

Fostering empowerment and building capacities of rural women through community-based agroindustry: A case study in Donowarih Village, Indonesia

Sri Suhartini^{1*}, Susinggih Wijana¹, Widya Dwi Rukmi Putri², Panji Deoranto¹, Rohma¹,
Novita Ainur Rahma¹, and Masud Effendi¹

¹Department of Agro-industrial Technology, Faculty of Agricultural Technology, Universitas Brawijaya, 65415, Malang, Indonesia

²Department of Agricultural Product Technology, Faculty of Agricultural Technology, Universitas Brawijaya, 65415, Malang, Indonesia

ABSTRACT

Donowarih village, located in Malang Regency, East Java, Indonesia, is closed to the Universitas Brawijaya's Educational Forest (known as UB Forest). The village has various potential local commodities such as orange fruits and batik. During harvesting season, the price of orange fruits declined, and inadequate storage system has led to a rapid deterioration of orange fruits. Furthermore, various problems faced by the community, such as poverty and lack of knowledge/skills, are becoming the major challenges to be tackled. On the other hand, orange fruits and batik are potential to be diversified into high value-added products, which can be done through the introduction of post-harvesting technology and trainings for skills improvement. Furthermore, the Indonesian Government program of one village one product (OVOP) is becoming key drivers to any community engagement program in Indonesia. The aim of this community engagement program was to build creative economy through the formation of group-based agro-industry to fostering rural women empowerment and building their capacity. The program targeted rural women to have skills and knowledge in making orange juice beverage drink and batik-based souvenir products, making them as the icon products of Donowarih village. Since 2019, various activities have been carried out, including forming two group-based agro-industries (i.e. orange-based and batik souvenir groups), introducing orange-juice processing technology, trainings for skill and capacity building (i.e. patchwork and sewing skills, financial management, and marketing), providing aids and assistances, as well as assisting the establishment of the Village Owned Enterprises (known as BUMDesa). The program involved both academic staffs and students in providing the sustainable solutions to the local community problems and in transferring appropriate technology for local commodities diversification and value addition. In general, all the proposed activities in this program have improved the social and economy of Donowarih Village, as well as enhanced the rural women empowerment and capacity through economic activities of producing orange juice beverage and souvenir products. Also, the findings confirmed that this community engagement program has strengthened the collaboration between UB and the community in Donowarih village and provided the opportunities for academic staff and students to transfer the research results for the community's benefits.

KEYWORDS *Capacity building; creative economy; diversification; value addition; women empowerment.*

INTRODUCTION

Development is a process directed at outcomes encapsulating improved standard of living and greater capacity for self-reliance in economies that are technically more complex and more dependent

on global integration than before (Elliott, J., 2012). Process means a process of change in all areas of life that is deliberately on the basis of a specific plan which is aims to improve a community's welfare in both social and economic aspects (Aslin, H. and

Brown, V., 2004). Furthermore, the main object in community development is essentially a continuous dynamic process of the community to realize the desire and expectations of a more prosperous life with a strategy to avoid the possibility of marginalization in community, such as through poverty (Smith, L. B., and Thelen, E., 2003; Taguchi, N., 2011).

In contrast to the development, empowerment approach has become a new concept that refers to the importance of social processes during the program focusing on more process oriented, rather than the result in development (Adamson, D. and Bromiley, R., 2013; Umanailo, M.C.B., 2019). This concept represents an effort to provide autonomy, authority and trust in each individual within an organization and encourage them to actively participate in development (Agustina, E., 2019; Revell, P. and Dinnie, E., 2020). From the original concept, empowerment is the process by which people acquire knowledge, skills, and willingness to criticize and analyze their situation, make decisions and take appropriate action to change to be in a better condition. Thus, there is a process where people are encouraged and convinced to develop full skills, abilities and creativities (Rolfe, S., 2016). Based on operational process, empowerment is the trend of a process that provides or diverts some power and ability to individuals and communities to be more powerful and it can be completed with a material asset building effort to support their independence through the organization. This is emphasizing process to provide stimulation, encourage and motivate individuals having the ability to determine their life chances and life choices through a dialogue process (Cornwall, A., & Brock, K. (2005); Jumiaty, I.E., Muhtar, E.A. and Irawati, I.R., 2016).

Hence, empowerment is fair power sharing to increase political awareness and power in the group and community. Empowerment and participation emerged as a widely expressed two words when speaking about development. Zadeh and Ahmad (Zadeh, B.S. and Ahmad, N., 2010) point out that participation is also an important element of self-help and empowerment process. In development programs, people should be involved in decisions making that affects their lives, thereby gaining self-

confidence, self-esteem and developing new knowledge and skills (Cornwall, A. (2006); Cornwall, A. (2007)). Nevertheless, the importance of empowerment and participation has not fully internalized and implemented by development stakeholders, such as: government, private sector, NGO's and society (Howard, J. and Wheeler, J., 2015). People tend to feel hesitant to face the practice of participation in implementing each phase of development where participation can give the power or knowledge of an alternative discourse to people who are marginalized, especially the poor from the third world, women and rural people (Mansuri, G., and Rao. V., 2012). Consequently, almost all development projects require empowerment and participation in their implementation where people are placed in strategic positions that determine the success of the development program (Remenyi, J. 2004).

In line with empowerment and participation, community empowerment is a concept of economic development which emphasizes the social values. This concept can be used to prepare rural communities to strengthen themselves and the groups in various ways, such as: institutional, leadership, socio economic, politics by using their own culture and it reflects a new paradigm of development, namely people-centered, participatory, empowering, and sustainable (Duflo, E., 2012; Ansari, S., Munir, K. and Gregg, T., 2012). Isidiho and Sabran (Isidiho, A.O. and Sabran, M.S.B., 2016) and Ledwith (Ledwith, M., 2020). argue that there has been increasing emphasis upon the importance of alternatives, grassroots approaches to development, starting from empowerment of local communities. One thing that has become an essential in the empowerment process is when individuals or communities are given an opportunity to discuss what the important aspects for the better welfare are; this will have implications for the nature of development, changing the environment in which poor people help themselves to build their own character (Howard, J. and Wheeler, J., 2015). This concept is broader than merely meeting basic needs or providing mechanisms to prevent poverty as a social safety net and involves an alternative concept of development which requires inclusive

democracy, appropriate economic growth, and gender equity.

The main issues in development today are mainly related to improving living standards and eliminating absolute poverty, particularly in rural areas (Elliott, J., 2012; Remenyi, J. 2004}. Most projects were implemented in the form rural development by applying innovation models on policy, institutional and operational term. According to Rolfe (Rolfe, S., 2016) and Mansuri and Rao (Mansuri, G., and Rao. V., 2012) development projects in rural areas put significant emphasis on the formation of social capital as an advance to economic growth and for rural poverty alleviation. Growing social capital supported by economic empowerment of the rural poor is a necessity for rural poverty reduction to provide sustainable on-farm and off-farm opportunities (Agustina, E., 2019; Ansari, S., Munir, K. and Gregg, T., 2012). Therefore, participation and gender issues are at the center of attention lately in rural community development process in various countries, particularly for poverty reduction strategy (Zadeh, B.S. and Ahmad, N., 2010). Furthermore, there is conception that community should be involved in the process of development for improving the ability of people to determine their future. In this situation, community needs to be given a power and an authority to participate in development's management process. There are many experts who define participation, Cornwall (Cornwall, A. 2006). for instance, he point outs that participation is defined as people involvement by taking part in the common social activities, such as economic, social, political, and etc.

In addition, Program Pengembangan Desa Mitra (PPDM) was one of the community engagement programs established by the Indonesian Government to provide aid and assistance to rural communities or villages to become self-reliance village. The aim of this community engagement program was to build creative economy through the formation of group-based agro-industry to fostering rural women empowerment and building their capacity.

MATERIAL AND METHOD

The study was carried out in Donowarih Village, located in Malang Regency, which is about 30-40 minutes from Universitas Brawijaya. The observation was performed since April 2019 until December 2020, in an intermittent basis. This study is part of PPDM program and implemented for 2 years.

Respondents

The respondents of this study were housewives who active in PKK organization. Those women were involved in group-based agroindustry include batik-based souvenir products and orange juice beverage drink. There were 10 women who were actively participating in any training activities given.

Data collection

The study used a case study approach to investigate what is the object studied, as well as how and why such phenomena or findings may occur. The main focus of this study was women group-based agroindustry and the importance of trainings activities on improving the women empowerment and capability.

Data was collected following several method include document analysis, focus group discussion (FGDs) and interview. Document analysis was carried out from the secondary data resources. The document were collected from a reliable and credible institution or online sources, and those are relevant to the research study include statistical data, case studies, report of community engagement activities. The collected document were reviewed to support and to provide a comprehensive understanding about the study. FGDs were carried out during the implementation of the programs, particularly after the trainings was given. FGDs involved the the women participants. During the FGDs, the process of brainstorming was also taken place to provide information about what are the respondents needed from the programs and what actions need to be carried out further. Direct interview to the respondents were carried out after FGDs session under informal situation to avoid the respondents feeling under pressure.

RESULT AND DISCUSSION

The PPDM scheme in Donowarih village targeted rural housewives or women in creating a group-based economy activities based on the local

potential commodities. This study found that Donowarih village has potential commodities of orange, coffee and batik. Therefore, in 2019, two group-based agro-industries were formed to adding value to the local commodities include batik-based souvenir products and orange juice beverage drink groups. Since 2019, various trainings activities were given from orange juice processing using a simple and cheap technique to jelly candy making. While the souvenirs groups were given a Suspeso technique training for making brooch and small

pouch.

In 2020, the trainings were focusing on strengthening the skills and capability of group members. Specific to batik-based souvenirs groups, sewing and patchworks techniques as well as training on calculation the production cost and the selling price were given (see Figure 1). The trainers were from Pelanusa, a handicraft group which are consistent in assisting rural women to have economic activity by sewing- or patchwork-based products. The trainings were carried out for five time in five weeks consecutives.



Figure 1. Documentation for sewing and patchworks techniques, as well as calculation of production cost and selling price (batik souvenir group)

For the sewing techniques, all respondents were provided fabric materials for making mask and pouch. The second session was focused on making tissue and drink bottle holder, as well as cushion and table mat using patchwork techniques. Before trainings, all group members did not have a good understanding or a good skill for sewing or patchwork-making products. During the trainings, all members were compulsory to attend all sessions and, in each session, a specific task was given to be hand in on the next week schedule. The trainings were also taught them how to be creative in designing the handicraft or souvenirs. Therefore, after the trainings, all respondents were able to have improved their skills in sewing, gained more knowledge on patchwork technique and costing and pricing their products. The results of these trainings were that all the members were able to create, design and make their own products. However, problems of marketing are still high, mostly during this pandemic Covid-19 era.

Whilst orange-based product group was attended on-site training at CV Bagus Agriseta Mandiri (Batu City) for one day, focusing on apple juice making from ingredient preparation to product packaging (see Figure 2). On-site training was advised by the group during the FGD session. Before the training, all the orange-based group members still have lower knowledge on production process and the scale up of the processing capacity. During the trainings, all

participants were attended 1-hour class on basic recipe used by the company. Following was process demonstration at the production process room, so that the respondents can get glimpse of equipment used, the personnel hygiene, room sanitation, and etc. After the on-site trainings, the group members were feeling confident to be able to produce the orange-based juice products themselves. Therefore, since September 2020, the groups were keen to do some trials and make a diversification product of lime juice beverages. Also, they were able to make a modification of process, such as using closed container for orange juice before the filling and sealing process. Previously, they used open pan which affect the quality of the product. After modify the process and equipment, they found that the resulted orange juice has longer expire date. Another modification that has been done was to make another packaging material, such as bottle (150 mL). The orange-based group was also confident to start selling the orange juice via online marketing system of social media such as WA groups and Facebook. From the production activities, the groups were able to make some profit after they carefully calculate the production cost.



Figure 2. Documentation for on-site training and product diversification (orange-based group)

Furthermore, the PPDM team together with the postgraduate students also provides assistance to the groups, especially on group management, time schedule and business management. For this purpose, both groups were also trained with simple financial management, group management, virtual branding, and production permit (see Figure 3). These trainings were carried out twice in two-week time. Before the trainings, all the participants have no knowledge about the topic, especially in visual branding or financial management. Therefore, the respondents were eager to learn more. As a result, after the training, the group members were able to make a simple financial report of their own group

based on the production process cost and capital owned. Furthermore, the trainer from Pelanusa assisted the group to register for their production permit number (or known as Nomor Ijin Berproduksi/NIB). Thus, after the first training session, both groups have had the NIB number, which benefit for the market expansion. The problem faced by this group was again the marketing. As the product still has no registration number for food quality from BPOM or expire date, it is difficult to market to public. Therefore, the next target of this PPDM activities are to assist with the standardization and legislation aspects of the products, based on the current regulation.



Figure 3. Documentation for financial management, group management and visual branding by Pelanusa (souvenirs and orange-based groups)

In addition to the training programs, the PPDM team also providing aids and facilities, such as processing equipment, thus enable both groups to make the souvenirs or juice product. The team providing assistance to the Village Owned Enterprises (known as BUMDesa) as the umbrella for the economic

activity within the Donowarih village (see Figure 4). In the future, BUMDesa will provide places and platform to branding and expanding the unique product from Donowarih village. Thus, the economic activities will lead to better well-being and welfare of the local community.



Figure 4. Discussion and Assistance for BUMDesa, and preparation for outlet BUMDssa

IMPACT OF ACTIVITIES

On-site and off-site trainings to women-group based agroindustry in Donowarih village were found to provide positive impact on improving the knowledge, creativity and confidence. From the training, the women group members were able to implement the new skills for the benefits of the groups. The orange-based group was able self-produce the orange juice

product with process modification, thus provide additional income, as well as able to design and develop new juice product including the new packaging and equipment modification. The PPDM program by forming a group-based agroindustry has provided positive contribution on improving the women empowerment and the capability. Thus, further assistance is still needed

to ensure the sustainability of the groups.

CONCLUSIONS AND SUGGESTION

In general, the PPDM project enables a good collaboration between academic staff and students in assisting, discussing and planning a sustainable approach to tackling the problems faced by the community. Also, introducing and transferring a simple, cheap and feasible technology is beneficial for adding economic value to the local commodities. The trainings given have improved the social and economy of the Donowarih Village, as well as enhanced the group member's empowerment and capacity through economic activities (i.e. producing orange juice beverage and souvenir products). Also, the findings confirmed that this community engagement program has strengthened the collaboration between UB and the community in Donowarih village and provided the opportunities for academic staff and students to transfer the research results for the community's benefits.

ACKNOWLEDGEMENT

Authors would like to greatly thanks Research and Community Development Directorate, Ministry of Research, Technology and Higher Education for providing funding to this community engagement activities through multiyear Program Pengembangan Desa Mitra (PPDM) 2019-2020 with the Grant Number of 050/SP2H/PPM/DRPM/2019. Thanks to Institute of Research and Community Services, Universitas Brawijaya (IRCS UB) for their excellent support in organizing, administration as well as in monitoring and evaluating the PPDM project. Authors would also like to acknowledge the supports from Donowarih head village and the officers, as well as the community, thus enable us to fulfil the target of this community engagement program.

REFERENCES

Elliott, J., 2012. An introduction to sustainable development. London: Routledge.

Aslin, H. and Brown, V., 2004. Towards whole of community engagement: A practical toolkit. Canberra: Murray-Darling Basin Commission.

Smith, L. B., and Thelen, E., 2003. Development as a dynamic system. Trends in cognitive sciences 7(8), 343-348.

Taguchi, N., 2011. Pragmatic development as a dynamic, complex process: General patterns and case histories. The Modern Language Journal, 95(4), 605-627.

Adamson, D. and Bromiley, R., 2013. Community empowerment: earning from practice in community regeneration. International Journal of Public Sector Management, 26(3), 190-202

Umanailo, M.C.B., 2019. Integration of community empowerment models [Pengintegrasian model pemberdayaan masyarakat]. Proceeding of Community Development, 2268-277.

Agustina, E., 2019. The role of community empowerment carried out by village government in the regional autonomy era. UNIFIKASI: Jurnal Ilmu Hukum, 6(1), pp.34-39.

Revell, P. and Dinnie, E., 2020. Community resilience and narratives of community empowerment in Scotland. Community Development Journal, 55(2), 218-236.

Rolfe, S., 2016. Divergence in community participation policy: analysing localism and community empowerment using a theory of change approach. Local Government Studies, 42(1), 97-118.

Cornwall, A., & Brock, K. (2005). What do buzzwords do for development policy? a critical look at "participation", "empowerment" and "poverty reduction." Third World Quarterly, 26(7), 1043-1060.

Jumiati, I.E., Muhtar, E.A. and Irawati, I.R., 2016. Communication and community empowerment in national program for community empowerment (PNPM) Mandiri in Serang City. Journal of Humanities and Social Science, 21(7), 140-147.

Zadeh, B.S. and Ahmad, N., 2010. Participation and community development. Current Research Journal of Social Sciences, 2(1), 13-14.

Cornwall, A. (2006). Historical perspectives on participation in development. Commonwealth & Comparative Politics, 44(1), 62-83.

Cornwall, A. (2007). Buzzwords and fuzzwords: deconstructing development discourse. Development in Practice, 17(4-5), 471-484.

- Howard, J. and Wheeler, J., 2015. What community development and citizen participation should contribute to the new global framework for sustainable development. *Community Development Journal*, 50(4), 552-570.
- Mansuri, G., and Rao. V., 2012. Localizing development: Does participation work?. The World Bank.
- Remenyi, J. 2004. Chapter 1: What is Development? In *Key Issues in Development* (Kingsbury D. et.al) (pp. 22–44). New York: Palgrave Macmillan
- Duflo, E., 2012. Women empowerment and economic development. *Journal of Economic literature*, 50(4), 1051-1079.
- Ansari, S., Munir, K. and Gregg, T., 2012. Impact at the 'bottom of the pyramid': The role of social capital in capability development and community empowerment. *Journal of Management Studies*, 49(4), 813-842
- Isidiho, A.O. and Sabran, M.S.B., 2016. Evaluating the top-bottom and bottom-up community development approaches: Mixed method approach as alternative for rural un-educated communities in developing countries. *Mediterranean Journal of Social Sciences*, 7(4), 266-273.
- Ledwith, M., 2020. *Community development: A critical approach*. Bristol: Policy Press.