
5	Jatiyoso	42
6	Colomadu	19
	Total	481

The sample that can be taken from the slovin formula is, 20% of the population. The determination of the sample in this study is as follows

n = N/(N.e^2+1)

n = 481/(481.0,1+1)

n = 481/5,81=82,78=83 Petani.

After the number of sample farmers is known as 83 farmers, the next stage is to calculate the sample in each sub-district, using the proportional sampling method presented in the following table.

Table 2. Number of Samples in Each Sub-district

No	District	Number of Farmers	Number of samples

1	Jenawi	261	45
2	Tawangmangu	27	5
3	Ngargoyoso	30	5
4	Kerjo	102	17
5	Jatiyoso	42	7
6	Colomadu	19	4
	Total	481	83

The data collection technique used was in-depth interviews with tobacco farmers and key informants (Head of the Agriculture Office and Head of the Plantation Section) using a structured questionnaire to obtain data on the impact of the tobacco production increase program felt by farmers and documentation in the form of photos of activities and data from interviews.

The data analysis method used in this study is descriptive analysis to determine the profile of the tobacco production improvement program and measure the sustainability of the program implementation, then use validity and reliability tests to ensure the quality of the data collected and CIPP (Context, Input, Process, Product) analysis to evaluate the tobacco production improvement program based on context, input, process, and product.

3. RESULTS AND DISCUSSION

3.1. General Condition of Karanganyar Regency

3.1.1 Natural Conditions

Karanganyar Regency is located in Central Java and borders Sragen, East Java, Wonogiri, Sukoharjo, Surakarta, and Boyolali. The average altitude of the Karanganyar area is 511 meters above sea level with the lowest area of 90 meters above sea level and the highest of 2,000 meters above sea level. Karanganyar has a tropical climate with a temperature of 22°C - 31°C and an average rainfall of 205.74 mm per year. Most of the land in Karanganyar is used for agriculture (rice fields) and moors/gardens.

3.1.2 Population Condition

The population of Karanganyar increased from 901,345 people in 2021 to 955,116 people in 2023. The productive age population (15-64 years old) dominates with a total of 655,369 people. The number of female population is more than that of men.

3.1.3 Economic Situation

The agricultural sector ranks second in contribution to the Gross Regional Domestic Income (GDP) of Karanganyar Regency. The productivity of sugarcane plants is the highest, while tobacco productivity ranks third. The following table of tobacco harvest and production areas in Karanganyar Regency in 2023 can be seen in the table 3.

Table 3. Plant Area, Productivity, and Production of Tobacco (2020-2023)

Year	Tobacco	Plant area (Ha)	Productivity (Kg/Ha)	Production (Kg)
2020	Know	114	1.162,83	227.290
2021	Know	95	975,12	101.950

2022	Know	90	887,23	10.500
2023	Know	85	800	16.560
2021	Rajang	50	610	17.680
2022	Rajang	55	710,11	66.395
2023	Rajang	60	800	109.160

According to the data above, it is known that the area of tobacco land from 2021 to 2023 has fluctuated. Productivity in 2021 is 610 Kg/Ha with a production of 17,680 Kg. In 2022 productivity rises to 710.11 Kg/Ha with a production of 66,395 Kg and in 2023 it will increase by 800 Kg/Ha with a total production of 109,160 Kg.

3.1.4 Characteristics Responden

A respondent is an individual or group that provides answers or responses to questions or statements asked in a survey, questionnaire, interview, or other research. Respondents provide the data or information necessary to analyze and draw conclusions about the topic being researched. The characteristics of the respondents must be in accordance with the writing objectives of the research. The characteristics of farmers are a description of the farmer's condition. Respondents were dominated by productive age (51-58 years old) with the average respondents having a high school education

3.1.5 Questionnaire Data Analysis with CIPP *(Context, Input, Process, Product) approach*

Below is a statement on the implementation of the tobacco production increase program in Karanganyar Regency. On this questionnaire there is no right or wrong answer to each statement. Each statement is provided with five possible answers, namely (SS) = Strongly Agree, (S) = Agree, (R) = Doubtful, (TS) = Disagree, (STS) = Strongly disagree.

Table 4. Instrumen *Context*

No	Statement	SS	S	R	TS	STS
1	The activities of the tobacco production increase program are in accordance with the goals of my farming business					
2	In the distribution of plants, there is a document that I signed					
3	Training and mentoring added insight to me					
4	I have access to fertilizers, pesticides and other means of production					
5	Agricultural extension workers have good competencies according to the field					

Table 5. Input *Instrument*

No	Statement	SS	S	R	TS	STS
1	Acceptance documents in my line group are well stored					
2	The receipt of saprodi assistance is carried out transparently					
3	The amount of assistance is adjusted to the number of farmer group members					

4	The amount of assistance is adjusted to the area of land owned						
5	The types and types of saprodi that I line up are in accordance with the needs of the farming business						

Table 6. Instrumen *Process*

No	Statement	SS	S	R	TS	STS
1	Tobacco planting planning is in accordance with the schedule and recommendations from agricultural extension workers					
2	Planting planning is in accordance with the tobacco planting season					
3	Agricultural extension workers are appropriate to provide assistance to farmers					
4	Fertilizer application and risks are in accordance with recommendations from agricultural extension workers					
5	The types and types of saprodi that I line up are in accordance with the needs of the farming business					

Table 7. Instrumen *Product*

No	Statement	SS	S	R	TS	STS
1	The report on the results is in accordance with the format provided by the agricultural extension officer					
2	Results report containing the productivity of harvested tobacco					
3	The tobacco harvest is in accordance with the target					
4	The program has a positive impact on program recipients					
5	Programs can be continued and replicated					

3.1.6 Results of Analysis with SPSS

Case Processing Summary

		N	%
Cases	Valid	83	100.0
	Excluded a	0	.0
	Total	83	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.758	20

The data above shows that the value *of Cronbach's Alpha* > from the significance level of 0.7, then the instrument is said to be Reliabel.

3.1.7 T Score in Glickman Quadrant

Score T				Results
Context	Input	Process	Product	**Effective**
+	+	-	+	

The table above shows the results of the evaluation of programs or activities based on four categories: *Context, Input, Process, Product,* assessed as Effective. Each category is scored with a score of - *(minus)* or + *(plus)* which is then combined into a single T score.

3.1.8 Calculation Results

Context: Respondents generally agreed that the activities of the tobacco production improvement program were in accordance with the objectives of their farming business.

Input: Respondents generally agreed that the receipt of assistance is done in a transparent manner and that the amount of assistance is in accordance with the needs.

Process: Respondents generally agreed that agricultural extension workers were appropriate to provide assistance to farmers and the application of fertilizers and pesticides was in accordance with the recommendations.

Product: Respondents generally agree that the program has a positive impact on the recipient of the program and that the program can be continued.

4. CONCLUSION

Karanganyar Regency has the potential to increase tobacco production. This is supported by suitable natural conditions, adequate human resources, and government programs that favor farmers. To achieve optimal results, it is necessary to make efforts such as more intensive counseling, more targeted assistance, and easy access to production facilities.

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