
**APPLICATION OF RIGHT TECHNOLOGY IN IMPROVING COMMUNITY
INDEPENDENCE THROUGH LIFE SKILL PROGRAMS
(Case Study of Appropriate Technology for Utilizing Local Potential of Sente Bulbs
in Karangsetra Village, Pandeglang District, Banten Province)**

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ABSTRACT

The purpose of this study is 1. To describe the planning of appropriate technology application in the cente-based tuber processing food business as a local potential. 2. To describe the process of applying appropriate technology in a cente-based tuber processing food business as a local potential. 3. To describe the results of the application of appropriate technology in a cente-based tuber processing food business as a local potential. 4. To describe the follow-up to the application of appropriate technology in the cente-based tuber processing food business as a local potential. The methodology used in this study was to use descriptive qualitative methods using data collection of observation guidelines, interview guidelines, documentation and literature studies, with informants managing Melati PAUD and parents of Melati PAUD students. The results showed that the efforts of the management of Paud Melati in training the use of appropriate technology to improve independence through cente processing, learning citizens were able to realize the results of entrepreneurial life skills obtained through the learning of citizens towards the adoption of cente processing equipment technology, product diversification from senti bulbs, increased insight into efforts at independence in business and income. The conclusion in this study is proven to be able to increase the independence of trainees. Training participants are able to market themselves or through marketing services that are entrusted to PAUD Melati managers the results of entrepreneurial training. Based on the results of research and discussion that has been carried out in this study, the researchers provide some suggestions for institutions and Technical Resource Persons should conduct life training activities using appropriate technology more intensive and more optimal in facilitating learning as one of the activities to improve the independence of trainees.

Keywords : Appropriate Technology, Independence, Life Skills Education.

INTRODUCTION

Law No. 23 of 2014 concerning Regional Government states that the Unitary State of the Republic of Indonesia (NKRI) is divided into Provinces and regions of the province divided into Regencies and Cities. It was also stated in the Law that the provincial and

regional regions of the regency each had Regional Governments. Where is the condition of the Regency in Indonesia consists of developed and underdeveloped regions, so that in an effort to advance the general welfare and educate the life of the nation has not been fully realized because there are still gaps between developed regions and underdeveloped regions.

On this basis it is necessary to accelerate the development of disadvantaged regions specifically, planned, systematic, and sustainable. And in Law 17/2007 on RPJPN 2005-2025 it has been mandated the need to prioritize the development of the welfare of community groups living in underdeveloped areas and large alignments from the Government. Furthermore, the Government has issued Government Regulation No. 78 of 2014 which regulates the Acceleration of Development of Disadvantaged Areas (PPDT). The Development of Disadvantaged Areas is defined as "a planned process, effort and action to improve the quality of the community and region which is an integral part of national development".

Banten Province has 2 regencies which are included in disadvantaged areas namely Pandeglang and Lebak Regencies. (data source: Presidential Regulation (Perpres) Number 131/2015 concerning Determination of Disadvantaged Areas for 2015-2019). Pandeglang Regency has many people who do not have jobs. The potential of many crops that are found are sente sente tuber plants that grow wild, especially in Karang Setra Village, Koroncong District, Pandeglang Regency. This plant has not been used optimally. The processing that has been made by the community is the making of chips, buntel for its centipede leaves, and the vegetable tuber of sente. The preparations are only the majority of consumption for themselves / family. There is a group of people who have tried to use appropriate technology but have not been followed by other community groups, while appropriate technology can help increase production faster, better and more varied.

Poverty reduction in disadvantaged areas can be done through formal and non-formal education activities. One of the non-formal education efforts that can be done is by providing life skills education.

The results of observations in the field obtained information that there were many unemployed and many crops of sente crops that had not been used as commodities that had high selling value. Therefore, it is necessary to have a life skills education program using appropriate technology to contribute to the acceleration of development and completion of underdevelopment.

Based on the description of the background of the above problems, researchers are interested in researching about the Application of Appropriate Technology in Improving Community Independence through the Life Skill Program.

METHOD

The methodology used in this study was to use descriptive qualitative methods using data collection observation guidelines, interview guidelines, documentation and literature studies, with informants managing PAUD Melati and Parents of PAUD Melati students in the karangsetra village, Kec. Koroncong district. Pandeglang Banten Province

RESULTS AND DISCUSSION

A. Planning the application of appropriate technology in the business of processing tuber-based food as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province

Based on the results of observations before the study, managers and researchers have devised a plan to carry out the senti yam processing business plan.

The stages of identification are carried out to find out the forming variables of the phenomena that are the object of study. The phenomenon referred to here is the condition of the area that is the target of the implementation (implementation) of a program or activity in an area. The process of identifying variables is done through mapping (mapping) the conditions of the area. Mapping the condition of an area is carried out to find out its socio-economic conditions, so that based on this mapping can be carried out socio-economy assessment. This socio-economic assessment includes general overview of location data, socio-demographic characteristics, and socio-economic conditions of the community (including levels of income & expenditure, livelihoods, level of education, etc.).

The application of appropriate technology in Pandeglang District based on the identification of the target is the community members who become PAUD parents and or PAUD managers in one of the disadvantaged villages, namely Karangsetra Village, Koroncong District. The empowerment material is processing sente tubers into various flavors and flavors.

on the aspect of the cente-based tuber-based food business using a SWOT analysis that includes an analysis of internal factors to find out the strengths and weaknesses that they have. This can be seen in the results of interviews with managers with the initials C as follows:

"We are aware that preparations that can be used as a basis for planning and at the same time as our reference in implementing appropriate technology implementation activities in improving community independence through life skill programs, to be more directed, run efficiently and effectively. Therefore, the PAUD Melati manager always prepares before identifying the needs of the life skill program participants. "

From the results of the research, the researcher did get an idea that planning in the application of appropriate technology in the cente-based tuber processing food business as a local potential carried out by Melati PAUD managers is to encourage self-reliance, shape the competence and development of the entrepreneurial spirit.

Sondra Stein (2000: 17) suggests that there are four standard categories that need to be prepared in the future, namely the ability for adults: 1) get information and ideas, 2) communicate with confidence the message and can be understood by others, 3) making decisions based on solid information and being able to analyze and be able to determine carefully, 4) always learn not to miss.

B. The process of applying appropriate technology in a cente-based tuber processing food business as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province

In the implementation of appropriate technology implementation in cente tuber processing business with a free expression approach directed through a learning strategy with "giving motivation" to arouse attention and stimulation of the birth of a motive that can be used as a basis for work, the researcher begins by conducting a planning phase that includes activities:

- 1) Designing scenarios for the implementation of appropriate technology in the cente processing business as follows:
 - a) Managers with life skill trainees dialogue to arouse attention and stimulation born of motivation that can be used as a basis in fostering the entrepreneurial spirit of life skill program participants in increasing independence through sweet potato processing
 - b) The manager introduces appropriate technology tools to support program activities, in stimulating participants of activities, arousing the attention and stimulation of program participants.
- 2) Researchers and managers prepare equipment and materials needed by program participants in the application of appropriate technology in the cente processing business.

Based on the results of the interviews and observations above, it was obtained information that in the implementation of appropriate technology application program activities in the senti sweet potato processing business, successfully motivated program participants to be eager to participate in the implementation of appropriate technology in increasing community independence through life skill programs. Motivation is the driving force of learning activities. Learning motivation of life skill program participants is closely related to the objectives to be achieved by participants. If the participant who is learning realizes that the goal to be achieved is useful or useful for him then the motivation of independence will emerge strongly. So, the implementation activity is the initial activity in a program activity meeting aimed at generating motivation and focusing the attention of the participants to actively participate in the process of program implementation of appropriate technology in increasing community independence through life skill programs.

The idea of Appropriate Technology (TTG) was originally proposed by Dr. E.F. Schumacher. He is an English economist. The thinker about the initial idea of appropriate technology (TTG) was outlined in his very inspirational book entitled "Small is Beautiful" published in 1973. Dr. Schumacher was appointed as the British Coal Board Advisor and government advisor for Burma - now Myanmar and later for India. Thinkers about the concept of appropriate technology also influenced the thinking of India's first PM Jawaharlal Nehru. In 1961, PM Nehru invited Dr. Schumacher at a development planning commission in India, then Dr. Schumacher proposed "intermediate technology" at the commission but did not take part in the commission. In 1966, Dr. Schumacher founded a non-profit organization called

Intermediate Technology Development Group (ITDG). The approach to technology development received considerable attention in the 1960s and was known as a social movement during the world energy crisis in the 1970s and was also known as an environmental movement. The concept of technology offered by Dr. Schumacher, who was formerly called "intermediate technology", became known today as an appropriate technology.

Although there is still much debate about the concept of appropriate technology, currently it is recognized that in general the technology in question is technology that is implemented on a small scale, decentralization, solid work, environmentally friendly, and paying attention to local wisdom. At present ITDG (Intermediate Technology Development Group) still exists and aims to "show and advocate for sustainable development through the use of technology to reduce poverty in developing countries"

C. The results of the application of appropriate technology in the business of processing tuber-based food as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province

Mastery of learning citizens towards the adoption of cente tuber processing equipment technology is something related to learning activities because learning activities are processes while learning outcomes are some of the results achieved by a person after experiencing the learning process by first signifying an evaluation of the learning process undertaken. Learning outcomes are the result of an interaction between learning action and teaching action, the teaching action ends with the process of evaluating learning outcomes. From the learning side, learning outcomes are the end of teaching from the top of the learning process.

In this study, researchers used criteria to determine the learning outcomes of learning citizens' mastery on the adoption of tuber cente processing equipment technology in relation to efforts to increase community independence.

The ability of domestic food production from year to year is increasingly limited, while population growth is increasing. In order for national food sufficiency to be fulfilled, the efforts taken are to improve the productivity of fresh tubers with appropriate technology and food diversification efforts. Food diversification efforts are very important, because of the limited production capacity. To show the success of diversification, the way of serving food needs attention, because this method of presentation will determine how much (quantity) of the food is consumed.

Sente tuber commodities are tubers that can support food diversification, because the tuber is grown in the area of Karangsetra Village, Kec. Koroncong of Pandeglang Regency, Banten Province is very abundant, therefore the relevant communities and offices are interested in processing sente tubers into various kinds of food that are useful and have high selling value.

Diversification or diversification of products from the bulbs of the community learns the application of appropriate technology to welcome enthusiastically this activity, several questions are carried out and scramble to be able to help the implementation of the

practice of making processed products while feeling the results. With this program, it is expected that there will be an increase in community independence in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province, as well as an increase in the economic value of cente tuber products so that it can increase income for households.

Sente tubers have the potential to be processed into various types of processing, including: as a staple food, as vegetables, as processed (taro chips, cakes, etc.), sentry flour. Sente tuber plants are potential carbohydrates as a supplement / substitution of rice or as a diversification of food, industrial raw materials and so on. Sente tubers have great benefits to be developed because of various benefits and can be cultivated easily so that the potential of sente tubers is quite large.

According to Lamman (in Fatimah, 2006) states that independence is an individual's ability to regulate himself and not depend on others. The same thing was also expressed by Brawer (in Havinghursts, 1993) that independence is a behavior found in someone who arises because of encouragement from within himself, not because of the influence of others. According to Maslow (in Ali, 2005) that independence is one of the levels of human needs referred to as the need for autonomy. He also added that a person who achieves self-actualization has special characteristics of actualization, one of which is the need for privacy and independence, where people who actualize themselves in meeting their needs do not need others. In connection with that according to Beller (in Ali, 2005), people who have low independence usually have special characteristics including seeking help, seeking attention, seeking direction, and seeking support for others.

Departing from these definitions, it can be understood that group independence is

- a. A condition in which a person / group of people has the desire to compete to advance for the good of themselves / their group.
- b. Able to make decisions with initiatives to overcome problems faced by the self / group.
- c. Have confidence and carry out their duties.
- d. Responsible for what he did.

D. Follow-up on the application of appropriate technology in the cente-based tuber processing food business as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province

Skills development for parents of PAUD Melati students in increasing independence through the cente tuber processing business is currently not optimal, while sente tuber as raw material is available locally, even now because it is less touched by technology, its use is still not convincing the community in Karangsetra Kec Village . Koroncong, Pandeglang Regency, Banten Province. Therefore the managers of Jasmine PAUD and PP-PAUD Dikmas West Java coordinate in increasing the independence of the Karangsetra village community in the district. Koroncong, Pandeglang Regency, Banten Province through life training of cente processing skills.

Technological factors can be opportunities and threats to business development carried out by life learning skills residents in the centrifugal processing development program, because it will affect products, services, markets, competitors and customers. This is

highly considered by PAUD Melati managers with the use of appropriate technology that has several benefits including increasing the efficiency of production time, technically processing centrifugal tubers with modern tools, although some still use traditional tools.

Basically partnership is a collaboration between two parties or more in a direct or indirect business relationship based on the principle of mutual need, trust, strengthen and benefit which involves business actors, the development of partnerships conducted by PAUD Melati managers with several small and medium entrepreneurs is to facilitating the marketing of the products of citizens learning life skills programs in this case parents of PAUD Melati students so that parents of Melati PAUD students are not confused in marketing the sentient tuber products that have been produced.

The implementation of Life Skill Education (Life Skill) that integrates learning activities and business activities, both in the field of trade, services, industry and agriculture or animal husbandry in accordance with the learning needs of learning citizens and the potential available in their environment, basically has touched the efforts of development and development entrepreneurship. Entrepreneurship training is very important for the community including school dropouts in the context of the empowerment process. Empowerment is intended to shape the entrepreneurial personality, namely: (1) having high trust in hard work, independent work, and understanding the risk of failure as part of success, (2) having the ability to organize and make goals, oriented and responsible for good or bad results events, (3) having creativity and finding ways to make it happen through entrepreneurship, and (4) liking challenges and finding oneself through activities by realizing their ideas. Steinhoff (1993) in Sujana (2000: 131).

CONCLUSION

The application of appropriate technology in the business of processing tuber-based food as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province basically includes four stages: planning, process, results, and follow-up. The four stages are related to each other and continuity in the process of activities so that in the end it can contribute to the improvement of community independence in the case of Melati PAUD parents.

1. Planning the application of appropriate technology in the cente-based tuber processing food business as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province

Planning for the adoption of appropriate technology in tuber cente-based food processing business as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province through several stages, including: identification, Determination of Priority Scale, Strategy & Method of Achievement, as well as Appropriate Technology Innovation used, organizing learning residents and resource persons, developing teaching materials and learning strategies, preparing appropriate technology equipment for tuber processing sente, analysis of market and business potential.

2. The process of applying appropriate technology in a cente-based tuber processing food business as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province.

The process of applying appropriate technology transfer by Melati business group learning residents by using adult learning methods that emphasize more practical aspects or mastery of skills using appropriate technology tools for cente tuber processing.

3. The results of the application of appropriate technology in the production of tuber-based cente food processing as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province.

The result of the transfer of appropriate technology carried out by the Melati business group learning residents was the mastery of the learning residents towards the adoption of cente centrifugal processing equipment technology, the diversification of products from tuber cente fruit, increased insight into efforts at self-reliance in business and increased income.

4. Follow-up on the application of appropriate technology in the business of processing tuber-based food as a local potential in Karangsetra Village, Kec. Koroncong, Pandeglang Regency, Banten Province.

Follow-up of the planned transfer of appropriate technology is skills development, business development and partnership development.

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