EVALUATION PROGRAM FOR INCREASING VALUE ADDED AND COMPETITIVENESS OF HORTICULTURAL PRODUCTS IN SUPPORTING SUSTAINABLE AGRICULTURE (EVALUATION RESEARCH ON THE MULYATANI GAPOKTAN IN BREBES)

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Article history: received 08 August 2021; revised 17 August 2021; accepted 29 August 2021

DOI: https://doi.org/10.33751/jsi.v4i2.6119

Abstrak. The purpose of this study is to evaluate the implementation of the program to increase the added value and competitiveness of horticulture through APBN funds that have been implemented by the Directorate of Processing and Marketing of Horticultural Products at the Mulyatani Gapoktan in Brebes Regency. This program is expected to support sustainable agriculture in Brebes district. The government strongly supports the development of shallot cultivation in Brebes district, which is the largest center for shallot commodities in Central Java. Increased added value can be obtained by farmers at the time of starting cultivation, post-harvest to marketing. By doing good and correct cultivation, it can increase the productivity produced (18 tons/hectare). The use of organic materials and reducing the use of chemical pesticides in onion cultivation is a form of added value obtained by farmers because the production costs for purchasing chemical pesticides reach 8% of the costs incurred. then if done postharvest properly and correctly it can reduce losses (damage) that occur so that the product has a high selling value. The added value of shallots obtained by Gapoktan Mulyatani is apart from the cultivation and postharvest processes, as well as in the marketing process of fresh and processed forms (fried onions, crispy onions, and onion paste), so that the shallot business can support sustainable agriculture because of the shallot business process. starting from upstream to downstream. The purpose of providing postharvest infrastructure assistance and shallot processing facilities at the Mulyatani Gapoktan in Brebes Regency by the Directorate of Horticultural Product Processing and Marketing is to implement a program to increase added value and horticultural competitiveness to improve the welfare of members of the shallot farmer group. So that the results of this evaluation will be used as a reference that this program can still be continued by involving other agencies so that the program runs according to the targets to be achieved.

Keywords: application of cultivation; postharvest; added value; sustainable agriculture

I. INTRODUCTION

The national natural resources management planning alignment with SDGs programme, particularly the water resources management, afforestation programme, as well as programme agriculture (Widiyono innovative **[1]**). Facilitation support through the budget of the Directorate General of Horticulture is a stimulant or lever in realizing the independence of independent and sustainable horticultural farming groups in carrying out their business. In accordance with Presidential Regulation Number 45 of 2015, one of the functions of the Directorate General of Horticulture is to formulate, implement policies, prepare NSPK, provide guidance and carry out evaluation and technical administrative support including efforts to improve postharvest, processing, and marketing of production products, especially in onion commodities and other horticultural crops.

The Shallots are one of the national superior vegetable commodities that have been intensively cultivated by farmers for a long time. Brebes Regency is one of the largest shallot production centers in Central Java. According to Kusuma and Firdaus [2] although shallot is Indonesia's leading vegetable, shallots have not been able to compete in the world market strongly because shallots do not have a comparative advantage. Indonesian shallots have not been able to compete well when compared to competing countries, one of which is China. The current problem is that red onions are mostly marketed in fresh form [3]. In fact, shallots can be processed into various products that provide added value for farmers, especially during the harvest season, which is almost always followed by falling prices. Some people know that processed shallots are limited to fried onions or a mixture of pickles [4]. Moreover, the commodities that have penetrated the export market can also be processed into pasta products, dried sliced onions and shallot oil [5]. The processed red onion product is not yet very popular in Indonesia, but the future business prospects are quite promising. Some of the problems associated with the onion processing industry today are: 1) Limited raw materials, where the raw materials are obtained through collectors, not directly from farmers, 2) Supply of raw materials is not available continuously, 3) Large industries refuse supply from small industries because the raw materials do not meet the standards. For example: The instant



noodle factory partnership pattern has the quality standard of raw shallots or processed materials needed.

Shallots sold in processed form provide higher profits for farmers, it can be seen from the value of the farmer's share for processed shallots which is higher than the value of the farmer's share of unprocessed shallots (Rasoki **[6]**; Apriliani and Fahmi **[7]**).

The government has tried to continue to provide assistance by regulating planting patterns, bridging partnership patterns with large industries, good ways of cultivation and post-harvest, and providing facilities and infrastructure assistance to increase production output.

II. RESEARCH METHODS

The search was conducted at Gapoktan Mulyatani located in Wanasari District of Brebes Regency, Central Java Province, in February to April 2021. The method used is qualitative descriptive [8]. Data sources are taken through observation, interviews, and analysis of documents both in research locations and in the Directorate of Processing and Marketing of Horticultural Products.

III. RESULTS AND DISCUSSION

The Directorate of Horticultural Product Processing and Marketing has implemented the Horticultural Value Added and Competitiveness Improvement program through APBN funds. Within a period of four years (January 2016 -December 2020), it has provided assistance with facilities and infrastructure for processing and post-harvest shallots to the development location of the shallot area, one of which is in Brebes district through a program to increase added value and competitiveness of horticulture. It is hoped that this program will support sustainable agriculture which is directed to the application of the concept of developing a complete agribusiness business from upstream to downstream. The independence and participation of farmer groups independently does not necessarily expect complete assistance to the government, making the mindset of Gapoktan Mulyatani to try to be more independent with support from the government in the form of a program to increase added value and competitiveness of shallots, so that the program can run hand in hand with support the.

This Gapoktan has implemented a good cultivation and postharvest system and some members are graduates of SLPHT (Integrated Pest Management Field School) however, this has not been fully implemented by all members of the farmer group. The current average productivity is 8-10 tons/ha, slightly lower than the national average of 9.3 tons/ha. From good and correct cultivation and postharvest methods, the Mulyatani Gapoktan has been able to increase the added value of the resulting production by applying good and correct cultivation SOP (Standard Operasional Procedure) and GHP (Good Handling Process). In addition to implementing SLPHT, this Gapoktan also uses organic fertilizers that are produced by themselves so that they can reduce production costs incurred. Meanwhile, with the help of postharvest tools, it can minimize damage to crops (losses).

Good and correct shallot cultivation and postharvest in Gapoktan Mulyatani has been implemented, although not all members have done it, but there is a slight change in the mindset of farmers to try to cultivate shallots starting from upstream to downstream businesses to support sustainable agriculture. The added value obtained by the Mulvatani Gapoktan is p there are times when they apply good and correct cultivation so that production results increase, good and correct postharvest application can also reduce losses and the products produced are competitive and environmentally friendly. To anticipate the price dropping during overproduction, the Mulyatani Gapoktan is able to process the shallots into fried onions, crispy onions and pasta. They are aware that by implementing the shallot business with the support of this assistance program, they can reduce the production costs incurred so as to be able to improve the welfare of farmers because the products produced are of high quality. With the assistance of tools provided both from the program to increase the added value and competitiveness of horticulture in the form of post-harvest facilities and infrastructure as well as from other ministry programs, this Gapoktan has been able to produce fresh and processed onion products in the form of fried onions, pasta onions and crispy onions. This makes the Mulyatani Gapoktan able to produce shallots so that they can be competitive in national and international markets. Gapoktan Mulvatani is also able to utilize post-harvest tools so that it can reduce losses at harvest.

This Gapoktan already has a Business Permit and already has a market share, including for fresh products to be marketed to several areas according to market demand, while processed products are marketed online and previously marketed to Singapore and the Middle East. However, due to the COVID-19 pandemic, the market currently only caters to the online market. With the assistance and support from programs to increase added value and competitiveness of horticulture and synergies from Ministries/Institutions, we are able to support programs to increase added value and competitiveness of shallots". From the data obtained, it appears that the demand for fried shallots is quite high because consumers of fried shallots are local, while for processed shallots, crispy onions and pasta, the demand for local and foreign consumers (Singapore and the Middle East). The result of the evaluation of this research is a recommendation for a program to increase the added value and competitiveness of shallots in supporting sustainable agriculture. Recommendations for the implementation of the program to increase the added value and competitiveness of shallots in supporting sustainable agriculture in Brebes district include:

1. Context Evaluation (Context)

By having a clear legal basis, the Directorate of Horticultural Products Processing and Marketing has been able to properly organize a program to increase the added value and competitiveness of shallots through APBN funds. The program objectives have been achieved well based on the



legal background and basis that are met but need to be reviewed in order to meet the expected quantity and quality.

2) Evaluation of Inputs (Inputs)

- a. In order to improve cultivation and postharvest methods through increasing the added value and competitiveness of shallots in supporting sustainable agriculture, it is carried out with a cooperation scheme between the Directorate of Processing and Marketing of Horticultural Products and the District Agriculture Office, it is proposed that guidelines related to the preparation of implementation stages with budgeting be adjusted to standards costs (NSPK) issued by the Directorate General of Horticulture. The Directorate of Processing and Marketing of Horticultural Products can carry out its role to provide rewards and punishments to the Service if in the implementation of the program things are found that are not in accordance with the planning document.
- b. Program assistance should not only be in technical terms but can also provide EQ (Emotional Quotient) training because the ability to manage emotions and the ability to motivate oneself plays a much more important role in success because Gapoktan members have low educational backgrounds so that it also affects psychological conditions.
- c. It is advisable to make/establish an organizational structure for implementing the program so that it is clearer and more focused regarding the tasks and functions in terms of mentoring and supervising program implementation.
- 3) Process Evaluation
- a. The evaluation system that has been carried out by the Directorate of Horticultural Product Processing and Marketing should still be used for future programs by considering the input from the evaluation results in order to improve the quality of the program.
- b. It is necessary to coordinate better with the Provincial/Regency Agriculture Office to be more highly committed to the things that have been agreed so that the objectives of the program implementation are achieved as targeted.
- c. It is necessary to make adjustments to the target recipients' plans so that the assistance is right on target and can be utilized by referring to the technical guidelines on Implementation Procedures and Supporting Activities.
- d. To support sustainable agriculture, it is necessary to pay attention to the stages of cultivation, post-harvest, processing and marketing of products, for that there needs to be a strong commitment from related parties so that the stages of implementing activities can be realized as planned. e. It is advisable to provide technical guidance guided by an expert who not only masters the material and is experienced in their field but also helps build networks in the promotion and marketing process.

- 4) Product Evaluation (Product)
- a. Judging from the process of implementing the program assistance provided to the Mulyatani Gapoktan, it was good, but the cultivation and postharvest processes were still unable to be carried out by all Gapoktan members to improve the quality of the resulting production. This shows that there is still a need for motivational support and assistance in implementing the program. The implementation of the program requires a high commitment from both parties who work together on the things that have been agreed so that the objectives of the program implementation are achieved as targeted.
- b. It is necessary to revise the implementation of the program to increase added value and competitiveness in the future by considering the results of the CIPP evaluation that has been carried out in an effort to improve the implementation of subsequent programs so that they are able to support sustainable agriculture.

IV. CONCLUSION

The added value and competitiveness of shallots obtained by the Mulyatani Gapoktan is that when they apply good and correct cultivation, production results increase, good and correct postharvest application can also reduce losses and the products produced are competitive and environmentally friendly. To anticipate the price dropping during overproduction, the Mulyatani Gapoktan is able to process the shallots into fried onions, crispy onions and pasta. Promotional media in the form of leaflets and social media, promotions and testimonials based on social media from visitors are also a form of support in efforts to develop the shallot business, both fresh and processed. With the existence of online sales media, it is very supportive of the Mulyatani Gapoktan in marketing shallots in both fresh and processed forms.

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