DETERMINING ELEMENTS VARIETY OF EMPOWERMENT OF MILLENNIAL FARMERS THROUGH PARTNERSHIP WITH STUDENTS PARTICIPATING IN THE MERDEKA PROGRAM LEARNING AT MERDEKA CAMPUS

Dumasari Dumasari¹*, Sulistyani Budiningsih², Pujiati Utami³, Pujiharto⁴, Yusuf Enril F⁵, Naelati Tubastuvi⁶, Dini Siswani⁷

^{1, 2, 3, 4, 5, 6, 7} Universitas Muhammadiyah Purwokerto *Corresponding Author: Dumasari Dumasari

ABSTRACT

This study aims to examine the various determinants of the empowerment of millennial farmers through partnerships with students participating in the Merdeka Learning Program at the Merdeka Campus. The research location was deliberately set at Pliken Village and Linggasari Village, Banyumas Regency, Central Java Province, Indonesia. The research method used is a survey. The research results show that the relationship between the various determinants is very close. The various elements in question are millennial farmer respondents, students, lecturers, and education staff. The mutually supportive roles facilitate the empowerment of respondents through partnerships with students participating in independent learning at an independent campus that is driven nationally.

Keywords: partnership, independent learning, independent campus, empowerment, millennial farmers, on-farm off-farm

I. INTRODUCTION

1.1. Background

The development of human resources as the capital sustainable main for national development remains essential to be done intensively by various parties. Empowerment efforts are an appropriate strategy to improve the quality of human resources (A. Chaudhuri 2016; Dumasari et al. 2021). Each empowerment model requires active participation and collective action towards behavioral renewal (Tremblay and Gutberlet 2012; Santosa and Edy Priyono 2012; Suartha et al., 2014; Mudege et al. 2015). The empowerment orientation cannot be separated from local resources, including values, norms, social capital, local wisdom, and other available potentials, including the natural resources around them (Aminah et al., 2015; Badaruddin et al., 2018; Dumasari et al. 2020). One human resource group that needs empowerment is the younger generation, including young farmers (Eistrup et al., 2019; Prayoga et al., 2020; Liontakis, et al., 2021). Young farmers have a role to play as the next generation of agricultural development known as millennial farmers. Young farmers have a role to play as the next generation of agricultural development known as millennial farmers (Bollani and Bonadonna 2019; Kifli et al. 2021); The characteristics of self and farming managed by young farmers are unique. Millennial farmers have distinctive characteristics of young and productive age potential for innovative, creative behavior (Printezis and Grebitus, 2020). Interest in agricultural production activities can start from parents' socialization who are farmers. Young farmers can start managing on-farm and offfarm farming when they learn from the experiences of other farmers, either directly or indirectly.

Farming behavior managed by millennial farmers is expected to achieve better farming, better business, better living, and better community progress conditions. Young farmers are still prone to failure and gaps when managing both on-farm and off-farm (Sumartono and Yuliarti, 2019). Therefore, millennial farmers need to learn from farmers who have whole experience in farming and doing business. Sharing experiences with fellow millennial farmers is also precious to learn from successes and failures in farm management. Communication and business cooperation networks help millennial farmers increase production efficiency, marketing, and adopting technological innovations (Miller and McCole, 2014). The entrepreneurial spirit is one of the determining factors for the courage of millennial farmers to earn profits.

However, social reality shows that this target condition is still tricky for millennial farmers to achieve due to limited access to capital, technology, product prices, markets, and partnership networks (Hamilton et al., 2015). These limitations need to be resolved so that millennial farmers still exist to manage their farming smartly and profitably both economically, socially, culturally, and in the natural environment. Millennial farmers need encouragement to develop ecoagropreneurship in the spirit and ability of agricultural entrepreneurship.

Regarding the ecoagropreneurship concept, millennial farmers can utilize and process local natural resources into mixed farming patterns. Entrepreneurship is essential for advancing young farmers (Bosworth and McElwee, 2014). The empowerment of millennial farmers is a priority for national development programs, significantly improving the quality of competitive human resources. Therefore, FPP-UMP is encouraged to conduct research to empower millennial farmers by adopting mixed ecoagropreneurship farming-based in the Program of Merdeka Belajar Kampus Merdeka (MBKM) or Independent Learning Campus Policy of student partnerships in Banyumas Regency.

This research supports programs to reduce poverty and unemployment problems among young people in rural areas. The research results are also helpful in increasing the economic independence and entrepreneurship of millennial farmers who are productive, creative, and innovative. The benefits of other research results as valuable experience for improving the competence of MBKM students with learning by doing techniques. The research results are useful for learning materials for subjects such as Development, Agricultural Community Development, Entrepreneurship, Agricultural Communication, Agricultural Sociology, Business Communication, and Problem Solving. This study aims to examine and analyze the various determinants of the empowerment of millennial farmers through partnerships with students participating in the Merdeka Learning Program at the Merdeka Campus.

II. METHODS

The research location was deliberately set in the rural area of Banyumas Regency, Central Java Province: The research locations included Pliken Village and Linggasari Village. The research method used is a survey with a descriptive analysis model, with a qualitative and quantitative research approach.

The study population includes all community members who manage on-farm and off-farm businesses aged between 25-40 years and reside in the research location. The millennial farmer respondents were determined by using a sample random sampling technique. The type of farming managed by the respondents is not strictly limited. Respondents who manage onfarm and off-farm simultaneously can be selected as primary data sources.

The number of respondents is determined not on a proportional quota basis as is applicable according to statistical rules. Respondents were also chosen not by the principle of representation. However, the determination of respondents is based on meeting data needs. When the data is saturated, the respondent's determination is immediately stopped. Key informants were selected by snowballing sampling.

The types of data used in this study are primary and secondary data. Primary data were collected by interview and observation techniques. Focus group discussions include the primary data collection techniques used by the research team to agree on the correctness of certain data types. Secondary data is obtained using material analysis techniques to source documents and articles following the research theme.

The collected data is processed by entering, checking, categorizing, reducing, displaying, and verifying stages. The processed data were immediately analyzed using qualitative and quantitative techniques. The research data will be analyzed with Interactive Analysis Model, Reflection Test, Tri Angulation, and nonparametric statistics.

III. RESULT AND DISCUSSION

The empowerment of millennial farmers is community-based important to support sustainable national development. Millennial farmer empowerment is influenced by personal characteristics: age, education and farming experience, availability of production capital, and ability to access technology (Effendy et al. 2021; Liao and Meng 2020). Millennial farmers can manage their farming profitably if they are supported by adequate infrastructure facilities. Another requirement is the availability of farmer groups with regular counseling and training activities. Millennial farmers need skills to identify the potential of local resources that can be processed into economically valuable products such as agricultural waste (Becker et al., 2016; Dumasari, et al., 2020). Millennial farmers in Central Java, Indonesia produce coconut waste into cococraft by modifying artistic printing techniques in classic, natural,

and contemporary styles (Dumasari, Darmawan, et al., 2021).

The process of empowering millennial farmers requires the support of various parties, including universities. Support from universities can be in research activities, community service, or partnerships. One program that has the potential to make a significant contribution to the empowerment of millennial farmers is the Independent Learning Campus Policy (MBKM).

Respondent millennial farmers who need empowerment through partnerships with MBKM FPP UMP students have different characteristics from one another. Ownership of socio-economic characteristics determines the orientation, ability, and decision-making of adopting ecotechnopreneurship in managing mixed farming. Several indicators of the socioeconomic characteristics of respondents in Pliken and Linggasari villages are listed in Table 1.

Socio-Economic Characteristic	Respondent Percentage (%)				
	Pliken Village	Linggasari Village			
Gender					
Women	9	11			
Men	91	89			
Age					
< 25 years old	44	22			
25-35 years old	56	78			
Education					
Middle School	0	0			
Junior High School	0	11			
High School	78	56			
College or Universities	22	33			
Experience					
<2 years					
	44	67			
2-5 years	56	33			
>5 years					
Average level of income from farming sector					
(Rp/month)	33	36			
< 2 million/month	56	36			
3-5 million/month	21	27			
>5 million/month					

Table 1. Characteristic of Respondent

Not all respondents in both research locations manage mixed farming. Most of them are new to monoculture farming on-farm and off-farm. Limited production capital is the primary reason for the slowness of respondents in developing a mixed farming business. The uncertainty of the price market of harvested products is one of the reasons for the respondent's sluggishness.

Most respondents had the opportunity to become millennial farmers because they continued

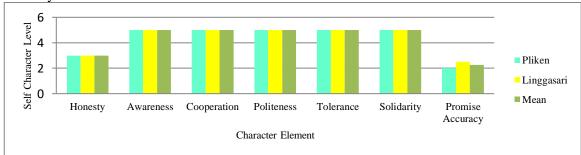
farming managed by their parents. The activity of helping parents' farming is known as the beginning for most millennial farmer respondents to pursue on-farm or off-farm. Only a few respondents started a business with a selfconscious background—the farm profiles managed by the respondents in both Pliken and Linggasari. The respondents' ability is not the same in adopting ecoagrotechnopreneuship in farm management. Respondents in Pliken Village, on average, have higher ecoagrotechnopreneurship enthusiasm and abilities than respondents in Linggasari Village. These differences are detailed in Table 2.

No.	Ecoagropreneurship Element	On-Farm					
		Pliken Village		Linggasari Village			
		Low	Middle	High	Low	Middle	High
1	Dare to take risks	28	40	32	6	44	50
2	Able to take advantage of	0	44	56	0	40	60
	economic opportunities						
3	Productive	12	68	20	3	37	60
4	Creative	32	40	28	23	43	34
5	Innovative	52	40	8	23	43	34
6	Business cooperation network	16	56	38			
7	Aware of sustainability or	12	60	28			
	environment						

Table 2. Ecoagrotechnopreneurship Adaption

Millennial farmer respondents in Pliken Village and Linggasari Village formed early partnerships with MBKM students from the Faculty of Agriculture and Fisheries, the University of Muhammadiyah Purwokerto, to empower mixed farming-based farming to have hopes of sustainable cooperation. Respondents hope to receive valuable information in production technology innovations, post-harvest processing, markets, and opportunities for productive farming diversification.

The smooth empowerment of respondent millennial farmers in collaborating with MBKM FPP IMP students is influenced by the readiness and ability of several related elements: students themselves, lecturers, and education staff. The element of self-characteristics regarding the accuracy of promises held by student respondents is still relatively low, so it needs to be improved through timely self-control exercises. The element of honesty is sufficient and still needs to be improved through direct independent attitude control. Meanwhile, other elements of caring, cooperation, politeness, tolerance, and solidarity are already in the high category. This readiness and ability are observed from the characteristics of MBKM students in FPP UMP research which can be seen in Figure 1.

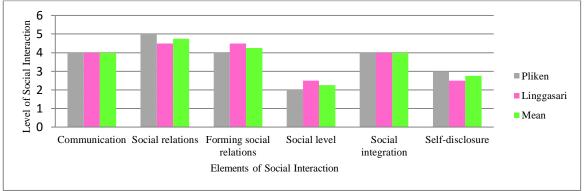


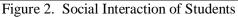


The ability of social interaction is one measure of the condition of students in establishing relationships with millennial farmers. MBKM research students still have low self-disclosure during the initial partnership with the research respondents' millennial farmers. Low selfdisclosure is shown by being reluctant, shy, and not expressing opinions spontaneously.

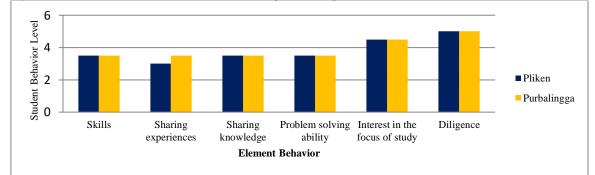
Differences in social status also cause students to have a low social level in interacting with respondents' millennial farmers. However, the student's communication skills, social relations, social relations, and social integration were observed to be relatively high. Readiness and

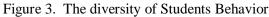
ability to establish social interaction can be seen in Figure 2.





The diversity of student behavior during research activities shows good conditions in the diligence element and interest in study materials. Meanwhile, knowledge in sharing experiences and innovations is categorized as quite adequate. Only the conditions that show skills in selecting respondents and skills as facilitators that convey solutions to problem-solving experienced by millennial farmers are still relatively low. This is understandable because the preparation of students before carrying out research is limited. The diversity of student behavior is shown in Figure 3.





Conditions and support from lecturers also determine the smooth running of research MBKM activities. The condition of lecturer support regarding the time management element still needs to be improved efficiently. The clash of research MBKM activities with other Higher Education Tri Dharma activities caused unintentional delays. Another element of lecturer support is high. Details of the condition of the element of lecturer support can be seen in Figure 4.

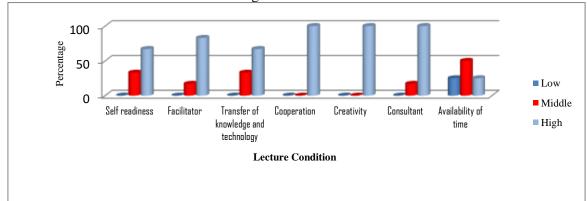


Figure 4. Condition of Lecture Supports

The contribution of education personnel is indeed significant for the implementation of research MBKM. The element that still needs to be developed is punctuality in providing administrative services to students participating in research MBKM.

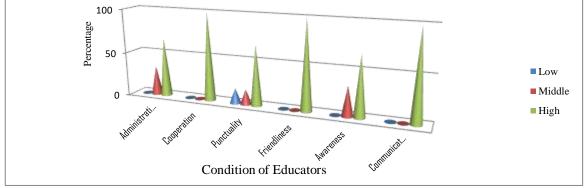


Figure 6. Conditions of Education Personnel Support

The readiness condition of themselves and the research team and students participating in the collaborative research program with the MBKM Program turned out to provide support for the direction of respondent empowerment. The ability to carry out social interaction with respondents also affects the speed of respondents in absorbing information about various solutions to on-farm and off-farm business development problems. Students' communication skills provide a more accessible opportunity to help respondents receive information about livelihood diversification development opportunities. However, the limited time in collaborative research focuses on respondent empowerment. Empowerment is a dynamic, sustainable, and local resource-based process (Chambers, 1983; Chambers 1994; (Mubita, et al., 2017; Dumasari et al. 2020).

IV. CONCLUSION AND SUGGESTION

The empowerment of millennial farmers requires support from various parties, including through collaborative partnerships with students from universities participating in the Program of Merdeka Belajar Kampus Merdeka. The role and support of students require contributions from the lecturers and education staff. This program is a channel for various experiences, knowledge, and technology between the community and universities. Student character development is strengthened by studying outside the campus directly to the community. Downstream research results are realized through this partnership.

ACKNOWLEDGMENT

We would like to thank the Directorate of Research and Community Service (DRPM) of the Ministry of Research, Technology and Higher Education who has funded this research through the Independent Learning Fund Assistance Program for the Independent Campus (MBKM).

REFERENCES

- [1] A. Chaudhuri. 2016. "Understanding 'Empowerment." *Journal of Development Policy and Practice* I(2):121–41.
- [2] Aminah, Sitti, Sumardjo, Djuara P. Lubis, and Djoko Susanto. 2015. "Factors Affecting Peasants' Empowerment in West Halmahera District – A Case Study from Indonesia." Journal of Agriculture and Rural Development in the Tropics and Subtropics 116(1):11–25.
- [3] Arshad, M. A., Khan, K.,; S, Khan., Shahid, Z., (2020) High performance organisation: the only way to sustain public sector organisations. *International Journal* of Public Sector Performance Management, 6(6), 806-816.
- [4] Badaruddin, Dr., Kariono Kariono, Dr. Ermansyah, and Lina Sudarwati. 2018.
 "Community Empowerment Based Social Capital and Village Business Company (BUMDes)." Pp. 181–87 in Advances in Social Science, Education and Humanities Research. Vol. 136. Atlantis Press.
- [5] Becker, Renan, Taiane Nunes de Queiroz,

Fernando Santos, Marlon Cristian Toledo Pereira, Robson Bohrer, Jeane Dullius, Matheus Vilares, and Grazielle Machado. 2016. "Productivity Potential and Coconut Waste Quality for Biorefining." *Agronomy Science and Biotechnology* 2(1):11–20.

- [6] Bollani, Luigi and Alessandro Bonadonna. 2019. "The Millennials ' Concept of Sustainability in the Food Sector." Sustainability 11(2984):1–19.
- [7] Chambers, Robert. 1994. "Participatory Rural Appraisal (PRA): Challenges, Potentials and Paradigm." *World Development* 22(10):1437–54.
- [8] Dumasari, Dumasari. Darmawan, Wayan. Iqbal, Achmad. Dharmawan, Budi. Santosa, Imam. 2020. "A Pro-Conservation Adaptation Power Model for Cococraft Craftsmen Using Coconut Waste in Purbalingga, Central Java, Indonesia." *International Journal of Conservation Science* 11(1):87–96.
- [9] Dumasari, Wayan Darmawan, Ismangil, Budi Dharmawan, and Imam Santosa. 2020. "Empowerment of Subsistence Craftsmen through the Adoption of Environmentally Friendly Cocodust Production Technology." *International Journal on Advanced Science, Engineering and Information Technology* 10(2):691– 702.
- [10] Dumasari, Dumasari, Wayan Darmawan, Imam Santosa, and Sulistyani Budiningsih. 2021. "Modification of Print Techniques Based on Creative Imagination to Improve the Skills." *Academy of Strategic Management Journal* 20(4):1–11.
- [11] Dumasari, Dumasari, Budi Dharmawan, Sulistyani Budiningsih, and Inam Santosa. 2021. "Sensitivity-Based Adaptive Management in Empowering Quality Cococraft Craftmen." *International Journal of Entrepreneurship* 25(1):1–12.
- [12] Effendy, Lukman, Momon Rusmono, Cibalagung Bogor, and West Java. 2021. "Factors Affecting the Capacity of Millennial Farmers in Chili Farming Community Garut Regency." in International Journal of Innovative Research Technology Science and 6(5):191-98.
- [13] Eistrup, Mathias, Ana Rita Sanches, and Jos Muñoz-rojas. 2019. "A 'Young Farmer Problem '? Opportunities and Constraints for Generational Renewal in Farm

Management : An Example from Southern Europe." *Land MDPI* 8(70):1–13.

- [14] Eko Sumartono, Ellys Yuliarti, Dewi Stopia Nengsi. 2019. "Perception of Millennial Generation of Farmer Children on Employment in Agricultural Sectors (Case Study of Farmer Children in Village Padang Cekur, Talo District, Seluma District)." *International Journal of Advances in Social and Economics* 1(1):22–27.
- [15] Kifli, Gontom Citoro, Slameto Slameto, Juliana Carolina Kilmanun, Dadan Permana, Melia Puspitasari, Ester Justina Simanjuntak, and Chetty Meitrianty. 2021. "Key Role of Millennial Generation in Rural Agricultural Development In Indonesia: Cohort Generation Theory Approach." Pp. 1–8 in *IConARD 2021*. Vol. 316 02002. E3S Web of Conferences.
- [16] Liao, Yang and Li Meng. 2020. "Research on Social Psychology and Young People's Action in the Construction of Guangdong-Hong Kong-Macao Greater Bay Area." *Journal of Social and Political Sciences* 3(1).
- [17] Liontakis, Angelos, Alexandra Sintori, and Irene Tzouramani. 2021. "The Role of the Start-Up Aid for Young Farmers in the Adoption of Innovative Agricultural Activities : The Case of Aloe Vera." *Agriculture MDPI* 11(349):1–24.
- [18] Miller, Crystal and Dan McCole. 2014. "Understanding Collaboration among Farmers and Farmers' Market Managers in Southeast Michigan (USA)." Journal of Agriculture, Food Systems, and Community Development 4(4):1–18.
- [19] Mubita, Aurick, Mundia Libati, and "The Munalula Mulonda. 2017. Importance and Limitations of Participation in Development Projects and Programmes." European Journal of Scientific Research 13(5):238-50.
- [20] Mudege, Netsayi N., Ted Nyekanyeka, Eliya Kapalasa, Tafadzwa Chevo, and Paul Demo. 2015. "Understanding Collective Action and Women's Empowerment in Potato Farmer Groups in Ntcheu and Dedza in Malawi." *Journal of Rural Studies* 42:91–101.
- [21] Prayoga, Kadhung, Subejo, and Alia Bihrajihant Raya. 2020. "Shifting the Meaning of Farmers from the Young Farmers Perspective Shifting the Meaning

of Farmers from the Young Farmers Perspective." in The 5th International Seminar on Agribusiness 2019. IOP Conference Series: Earth and Environmental Science.

- [22] Kumar, S. (2022). Strategic management of carbon footprint using carbon collectible non-fungible tokens (NFTS) on blockchain. Academy of Strategic Management Journal, 21(S3), 1-10
- [23] Kumar, S. (2021). Review of geothermal energy as an alternate energy source for Bitcoin mining. Journal of Economics and Economic Education Research, 23(1), 1-12
- [24] Roy, V., Shukla, P. K., Gupta, A. K., Goel, V., Shukla, P. K., & Shukla, S. (2021). Taxonomy on EEG Artifacts Removal Methods, Issues, and Healthcare Applications. Journal of Organizational and End User Computing (JOEUC), 33(1), 19-46. http://doi.org/10.4018/JOEUC.202101010

http://doi.org/10.4018/JOEUC.202101010 2

- [25] Printezis, Iryna and Carola Grebitus. 2020. "College-Age Millennials' Preferences for Food Supplied by Urban Agriculture." Frontier in Sustainable Food Systems 4(May).
- [26] Robert Chambers. 1983. Rural Development: Putting the Last First.
- [27] Santosa, Imam and Rawuh Edy Edy Priyono. 2012. "Diseminasi Model Pemberdayaan Masyarakat Desa Melalui Pengelolaan Agrowisata." Mimbar 28(2):181–90.
- [28] Suartha, I. Dewa Gede, Made Suma Wedastra, and Ida Bagus Eka Artika. 2014.
 "Model Empowerment of Rural Poor Farmer Women through Agribusiness Base Entrepreneurship Development in the Regency of West Lombok." International Journal of Geology, Agriculture and Environment Sciences 2(October):2–5.
- [29] Tremblay, Crystal and Jutta Gutberlet.
 2012. "Empowerment through Participation: Assessing the Voices of Leaders from Recycling Cooperatives in São Paulo, Brazil." Community Development Journal 47(2):282–302.