

Empowerment of Cassava Farmers Through Processing of Local Potential Based on Home Industry

Alhamuddin Alhamuddin*, Rabiatul Adwiyah, Fahmi Fatwa Rosyadi Satria Hamdani, Shindu Irwansyah
Universitas Islam Bandung
Bandung, Indonesia
*alhamuddinpalembang@gmail.com

Abstract—Women's involvement in the productive business sector will cause social change. The inclusion of women in the labor market or productive work affects household economic activity, resulting in changes in family economic structure. Empowering mothers can be done through processing food that can be used as a souvenir for tourists. West Bandung Regency is one area that has a lot of cassava potential, one area producing a lot of cassava is Cikalong Village. This program was going to focus on food manufacturing training from home industry-based cassava. In addition to food manufacturing training, the proposing team also taught cassava farmers to process food from cassava using interesting variations of taste and color, as well as brand selection for their products. The purpose was to invite tourists to buy and enjoy the culinary processing of the cassava farmers. The empowerment of Cassava Farmers was carried out using the Participatory Action Research (PAR) approach. The expectation of this program was the existence of products prototype processed from local agricultural products, namely cassava, to support the economic condition of the participants and to use processed products as culinary tourism centers.

Keywords: *farmer, cassava, home industry, innovation*

I. INTRODUCTION

The biggest burden of poverty lies with certain groups. Women in general are the losers because they bear a heavier burden of life than men. Likewise children who suffer from their future quality of life are threatened, with malnutrition, low level of health and education and underdevelopment in many ways. Various efforts and development policies have been carried out by the government so far, especially to provide opportunities for the poor to improve welfare. One form of these efforts is through the family empowerment approach which refers to Law No. 10 of 1992 concerning "Population and Family Development" [1] in which its implementation is stipulated in Presidential Instruction No. 3 of 1996 concerning the Development of Prosperous family in the context of Increasing poverty reduction [2].

Women's involvement in the productive business sector will cause social change. The inclusion of women in the labor market or productive work affects household economic activity, resulting in changes in the family's economic structure [3] Mother empowerment can be built through activity such as

food processing that can be used as souvenirs for tourists. Currently, the tourism industry sector is in great demand. The world of tourism is currently receiving more attention in various countries. This trend can be seen through the development of many travel agencies, hotels, attractions, restaurants, souvenir centers. It's no wonder that many countries are trying to develop their tourism. Tourism is also synonymous with the term culinary tourism. Now this culinary tourism trend is echoing in several places. Even television stations also present culinary tourism programs. At a glance, the understanding of culinary tourism is looking for eating destination because during the course of the tour activities, the participants search for places to eat.

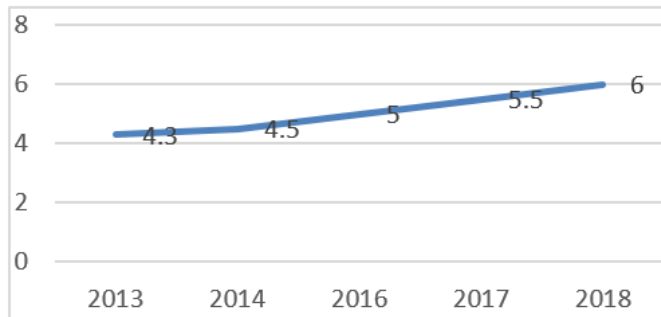
According to the Fourth Edition of Indonesian Dictionary in 2011, culinary tourism is a tour carried out to enjoy a variety of cuisines from various regions. Besides restaurants, tourists usually visit souvenir centers or other places to relieve hunger. So it is not surprising if in every tourist destination there is always a center for typical souvenirs of the area. This certainly can be a special attraction for the economic players in the food industry, especially the processed food industry, to continue to develop their business. The reason is because most Indonesian people consider that food is a basic need that must be met to maintain their survival.

As we know that the last few years, snack made from cassava, especially snacks such as chips, or any other creation from cassava, are being loved by most urban communities. The savory and spicy flavor make people consuming it become addicted. This is evidenced by the many products of cassava chips with spicy flavors offered with various levels of spiciness. Brands of cassava chips products include *Maicih, Karuhun, Kribo, Bukan Emak*, and others. For a massive agricultural education campaign are suggested [4].

The mandate of Regional Medium-Term Development Plan in West Bandung Regency during 2017-2021 states that West Bandung Regency has 3 (three) main tourist zones of tourist attractions (North Bandung Tourism Zone, South Bandung Tourism Zone and West Bandung Tourism Zone), which become the key of tourism development in West Bandung Regency due to the Regional Vision. This is so reasonable because these zones are potential to sustain the community's

economy; fertile natural resources (being the main capital of farming activities). Economic structure of the community in general is still agrarian, so as it is possible to develop agribusiness (an effort in agriculture to gain profits by managing aspects of cultivation, post-harvest processing until the stage of processing marketing).

West Bandung Regency is one area having big cassava potential. Based on the data below, Cikalong Village can produce Cassava every year, which continues to increase. According to the data, the growth of cassava production in 2018 were 6%. Agroindustry based on cassava has important roles in Indonesia economic structure. Cassava is known as well as staple food and also agro industrial material [5].



Source: West Bandung Regency in number, 2018

Fig. 1. Percentage of cassava production growth in Cikalong Village West Bandung Regency, West Java.

According to the background that has been described previously, the servants were interested in doing service to empower cassava farmers through household-based food processing in Cikalong Village, Cikalong Wetan District, West Bandung Regency.

Cikalong Village is one of the Villages in Bandung Regency which still needs to be improved in economic conditions and the potential of the region. One of the potentials of the region is to produce local cassava. Cikalong Village is included in the Pangalengan Sub district based on Government Regulation of the Republic of Indonesia Number 29 of 1995 dated August 23, 1995. Cikalong Village is located between two Foothills namely the Foothill of Malabar Mountain and the Foothill of Tilu Mountain. This area is potential enough to be made / developed into Agricultural / Agribusiness Areas, Tourism and Animal Husbandry Markets. The area of the Cikalong Village is ± 300 Ha, the Cikalong Village Area is located at an altitude of 907 M above sea level, with an average rainfall of 1,707 MI/Year, an air temperature of 20°C – 23°C [6]. The problems of the partners include: (1) Livelihood of the population dominated by farm laborers with low level of education; (2) Skill for processing agricultural product like cassava is still low, and there is no access to market cassava products effectively; (3) Cassava farmers who are not aware of the benefits of cassava-based food processing to improve their living standard and economic prosperity; (4) The lack of cassava food processing industry empowering the potential of women farmer in Cikalong Village. Empowerment of Cassava Farmers through Processing of Local Potential Based on Home Industry [7].

II. METHODS

The following is a plan of activities carried out by the Proposing Team during community service activity. **First**, the approach, which was to carry out direct communication with the assisted farmers to talk about the problems faced by the Cassava Farmers. In this approach, the team conveyed the aims and objectives, then explored as much information as possible about the existence of Cassava Farmers, starting from the condition of the community, education background of the community, facility and potential of the community in the area. This stage of the approach, team, community leaders and the assisted community identified the problems faced by cassava farmers to find the core and main problems. From this core problem, a mapping of problems would be found. The approach used could take the form of collective meeting and social analysis. This activity aimed to foster confidence in the ability and strength of citizens in order to improve their standard of living. In this activity, the Proposing Team also reflected and analyzed the social conditions that were owned by the residents of Cikalong Village. Through this social analysis, it was hoped that it could foster individual awareness, which then become a collective awareness to jointly plan a social action aimed at improving the lives of the Cassava Farmers.

For strengthening program, it was directed at interactive dialogue. In this interactive dialogue, the Proposing Team used a rapid assessment strategy and helped facilitate the assisted farmer women in understanding and exploring their own problems in the context of complex problems, so that critical awareness of the assisted community could be developed. This interactive dialogue could be pursued in a variety of approaches, namely collective meeting, focus group discussion, face to face (individual meetings), transects and mapping.

After an interactive dialogue was conducted, a general picture of the problem (summary problem) would be obtained as a basis for thinking (basic thinking) in a work plan (social planning). In social planning, the problem nodes and cases were examined and discussed using the trend and change method, Venn diagram, season and timeline calendar, critical event analysis, problem tree, and self-evaluation of the concept map.

Second, program planning (social plan), namely compiling an action plan and analyzing all the needs together. The process of preparing an action plan began with the mapping of the problems faced by the Cassava Farmers in Rende Cikalong Village. By mapping the problem, it was hoped that citizens would collectively realize things addressed to achieving the goals and ideals. The action carried out was based on mutual agreement of all parties from cassava farmers, so that the role of the whole community could participate and was expected to further strengthen their sense of trust and motivation.

Third, the implementation of the program (action plan), which starts to run the programs that had been designed and built during the planning stage. In implementing the program, the first thing to think about was financing, so this team was trying to find a breakthrough with outsiders to get the fund needed.

Fourth, Program Reflection and Evaluation. Reflection and evaluation was carried out every time the action was completed and or was being conducted to see how far the success rate of expectation built before. Reflection and evaluation was very possible for a change in strategy or additional action. Through this reflection and evaluation, it was hoped that it grew the sensitivity of the special citizens, cassava farmers. This kind of activity was done continuously as an effort for social change. After reflection and evaluation, a mapping of the problems was done to recognize changes in the process. This process then was rebuilt again to find the actual problems. This cycle was expected to be built from the community members themselves and transmitted to the next generation. Thus, the community was truly empowered and able to change themselves and their own environment collectively.

In addition, program evaluation could also find out how far the results that had been achieved in the implementation of the program with the aim of getting feedback as material for reflection, notes and thoughts in the context of compiling a program of stabilization and dissemination of results to related parties.

The above strategy has a connection that cannot be separated from each other. The approach was a strategy to explore various data and information. This was related to the planning of programs done to achieve the objectives, while the implementation of the program was the core of this strategy. Implementation of how the program was run, whether the implementation of the program had been carried out optimally or not.

III. RESULTS AND DISCUSSION

Communities are the foundation of our society and of our overall well- being. Unfortunately they are experiencing rapid transformations that may significantly erode their capacity to remain viable and sustainable both domestically and internationally [8]. Issues of empowering communities are examined in regard to social justice, challenges to democracy, and globalization of the economy and other sectors of society [8].

This Community Service Program was conducted by a community service team in Dangdeur Village, Cikalong, Bandung Regency. Based on the implementation of community service activities, the following results had been achieved: In the implementation of community service activities, our service team brought speakers and trainers to provide material on processing cassava into value-added products and improve the household economy of the cassava farmers. The participants that presented in the training and assistance of processing cassava got the dissemination on the importance of education, as well as on finding scholarships for the children of cassava farmers. Training has a positive impact, namely increasing knowledge and skills and efforts to improve the role of Balinese women in the family through food entrepreneurship activities [9].

In addition to outreach, the proposing team has also provided guidance to children who had dropped out of school in Dangdeur Village, Cikalong. The training included basic education and early education, such as teaching reading,

writing and arithmetic, so that children had stimulation for getting higher education. The results of the socialization were that children who dropped out of school were motivated for a higher achievement.

The results of discussions and outreach with out-of-school children and their parents showed that 80% of these children were enthusiastic to continue schooling, which gave impact to better future and change the economy of his parents, and to create a more decent and prosperous life from now on.

Beside food-making training from cassava-based home industry, the Proposing Team also taught cassava farmers to process food from cassava using interesting variations of flavor and color, as well as brand selection for their products. The purpose was to invite tourists to buy and enjoy the culinary processing of the cassava farmers.

According to the results of the cassava processing training, the mothers were very enthusiastic, and 87% of housewives followed well until the end of the program. Cassava-based snack made were chips, *combro*, and cassava *skotel*. In addition, the participants were also taught to create the packaging and the marketing process. However, to promote grassroots innovations that leverages ICT to solve problems of rural development and poverty[10]. Using ICTs to support poverty reduction is found to be possible [11].

Collaboration was conducted with the Department and the Ministry of Micro, Small, Medium Enterprises (MSME) to build a culinary-based MSME as an alternative to culinary souvenirs in the village of Dangdeur Cikalong. In the work as a housewife, member of the empowerment group could generate income to meet the needs of their families; Model of Mother Empowerment was built with the concept of sustainable development in the village of Dangdeur Cikalong as the following chart:



Fig. 2. Sustainable development economy concept for the mothers.

Mothers are expected to be able to utilize the potential of cassava on their residence, and then process it into creative and innovative products to increase family income, so that welfare increases. This is in line with the concept of Sustainable Development Economics. This kind of entrepreneurial spirit development is able to create creative and innovative results. Duflo said “Women empowerment and economic development are closely related: in one direction, development alone can play a major role in driving down inequality between men and women; in the other direction, empowering women may benefit development” [12]. Hall “Women’s individual empowerment, as well as their collective empowerment, are forces for social change in that broad social patterns result from

women's individual decisions and actions [13]. When women's perceptions, priorities, and behavior change, the world outside must adapt to them”.

Understanding and caring for the environment will develop by itself, if the community is often made aware and given awareness about the importance of protecting the environment. In general, women's participation in development program also means utilizing human resources with high potential [14]. The expansion of evaluation culture at the local level can translate into one of continuous improvement the support empowersments and community development [15].

IV. CONCLUSIONS

According to the dedication activities carried out, the development program had a significant advantage for the community to know their potential. Potential of cassava which had only been processed as a food ingredient for chips and crackers had not been able to lift the price of cassava on the market. So it was necessary to do a variety of cassava processing innovations to make the price of cassava competitive and ultimately able to improve the welfare of the community, especially the existing cassava farmers.

In addition, further guidance and assistance were needed for cassava farmers regarding marketing and financial management. As the consequence, this kind of activity really provides a sustainable benefit for the village community and is also able to reduce unemployment. Access to a range of energy services suitable to their enterprise would provide women with building blocks to operate their enterprise, alleviate restrictions on growth, increase their sustainability, and provide them with increased control over enterprise operation[16].

ACKNOWLEDGMENT

Our gratitude to Institute for Research and Community Service of Universitas Islam Bandung (LPPM-UNISBA) who have given the opportunity for us to participate in this grand of research and community services, hopefully it will be a motivation to continue for reearching, and publishing.

REFERENCES

- [1] Undang-Undang No. 10 Tahun 1992 tentang Perkembangan Kependudukan dan Pembangunan Keluarga Sejahtera. Jakarta; Kementerian Sekretaris Negara RI.
- [2] Impres No. 3 Tahun 1996 tentang Pembangunan keluarga Sejahtera dalam rangka Peningkatan Penanggulangan kemiskinan. Jakarta; Kementerian Sekretaris Negara RI.
- [3] D. Wisadirana, *Sosiologi Pedesaan*. Malang: UMM Press, 2004.
- [4] G.M. Ugbomeh, “Empowering women in agricultural education for sustainable rural development,” *Community Development Journal*, vol. 36, no. 4, pp. 289-302, 2001.
- [5] B. Unteawati and Z. Mutaqin, “The Mapping of Agroindustry Based on Cassava,” In *IOP Conference Series: Earth and Environmental Science*, Vol. 209, No. 1, p. 012019, 2018.
- [6] Profil Desa Cikalong Kecamatan Cikalong Kabupaten Bandung Barat, 2018. [Online]. Retrieved from: <http://www.cikalong.desa.id/first/artikel/99>
- [7] A. Saleh, R. Metalisa, and N. Mukhlisah, “Correlation between social capital and entrepreneurship toward Posdaya empowerment,” *Pertanika Journal of Social Science and Humanities*, vol. 24, no. 1, pp. 351-358, 2016.
- [8] W.B. Lacy, “Empowering communities through public work, science, and local food systems: Revisiting democracy and globalization,” *Rural Sociol.*, vol. 65, no. 1, pp. 3–26, 2000.
- [9] I.A.P.H. Ekayani, “Entrepreneur community prospect of snack made from local food by balinese women,” *Int. J. Life Sci.*, vol. 2, no. 3, pp. 151–163, 2018.
- [10] K.H. Nagy, “Transforming Government and Empowering Communities: The Sri Lankan Experience with e-Development,” *The World Bank*, 2008.
- [11] A.O. Ogunlade, “Analysis of the uses of information communication technology (ICT) for gender empowerment and sustainable poverty alleviation in Nigeria,” *Int. J. Educ. Dev. using ICT*, vol. 2, no. 3, pp. 45–69, 2006.
- [12] E. Duflo, “Women Empowerment and Economic Development,” *J. Econ. Lit.*, vol. 50, no. 4, pp. 51–79, 2012.
- [13] C.M. Hall, *Women And Empowerment*. Women Empower, 2013.
- [14] R. Adwiyah, A. Alhamuddin, F.F.R.S. Hamdani, and I.J. Triwardhani, “Commercialization of Inorganic Waste-based Eco Friendly Creative Products to Improve Living Standard of Women Street Vendors in Cikapundung,” vol. 307, pp. 526–528, 2019.
- [15] I. de los R.C. José M. Díaz-Puente, A.C. Montero, “Empowering communities through evaluation: some lessons from rural Spain,” *Community Dev. J.*, vol. 44, no. 1, pp. 53–67, 2009.
- [16] J. de Groot, N. Mohlakoana, A. Knox, and H. Bressers, “Fuelling women’s empowerment? An exploration of the linkages between gender, entrepreneurship and access to energy in the informal food sector,” *Energy Res. Soc. Sci.*, vol. 28, no. April, pp. 86–97, 2017.