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Evaluation of the Results of Food Plant Seed Breeding Training in 2013 on the Development Unit of Food Plant Seeds and Horticulture, West Kalimantan Province

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ABSTRACT
This study aimed to evaluate the 2013 food plant seed breeding training program that adopts Kirk Patrick's approach by using four levels of evaluation stages, namely Reaction Evaluating, Learning Evaluating, Behavior Evaluating, and Results Evaluating. This study was qualitative descriptive. The research informant was the Head of the Food and Horticultural Plant Seed Development Unit of West Kalimantan Province. The training participants were represented by 7 Heads of Seed Garden Installation, one committee, one instructor as a training facilitator, as well as one farmer breeder who did not participate in the training program. Data collection was carried out through observation and in-deft interview techniques with the informants. The results of descriptive analysis showed that the policy context concerning the objectives to be achieved and the program was considered clear according to the majority of informants and also running well. At the Reaction Stage, most of the informants admitted that the time given was too limited: however, the participants were satisfied with the atmosphere of the Food Plant Seed breeding training activities, the instructor was considered to be competent and mastered the learning media so that he was able to motivate the participants to be active in learning, the committee had also worked optimally. At the Learning Stage, the learning method was presented interestingly yet the participants were not yet fully skillful. At the Behavior Stage, the majority of informants from the participants' group acknowledged that there had been a change in behavior which was shown by the improvement of skills after participating in the Food Plant Seed breeding training program. Finally, at the Yield Stage, after a few months of participating in the breeding training of these food crop seeds, there had been a change in production even though has not been able to exceed the production yield of the breeding farmers who did not participate in the breeding training program of these food crop seeds.

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INTRODUCTION

The need for quality seeds for food crops is relatively high in line with production objectives that are more commercially oriented. High-quality seeds will produce high productivity if the cultivation of plants is carried out adequately. On the other hand, the provision of quality seeds to farmers at affordable prices is still experiencing obstacles. Seed producers whose production centers are scattered in various regions and the width of the distribution of farmers' planting areas are obstacles in controlling the production and distribution of seeds.

Seed development is one of the seven revitalizations used by the government of the Republic of Indonesia to achieve the four main targets of agricultural development in 2010-2014 which include achieving self-sufficiency and sustainable self-sufficiency; increasing food diversification; increase in added value, competitiveness, and exports, as well as increase the welfare of farmers. Efforts made to revitalize seeds and nurseries have been included in the 2010-2014 Ministry of Agriculture Renstra (Rachman, 2011).

Departing from the vision of the Governor of West Kalimantan "The realization of West Kalimantan people who are faithful, healthy, smart, cultured and prosperous" the pair of Governor and Deputy Governor of West Kalimantan, Cornelis-Christiandy has taken the right step by prioritizing agriculture as one of the leading sectors to realize prosperous West Kalimantan people.

It is undeniable that agriculture is still the backbone of West Kalimantan's economy. With a population of around 4.47 million people, and a workforce working around 2,095,705 people, about 60% of them are engaged in agriculture in general (food crop agriculture, plantations, and forestry). This means about 1.27 million people, West Kalimantan in Figures 2012 (http://www.kalbarprov.go.id). It is not surprising that agricultural development is a priority in West Kalimantan, even a necessity, because prioritizing agriculture means that the government has empowered the people of West Kalimantan as many as 1.27 million people, this number does not include family members.

So far the agricultural sector is still the main driver of economic development in West Kalimantan. The contribution of the agricultural sector to West Kalimantan's GRDP reaches 25% of the total of around IDR. 30 Billion (West Kalimantan in Figures, 2011). From the 25%, the food crop sub-sector gave the highest contribution, followed by plantations, livestock, fisheries, and forestry. This relatively large contribution is of course very influential in improving the welfare of the people of West Kalimantan, especially farmers.

The agricultural sector has recently received serious attention from the world, including in Indonesia, especially concerning the issue of food availability. Agriculture, in general, plays an important role in the world food supply. In addition, the demand for agricultural products is increasing every year as the population increases. On the other hand, the occurrence of Global Warming symptoms and current world climate change greatly affects and even threatens the agricultural cultivation system. Some agricultural countries have even experienced the effects of global warming and climate change, such as drought, flooding, pest attacks, and so on so that many agricultural products experience crop failure.

Seeing current conditions, the role of agriculture will be increasingly important for human survival. The success of the agricultural sector, especially food crops & horticulture, is an absolute requirement so that the needs of human life in the food sector are met. For that, we must also increase development programs that are directed at the agricultural sector, especially food crops & horticulture in West Kalimantan.

Government policy to prioritize the agricultural sector, especially the Food Crops & Horticulture sub-sector, has an important role in efforts to increase food production (rice) to support food security in West Kalimantan. Because food and food availability cannot be separated from the world of

agriculture. Therefore, in line with the central government, the Governor of West Kalimantan Province Cornelis through the West Kalimantan Provincial Food Crops & Horticulture Service and other agricultural offices at the provincial/district/city level have scheduled 4 successful agricultural programs to achieve food security and prosperity for the West Kalimantan farming community.

The four main programs are (1) Food self-sufficiency and sustainable self-sufficiency; (2) Food Diversification; (3) Increased competitiveness and added value; and (4) Increasing farmer welfare. The four successes of this agricultural development program have been translated into various forms of development activities that directly touch the community.

The West Kalimantan Province Food Crops and Horticulture Seed Development Unit is a Technical Implementation Unit (UPTD Type-A) of the West Kalimantan Province Food Crops and Horticulture Department (PerGub no 29 of 2009), which is domiciled in Peniraman Village, Sungai Pinyuh District, Pontianak Regency, West Kalimantan. In the context of seed development, the West Kalimantan Province Food and Horticultural Seed Development Unit are equipped with seed garden installations that are spread across several districts/cities in West Kalimantan, where each seed garden installation is led by a Head of Installation Gardens.

The application of quality seeds in farming is the starting point for achieving high productivity. Various efforts have been taken by seed producers including UPBTPH West Kalimantan Province which is mandated by the local government to produce seed sources of food crops, especially rice plants. Among other things, through research and development of seed sources of food plants on existing land in plantations owned, but it is deemed inadequate if we compare the 70,000 kg of seed produced by UPBTPH in 2013 which can only meet the planting needs of 2,800. ha only, while in West Kalimantan in 2013 alone there was 475,883 ha of land for rice plants which required 11,897,075 kg of spread class rice seeds.

Human Resources (HR) is a central factor in an organization. Whatever the form and purpose, organizations are created based on various visions for the benefit of humans and in carrying out their missions are managed and managed by humans. So, humans are a strategic factor in all institutional/organizational activities. Foulkes, 1975in his book, the Harvard Bussiness Review, predicts that the role of HR from time to time will be more strategic with the following words: "For many years it has been said that capital is the bottleneck for a developing industry. I don't think this any longer holds. I think it's the workforce and the company's inability to recruit and maintain a good workforce that does constitute the bottleneck for production. … I think this will hold even more in the future".

The importance of human resources needs to be realized by all levels of management. No matter how advanced technology is today, the human factor still plays an important role in the success of an organization. According to Zainun (2001: 17), human resource management is an important part, it can even be said that management is essentially human resource management or human resource management is identical to the management itself.

Emphasis on human investment is believed to be the basis for increasing total productivity of production factors in the Food Crops and Horticultural Seed Development Unit. Land, labor, physical capital may experience diminishing returns, but science does not. Solow (2009) emphasized the role of science and human capital investment in spurring economic growth. The Solow theory was then developed a new theory of economic growth known as The New Growth Theory (Tilaar, 2000: 33).

Tilaar (2000: 33) stated the factors that cause the need to develop the level of education to build an economy, are: (1) Higher education broadens people's knowledge and enhances the rationality of their thinking. This allows people to take more rational steps in taking action or making decisions. (2) Education allows people to learn the technical knowledge needed to lead and run modern companies

and other modern activities. (3) The better knowledge obtained from education becomes an incentive to create reforms in the technical, economic, and various other aspects of community life.

Thus a higher level of education or knowledge will ensure continuous improvement in the level of technology used by society. Recognizing the important role of education. Meanwhile, Latoiner, as quoted by Saksono (1993), suggested that employees can develop faster and better and work more efficiently if before working they receive training under the guidance and supervision of an expert instructor. Otto and Glasser (1969) as quoted by Martoyo (1992: 41) used the term "training" or training for efforts to increase knowledge and skills so that education is embedded in it.

Education, in general, is concerned with preparing prospective personnel who are being needed by an agency and organization, while training is more related to the improvement of skills of employees who have occupied or worked in certain organizations. In an orientation training or the emphasis is more on the task that must be carried out, while education is more on the development of general abilities. To improve knowledge, skills, and work attitudes that are more conducive to the performance of employees within the Food Crops and Horticultural Seed Development Unit, technical training is held in the propagation of seeds from food plant sources, especially rice.

Program evaluation is a unit or activity unit that aims to collect information that realizes or implements a policy, takes place in a continuous process, and occurs in an organization that involves a group of people for decision making. Program evaluation aims to determine the achievement of program objectives that have been implemented. Furthermore, the results of program evaluation are used as a basis for carrying out follow-up activities or for making subsequent decisions. Evaluation is synonymous with supervision activities. Evaluation/supervision activities are intended to make decisions or follow up on programs that have been implemented. The benefits of program evaluation can be in the form of terminating the program, revising the program, and continuing the program.

In program evaluation, the implementer (evaluator) wants to know how high the quality or condition of something is as a result of program implementation after the data has been collected compared to certain criteria or standards. In program evaluation, the implementer (evaluator) wants to know the level of program achievement, and if the goal has not been achieved, the implementer (evaluator) wants to know the location of the shortcomings and why. The results are used to determine the follow-up or decisions to be taken. In program evaluation activities, indicators are indicators to determine the success or failure of an activity.

Controlled experimentation is the best method to use in evaluating a training program. In a controlled experiment, both the training group and the control group (which did not receive training) are used. Data (for example, on the quantity of production or the quality of work output) should be obtained both before and after the training effort in the group is exposed to training and before and after the work period associated with the control group. In this way, it is possible to establish the extent to which there is a change in performance in the training group that resulted from the training program and not from a change across the work unit such as an increase in salary; assuming that a salary increase will affect both groups equally. However, in terms of recent practice, one survey found that somewhat less than half of the companies that responded were trying to get pre- and post-training measures from training participants. An expert recommends using at least one evaluation form to evaluate the training program. Therefore, this study aims to evaluate the 2013 food plant seed breeding training program that adopts Kirk Patrick's approach by using four levels of evaluation stages, namely Reaction Evaluating, Learning Evaluating, Behavior Evaluating, and Results Evaluating.

METHOD

Research design is an investigation structure that is structured in such a way that the researcher will get answers to the questions that arise. The research method in a broad sense is a systematic and

measured and organized way and procedure to investigate a particular problem to find information to be used as a solution in problem alleviation (Silalahi, 2009: 34).

The research method that used in this research was to use an evaluative method with a qualitative approach. Evaluation research is a process carried out in the training of food plant seed breeding by first considering positive values and increasing self-sufficiency in food plant seeds and considering all the processes and techniques that have been used in research.

Evaluation research on food plant seed breeding training is a systematic data collection activity that is intended to make it easier for decision-makers to answer all the questions that will arise (Arikunto, 2007: 63). The evaluation that the means in this study was the activity of collecting data and information about the implementation of training activities for rice seed breeding in the Program to Increase Production, Productivity and Quality of Food Plants in Achieving Sustainable Self-sufficiency, concerning production and productivity as well as the availability of seed sources and seeds. Spread of rice plants in the Food and Horticultural Seed Development Unit of West Kalimantan Province.

The research informant was the Head of the Food and Horticultural Plant Seed Development Unit of West Kalimantan Province. The training participants were represented by 7 Heads of Seed Garden Installation, one committee, one instructor as a training facilitator, as well as one farmer breeder who did not participate in the training program. Data collection was carried out through observation and in-deft interview techniques with the informants. Data were analyzed descriptively.

RESULTS AND DISCUSSION

In this chapter, descriptive data of research objects had been presented through observation, interviews, questionnaires, and documentation techniques, as well as strengthened by analysis of the evaluation of results by Kirck Patrick which measures at four levels, namely reaction, learning, behavior, and results. The entire population in the analysis was 44 people, with a research sample of 11 people consisting of one UPT head, one facilitator, one person from the committee, 7 people from the head of the seed garden installation, and one person from the farmer/breeder who did not participate in the training.

From the evaluation of Kirk Patrick's model that the author uses to evaluate the 2013 Food Plant Seed Propagation Training activity at the West Kalimantan Province Food and Horticultural Seed Development Unit, the author believes that there is something wrong with the implementation of this Propagation Training. Indeed at several levels of evaluation such as evaluation of learning and evaluation of the level of behavior that the author does show success and satisfaction, but for evaluation of the level of reaction shows that there is still a lack of time given in the training so that the evaluation of the results level of these activities, in the end, it did not show any significant changes to the training participants, who were local government officials who were given the responsibility to increase seed production and secure the availability of regional food plant seeds.

Sufficient duration of training time and the ability of training facilitators are very important factors in shaping the character of new knowledge for officers who attend food plant seed breeding training. This training activity only lasts for three days, the writer feels insufficient considering that the material for breeding food plant seeds is very diverse and complex, especially since each year the development of technology in this section continues to increase rapidly so it is very risky if in the end, the facilitators condense the material- material because the deadline given is very narrow.

The increase in the duration of training activities according to the author also does not have to be in a large number of days because it will cause the activity to be ineffective, it can even make the training participants leave all other activities that are also important, the additional time is ideally between two

to three days only, and training activities are focused on multiplying direct practical activities directly in the field. In addition, the continuity so that similar activities in future periods need to be carried out, of course with improvements and improvements to training activities, another thing that the author deems necessary is to strengthen the planning of activities that are even better than previous activities, in addition to providing the duration of training activities. the longer one.

An instructor/facilitator must be able to provide feedback on whether the participants are satisfied with the content of the training program, the depth of training materials, how to teach, how to deliver their knowledge, and so on. It is not an easy thing for an instructor/facilitator to be able to satisfy all the participants, the instructor/facilitator is required to be able to act effectively and efficiently so that all material can be absorbed and all participants are satisfied with how to transfer the entire content of the material. A trainer is required to be able to play the role of a trainer, coach, teacher, facilitator, entertainer, storyteller, or maybe even a comedian (Moekijat, 1990: 35).

In evaluating the results as the author's final move in the purpose of the research carried out, the authors analyzed after the 2013 Food Plant Seed Propagation Training activity was carried out, it turned out that the 2013 Food Plant Propagation Training activity did not have a significant effect on the results of crop production as the ultimate goal of the training. Even though seed production has increased, it is still below the production rate produced by seed breeder farmers who do not participate in the training at all. In addition to improving the skills of the training participants who were given during the training, the authors considered that other things also affected the increase in production, where these other things must also be considered and given by policymakers.

The training participants are officers, where all the planting activities they do are just routine work, this routine is given by their superiors in the office. Unlike the farmers who did not participate in the training activities, these farmers despite all the limitations attached to them, the sense of belonging to the plants they planted was much higher than the sense of belonging felt by the officers who had attended the Food Plant Seed Propagation training. So that if the production decreases, it will certainly be a burden for the farmer, on the contrary for the officers because the sense of belonging is not enough, the production target will not be a burden for them.

In addition to providing training for officers for decision-makers at the West Kalimantan Province Horticultural and Food Planting Seed Development Unit, it is necessary to make a policy which of course can be another stimulus so that these officers can improve their performance. Meanwhile, not all of the rewards given will be able to improve the performance of these officers, so it must be precise in providing stimulation or motivation, such as paying attention to the character, rotation, and age of the officers. Nurmiati (2019: 94) stated that rewards and punishments are not maximally related to improving employee performance.

CONCLUSIONS

From the results of the research that the author has described in the previous chapter, the writer tries to draw some conclusions, including (1) The author's assessment of the policy context in the Food Plant Seed Propagation Training activity lies in the government's commitment, programs, and objectives to be achieved in these activities. The government's commitment through the Food and Horticultural Plant Seed Development Unit of West Kalimantan Province can be seen from the implementation of the Program from the availability of sufficient funds, and the availability of facilities and infrastructure, and of course a serious commitment to the development of human resources. For the program, the availability of information and the need for activities in the program for participants based on the results of the interview is very good and very necessary, as well as clarity between policymakers, policy implementers, and participants regarding the goals and objectives to be achieved in this 2013 Food Plant Seed Breeding Training activity. (2) The evaluation of the participant's reactions to the implementation time in participating in the Food Plant Seed Breeding Training activity

mostly stated that there was still a lack of duration, a lot of material was summarized and compressed, As for the measurement of the instructors, all participants considered the instructor in the Food Plant Seed Breeding Training activity to master the material what was said, the instructor also motivated a lot, the instructor was able to use the media and was able to encourage the participation of the activity participants. As for the assessment of the committee, Participants feel that they know the working committee well, the committee has also worked swiftly and promotes a sense of courtesy. (3) Assessment of the learning process, the researcher uses indicators of the material method that is conveyed in increasing knowledge and skills when receiving learning at the Food Plant Seed Breeding Training activity, where the method used in the delivery of material is very innovative and interesting while improving skills is not yet effective because some participants were still inactive and less creative at the time of the training. (4) Assessment of behavior is focused on changes that occur after completing training, approximately 3 months afterward or participants have returned to work, so that it is more external, from interviews with informants the author assesses that most of the participants have attended the breeding training of food plant seeds. there was a behavior change but the quality of the skills was still considered small and insignificant. (5) The assessment of results as the focus of the research showed that there was an increase in the production of food crop seeds after the participants attended the technical training for Food Plant Seed Breeding in 2013, however the increase in the production yield was still below the average production yield of the breeding farmers (Group Benuang Agritama seed breeders) who did not participate in the training, and the increase in production yields was still far from the potential results of plant descriptions.

Based on the results of the research that has been carried out, allow the researcher to give suggestions, which can be considered for positive improvements for future activities, especially for the Food Plant Seed Propagation Training. The suggestions from these researchers are: (1) The policy context needs to be continuously improved and not complacent with the existing ones, both in terms of budget and increasing commitment to human resource development outside the regions. (2) Further training is more available with more time and use instructors who are more diverse in knowledge, including using the services of breeding farmers, private parties, or state-owned enterprises that have developed first as training instructors. (3) Encourage similar training activities for breeder farmers. (4) Continuously maximizing the monitoring and evaluation functions that exist in UPBTPH West Kalimantan Province to be able to monitor, direct and foster and encourage sustainable creativity for the participants who have participated in the training activities, so that the knowledge that has been gained will increase and develop. (5) So that there is further research on the evaluation of the production results of breeders who did not participate in the Food Plant Seed Propagation training but had higher production yields than participants who participated in the Food Plant Seed Propagation training.

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