

POVERTY REDUCTION THROUGH STRENGTHENING THE ROLE OF COOPERATIVE INSTITUTIONS: CASE STUDY OF RURAL RICE FARMING COMMUNITIES

Reduksi Kemiskinan Melalui Penguatan Peran Lembaga Koperasi: Studi Kasus Masyarakat Petani Sawah Perdesaan

Mochamad Ridwan 

*Magister of Applied Economics Program, Economics and Business Faculty,
University of Bengkulu, Bengkulu, Indonesia
Email: mridwan@unib.ac.id*

ABSTRACT

This study aims to reveal the actual role of rural cooperative institutions in reducing poverty through improving the performance of farming communities, especially rice farmers in rural areas. This study is a case study conducted in Sri Kuncoro Village, Pondok Kelapa District, Bengkulu Tengah Regency (as the selected research sample location). Data were collected through the interview, observation, focus group discussion, and documentation methods. Sampling was done by the purposive sampling method. The data collected were analyzed by qualitative (descriptive) and quantitative methods. The results showed that through quantitative analysis it was found that the depth (P1) and severity (P2) indexes of poverty in rural rice farming communities were $P1 = 0.023$ and $P2 = 0.004$ (both in the low category). Through qualitative analysis, it is revealed that the role of cooperative institutions in rural areas is still low, which has implications for weak efforts to reduce poverty in rice farming communities (as evidenced by the decrease in the depth and severity indexes of poverty which has not reached the expected level).

Keywords: *cooperative institution, performance, poverty, rice farming, rural*

ABSTRAK

Penelitian ini bertujuan untuk mengungkap peran sebenarnya dari lembaga koperasi perdesaan dalam mengurangi kemiskinan melalui peningkatan kinerja masyarakat petani, khususnya petani sawah di pedesaan. Penelitian ini merupakan studi kasus yang dilakukan di Desa Sri Kuncoro, Kecamatan Pondok Kelapa, Kabupaten

Bengkulu Tengah (sebagai lokasi sampel penelitian terpilih). Pengumpulan data dilakukan melalui metode wawancara, observasi, focus group discussion, dan dokumentasi. Pengambilan sampel dilakukan dengan metode purposive sampling. Data yang terkumpul dianalisis dengan metode kuantitatif dan kualitatif (deskriptif). Hasil penelitian menunjukkan bahwa melalui analisis kuantitatif ditemukan angka indeks kedalaman (P1) dan keparahan (P2) kemiskinan masyarakat petani sawah di perdesaan adalah $P1=0,023$ dan $P2=0,004$ (keduanya dalam kategori rendah). Melalui analisis kualitatif terungkap bahwa peran lembaga koperasi di perdesaan masih rendah, yang berimplikasi terhadap lemahnya upaya mereduksi kemiskinan pada masyarakat petani sawah (dibuktikan oleh penurunan angka indeks kedalaman dan keparahan kemiskinan yang belum mencapai tingkatan seperti yang diharapkan).

Kata Kunci: *lembaga koperasi, kinerja, petani sawah, kemiskinan, perdesaan*

INTRODUCTION

Poverty in farming communities is a phenomenon that occurs in all clusters, including the rice farming community cluster. With the development of time, the number of poor people continues to decline although gradually. Especially in rural areas, poverty rates have also decreased, although not as sharply as in urban areas. This phenomenon is strengthened by the fact that the inequality of poverty in farming communities, especially rice farmers, seen from the depth and severity index of poverty, has begun to decrease (although it is still relatively high when compared to other clusters). The poverty that occurs in Indonesia, including that, occurs in farming communities (rice farming sub-sector), is generally characterized by several internal characteristics such as the low quality of formal education, the low technology used, and unprofessional farm management (Matthew et al., 2019; Liu et al., 2021). These internal constraints have implications for the productivity of the rice farming sub-sector, which is still low. Poverty pressures on rice farming communities tend to come from the external environment such as the low role of related cooperative institutions in increasing farmer productivity, including their role in the procurement of agricultural facilities and infrastructure as well as the marketing system of agricultural products (Mgeni et al., 2018; Nelly et al., 2020; Zhang et al., 2021). Another fact that needs to be considered is that farming communities have agricultural natural resources that can be controlled (some problems can still be controlled) and production results can still be predicted well. Such characteristics allow the need for relatively stable production land (Liu et al., 2020).

Theoretically, the phenomenon of poverty that occurs in society (including rice farming communities) is always related to crucial problems such as backwardness, imperfection of the market system, lack of capital, low quality of human resources, and the low role of related economic institutions (Singh-Peterson & Iranacolaivalu, 2018; Radosavljevic et al., 2021). These factors

influence the low performance and productivity of the community. The implication that can occur is the lower the income of the community. The low income received by the community will have an impact on the inability to increase savings and in business will reduce investment. The next effect will be to weaken the ability to increase community capital. The impact that occurs as a result of the lower capital is the worsening of the poverty condition of the community. The condition of society is getting worse due to this circular negative influence, if a solution is not found immediately, it will worsen the poverty that sustainably occurs in farming communities. Therefore, solving the problem of poverty seems to require a structural analysis and can be directed to break the cycle of poverty (See the theory of the vicious circle of poverty from Ragnar Nurkse, 1953) (Wang et al., 2020).

In Bengkulu Province itself, although the number of poor people tends to decrease gradually, the level/degree of poverty (as seen from the index of depth and severity of poverty) is still not low. Graphically, the declining trend of the number of poor people in Bengkulu Province can be seen in Figure 1.

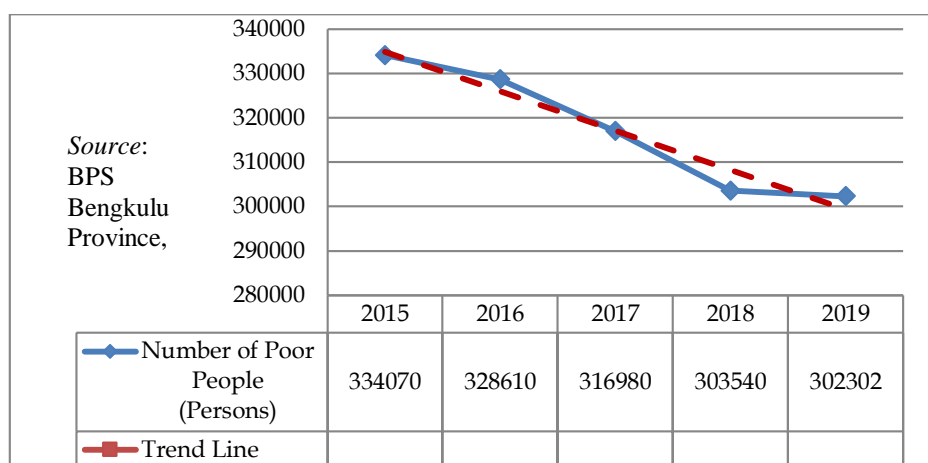


Figure 1.

Trends of the Development of the Number of Poor Population in Bengkulu Province (2015-2019)

Figure 1 shows the trend of the number of poor people in Bengkulu Province from 2015 to 2019, which has decreased (Badan Pusat Statistik/BPS Provinsi Bengkulu, 2020). This downward trend is moving gradually (slowly). Many factors have contributed to this reduction in poverty, such as a decrease in the number of unemployed, an increasing number of jobs (more and more), or an increased rate of economic growth, which has an impact on reducing the number of poor people (Osabohien et al., 2019).

Cooperative institutions in rural areas (which are one of the elements of economic institutions in rural areas) have an important and strategic role in

reducing poverty in farming communities as in the case of rice farmers through capital assistance and marketing of agricultural products. Kusmiati & Malinda (2018)) explained that to carry out economic development through optimizing the role of the community in economic development and strengthening economic institutions in the community (including cooperative economic institutions in rural areas) is an important thought in community empowerment. So that to support the empowerment program, it is very necessary to have institutional arrangements and management and organization between the rice farming community and the actors of cooperative institutions (Hatu et al., 2019; Adeyemo & Kehinde, 2021).

Based on the two empirical phenomena that occur in rice farming communities (with poverty levels that are not yet low/still relatively high) and the empirical conditions of rural cooperative institutions whose roles have not been able to support improving the performance of rice farming communities in rural areas, there are three questions arise, namely: why can what is the cause of this problem?, what are the factors that cause it?, and what is the solution so that these problems (regarding efforts to reduce poverty, especially those that occur in rural communities and the problem of the low role of rural cooperative institutions) can be overcome quickly?. Contextually, these three problems are the aim of this study to find answers as a whole through in-depth analysis and elaboration.

RESEARCH METHOD

This research is a case study and descriptive research, which focuses on efforts to uncover and explore the weak role of rural cooperative economic institutions in helping to reduce the level of poverty (reducing the depth and severity of poverty) that occurs in rice farming communities in rural areas. The approach used in this research is a deductive approach, with the intention that this research is carried out through a process of prior review of various theories, propositions, and axioms as a basis for conducting field research activities such as observations, interviews, and focus group discussions.

The important variables used in this study include: (1) The depth and severity of poverty in rice farming communities, as measured by index units; (2) The role of rural cooperative institutions in the community of rice farmers, as measured by units of people or units of groups of rice farmers; (3) Performance (productivity) of rural rice farmers in the management of natural resources in rice farming agriculture, which is measured in units of kg/quintal; and (4) the food poverty line and the non-food poverty line of rice farming communities in rural areas, as measured by food and housing/clothing (non-food) units (based on the 2004 basic needs commodity package survey).

Two types of data used in this study are primary and secondary data. Primary data includes data taken directly from the object of research, namely

from the community of rice farmers in the Sri Kuncoro Village, Pondok Kelapa District, Bengkulu Tengah Regency, Bengkulu Province. This location was chosen because most of the residents work as rice farmers (the largest number of rice farmers among other villages in Pondok Kelapa District). Secondary data is sourced from reports from various related institutions, such as the BPS (Central Bureau of Statistics) of Bengkulu Province and the Bengkulu Province Agriculture Office.

The sample selected as respondents includes small field farmers/farm laborers, all of whom are involved in the management of agricultural natural resources. Samples of rice farmers who act as key informants were taken from community leaders of rice farmers, and related agencies such as the agriculture office, and others. Determination of the sample is done by using a purposive sampling method. Data were collected through the following methods: (1) in-depth interviews, (2) observations, (3) focus group discussion/FGD, and (4) documentation.

Data analysis was carried out using two methods: (A) The Quantitative Analysis Methods, used in calculating the Poverty Depth and Severity Index (for rice farming communities), include: (1) *Poverty Depth Index (P1)*, that shows how much the average expenditure of the poor (rice farmers) deviates from the poverty line; and (2) *Poverty Severity Index (P2)*, that shows the information about distribution of expenditure among poor rice farming communities. P1 and P2 are calculated using the formula: $P\alpha = 1/n \sum_{i=1}^q [(Z - y_i/Z)^\alpha]$, where $\alpha = 1$ for the formula to calculate the Poverty Depth Index (P1) and $\alpha = 2$ for the formula to calculate the Poverty Severity Index (P2), where: z = poverty line; y_i = average monthly expenditure per capita rice farming community who are below the poverty line ($i=1, 2, 3, \dots, q$), $y_i < z$; n = number of rice farming communities; and q = the number of rice farmers who are below the poverty line. (B) The Qualitative (Descriptive) Analysis Method, which includes a detailed and comprehensive description of all the problems of the depth and severity of poverty in the rice farming community in the research area.

RESULT AND DISCUSSION

A. Quantitative Analysis of the Depth and Severity Index of Poverty of the Rice Farming Community in the Sample Village

The results showed that the poverty depth index of the rice farming community (*P1- Farmers*) in Sri Kuncoro Village, Pondok Kelapa District (as the research sample village) is obtained by entering several quantities, namely: n (number of rice farming communities in Sri Kuncoro Village) = 400 farmers, q (number of rice farming communities below the poverty line in Sri Kuncoro Village) = 50 farmers, y_i (average Average monthly expenditure per capita of rice

farming community who are below the poverty line in Sri Kuncoro Village) = 300,000, and z (poverty line in Central Bengkulu Regency) = 369.367 per capita per month. Through the existing formula ($P\alpha = 1/n \sum_{i=1}^q [(Z - y_i/Z)^\alpha]$), the poverty depth index of rice farmers community is 0.023, that indicates a relatively low/small value. The relatively low/small value of the poverty depth index of the rice farming community also indicates that the average expenditure of the rice farming community in Sri Kuncoro Village is relatively not too deep or not too far from the poverty line. The other side also shows that the poverty severity index of the rice farming community ($P2\text{-Farmers}$) in Sri Kuncoro Village is 0.004. This poverty severity of rice farmers community, that indicates a relatively very low/very small value. The relatively very small/very low poverty severity index of the rice farming community of Sri Kuncoro Village indicates the level of inequality in average expenditure between fishermen communities and the poverty line is relatively very low/not severe.

B. Qualitative Analysis of the Determinants of Depth and Severity of Poverty in Rice Farming Communities in the Sample Village

The results of focus group discussions, that consisting of 9 community leaders of rice farmers (including the village head of Sri Kuncoro), found 5 problems that allegedly interacted with the depth and severity of poverty that occurred in the community of rice farmers, namely:

- a. **The role of related cooperative institutions.** The existence of cooperative institutions related to the types of community livelihoods is very important and has a very strategic position in lifting the downturn of community poverty (rice farmers) both from the aspect of depth and severity. This statement is taken from the conclusion of the joint discussion with the rice farming community in Sri Kuncoro Village. The results of field observations show that the existence of agricultural cooperative institutions has not been able to show a significant role, even though these cooperative institutions are very much needed, especially in helping (providing loans) additional capital, marketing institutions for rice crops (rice), price buffers so as not to fall, and providers agricultural production facilities such as fertilizers, seeds, and others. It is corroborated by the results of a study from Juliman (2018) that the low role of cooperative institutions has an impact on the emergence of problems such as (1) The marketing-chain of crops that always depend on the "tengkulak (middlemen)" so that the price of rice cannot be raised maximally (cooperative institutions are not capable of regulating a profitable marketing channel system for rice farming communities); and (2) Provision of low-quality rice seeds and generally imported from abroad, which are usually susceptible to pest attack (McKillop et al., 2020).
- b. **Access to Capital.** Rice farming communities are faced with various obstacles related to efforts to improve the performance (productivity) of rice

farmers. One of the main obstacles is related to the ability of farmers to access capital. One of the important roles of cooperative institutions is to be able to provide capital for farming communities and subsidized fertilizer facilities (a relatively lower price than the price of unsubsidized fertilizer) (Lulun et al., 2019). This was corroborated by the results of focus group discussions with prominent rice farmers, which revealed that currently, the cooperative institutions in the sample villages are no longer active or not functioning. On the other hand, capital is still very much needed, especially for capital needs during the planting and harvesting seasons. During the planting season, rice farming communities need capital/funding for the costs of processing/plowing their farming fields, fertilizing costs, and grazing costs; while net income from harvests is on average only 11-12 million rupiah per hectare of rice fields for each harvest (this amount of income does not include part of the rice harvest that has been reserved for the family until the next harvest season). This lack of capital should be assisted by the surrounding rural cooperative institutions, where the role of cooperatives is very strategic in controlling this capital problem.

- c. **Marketing Chains.** The problem of marketing chains or marketing channels is also faced by rice farmers. Rice yields can only be marketed through middlemen (toke) and are generally priced at a lower price than the normal market price. This is because the number of rice farmers (who act as sellers of rice products) is relatively large, while the middlemen who tend to act as sole buyers, thus making the market model tend to be in the form of a "monopsony" competitive market (with a single buyer of rice products and tend to behave monopolistic) (Arbi et al., 2018; Saleh, 2020).
- d. **Social capital in the form of cooperation and togetherness.** The results of interviews/discussions with 9 rice farmer leaders (heads of rice farmer groups and village heads) indicate that social capital in the form of ties of cooperation and togetherness between members and between groups in the rice farming community is still quite strong. The high aspect of social capital in the form of cooperation and togetherness that is built in this rice farming community has caused many capital systems to be formed in a familial manner by adhering to togetherness. Strengthening this capital system will indirectly have an impact on strengthening the business, especially of the rice farming community, which in turn will be able to reduce poverty that occurs in the rice farming community (Kharisma et al., 2020; Zainal et al., 2020).
- e. **Infrastructure.** Infrastructure problems are classic problems faced by rice farming communities, where infrastructure in the form of natural water resource dams is a basic need in increasing the productivity of rice fields. The need for an irrigation system that only partially relies on natural water resources (using drainage or water channels in inadequate discharge), will

make it difficult to increase the productivity of rice fields optimally. This infrastructure in the form of a dam very needs a professional management agency such as a cooperative institution. The need for an appropriate irrigation system is identical to the need for technology in increasing the efficiency or productivity of the production of natural resources in rice fields. Theoretically (in the short to medium term production economics/microeconomics approach) (Idiong & Iko, 2019), this process of increasing efficiency or increasing productivity can be graphically illustrated in Figure 2.

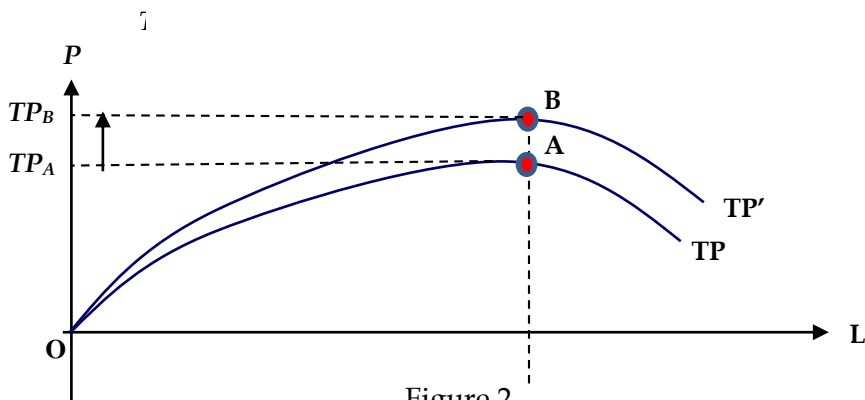


Figure 2.

The Efficiency (Productivity) with Fixed Labor/Farmers (L) and Improved Technology (Infrastructure Improvement) in Rice Field Agriculture Natural Resource Management

Explicitly, Figure 2 shows the increase in efficiency (productivity) of agricultural natural resource production. The increased efficiency (productivity) is indicated by an upward shift of the total production curve/function (TP) from TP to TP' or an increase in total production from TP_A to TP_B . This condition occurs due to an increase in agricultural technology (improvement of irrigation system quality) and an increase in technology due to an increase in the quality of human resources (rice farmers) in a better/more advanced direction (Arham et al., 2020). This changing condition occurs without any reduction/rationalization of labor (L) employed in the production process (increased efficiency with labor-intensive principles/without labor reduction).

- f. **Entrepreneurial Spirit.** Rice farming communities in rural areas (research sample) have an entrepreneurial spirit that has not been lifted. This condition is caused by the fact that most of them have side jobs such as working as masons, carpenters, or working as workers or owners of oil palm plantations even though the land is not so large. This side job sometimes causes his main profession as a rice farmer to be neglected or disturbed. The

results of previous studies confirm that many side jobs replace the main job, with the reason that the side income is much greater than the main job. Tenacity and high motivation (are two important elements of the entrepreneurial spirit) are needed to support the ability to improve performance, which in turn can increase income (welfare) significantly (Naminse et al., 2019; Kimmitt et al., 2020; Wardana et al., 2020).

C. Novelty of Research

Contrary to the results of empirical research and the results of previous studies, a novelty was found related to the main purpose of the study. Cooperative institutions that are in the environment of rice farming communities are not necessarily able to reduce poverty in traditional communities. This condition is indicated by: (1) the inability of cooperatives to act as marketers/distributors of rice harvests, (2) the inability to provide working capital quickly, so that it is preceded by the emergence of private capital providers, and (3) the inability to provide agricultural production facilities such as fertilizers, seeds, etc.

D. The Role of Rural Cooperative Institutions for Performance Improvement (Poverty Reduction) in Rice Farmer Communities

A qualitative model can be built as a solution to poverty alleviation in rice farming communities through the following stages:

The role of the existence of rural cooperatives in the community of rice farmers, is shown through the recruitment of all groups of rice farmers into cooperative members. Some of the heads of the rice farmers' groups have been appointed as management of the cooperative (for example, A1, A2, A3, and A4, become the management of the cooperative).

All the needs of cooperative members (all rice farmers in Sri Kuncoro village) including capital, raw material, marketing and others' needs for agricultural products were facilitated and managed professionally based on social capital. Cooperative institutions have also had market-oriented and profit-oriented for the benefit of improving the welfare of members (rice farmers) sustainably.

The model of the relationship between the rice farming community as a "group" with the cooperative institution as an integrated system, is shown in Figure 3.

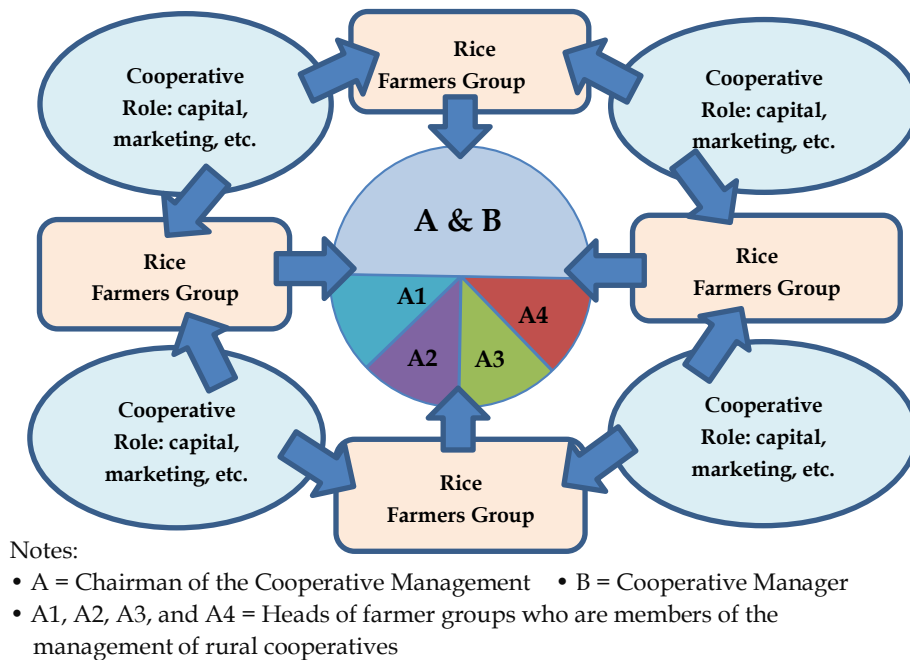


Figure 3.
The Role of Cooperatives in Improving Performance of Rice Farmers Communities

CONCLUSION AND SUGGESTION

Conclusion

Poverty conditions that occur in rural rice farming communities in Bengkulu Province indicate that the poverty depth index (P1-Farmers) is 0.023 and the poverty severity index (P2-Farmers) is 0.004; both fall into the low category. The low index of depth and severity of poverty in rice farming communities is caused by the high level of social capital factors in the form of cooperation and togetherness between members or between groups in the rice farming community. The role of rural cooperatives is very important and strategic in reducing poverty (reducing the depth and severity of poverty) through improving the performance (productivity) of rice farming communities, especially in rural areas. Unfortunately, the role of cooperative institutions in rural areas is still low. Two factors that cause the low role of cooperatives in rural areas are the inability of human resources to manage cooperatives and the high kinship system in the management system of cooperative institutions.

Suggestion

Performance or productivity improvement of rice farming communities, can be done: (a) rice farming communities can reduce farm operational costs, improve the quality of cooperation especially with external parties in creating the networks; and (b) the government can accelerate development in infrastructure and technology, such as the construction of modern irrigation infrastructure (the big dams) so that water supply does not depend on other villages, improve the fertilizer procurement system, and improve the "marketing-chain" which is more efficient and profitable.

There are two strategic programs that can be done: (1) strengthening the existence and role of rural cooperatives, namely: a) the objectively reorient, in detail, and honestly (openly) to various weaknesses related to the low role of cooperatives and b) build a "positive image" of the farming communities towards the important role of cooperative institutions; and (2) for related government institutions: a) the Department of Agriculture is expected to can increase its role in the empowerment process in terms of individual and group/social capabilities (such as empowerment of social capital), b) increasing subsidies that can provide stimulants and motivation for groups that exist in the rice farming community, c) improving a more effective control system such as improving various government regulations that previously had many indications of overlapping and not on target, and d) the government together with the rice farming communities, cooperative institutions, and other stakeholders tried to hinder the emergence of marketing systems, procurement systems, capital systems, and other systems that lead to a form of "pattern-client" that is not profitable.

REFERENCES

- Adeyemo, R., & Kehinde, A. D. (2021). Community Driven Development: The Case of Fadama II Cooperatives in Alleviating Poverty in a Developing Country. *Contemporary Agriculture*, 70(1-2), 46-53. doi: 10.2478/contagri-2021-0009
- Arbi, M., Thirtawati, T., & Junaidi, Y. (2018). Analisis Saluran dan Tingkat Efisiensi Pemasaran Beras Semi Organik dDi Kecamatan Rambutan Kabupaten Banyuasin. *JSEP (Journal of Social and Agricultural Economics)*, 11(1), 22-32. doi: 10.19184/jsep.v11i1.7151
- Arham, M. A., Fadhli, A., & Dai, S. I. (2020). Does Agricultural Performance Contribute to Rural Poverty Reduction in Indonesia?. *JEJAK*, 13(1). 69-83. doi: 10.15294/jejak.v13i1.20178

- Badan Pusat Statistik Provinsi Bengkulu. (2020). *Provinsi Bengkulu Dalam Angka 2020*. Bengkulu: Perum Percetakan Negara RI Cabang Bengkulu (Vol. 66)
- Hatu, D. R. R., Wisadhirana, D., & Susilo, E. (2019). The Shackles of Poverty of the Farmers in the Isolated And Vulnerable Community. *Russian Journal of Agricultural and Socio-Economic Sciences*, 86(2). 248-252. doi: 10.18551/rjoas.2019-02.30
- Idiong, I. C., & Iko, M. A. (2019). Profit Efficiency and Poverty Status of Farmers in Selected Rice Growing Communities in Cross River State, Nigeria. *Asian Journal of Agricultural Extension, Economics & Sociology*. 30(1), 1-12. doi: 10.9734/ajaees/2019/v30i130098
- Juliman, J. (2018). Pemberdayaan Lembaga Koperasi di Kabupaten Musi Rawas. *Jurnal Penelitian Pendidikan Sosial Humaniora*, 2(2). 226-234. doi: 10.32696/jp2sh.v2i2.61
- Kharisma, B., Remi, S. S., Wardhana, A., & Minarso, D. (2020). Modal Sosial dan kemiskinan di Jawa Barat. *Jurnal Ekonomi Dan Bisnis*, 23(2), 317-338. doi: 10.24914/jeb.v23i2.3303
- Kimmitt, J., Muñoz, P., & Newbery, R. (2020). Poverty and the Varieties of Entrepreneurship in the Pursuit of Prosperity. *Journal of Business Venturing*, 35(4), 1-18. doi: 10.1016/j.jbusvent.2019.05.003
- Kusmiati, E., H., & Malinda, S. (2018). Kegiatan Studi Penguatan Lembaga Koperasi pada Masyarakat Petani Garam di Kawasan Pesisir Pantai. *Charity*, 1(1), 110-141. doi: 10.25124/charity.v1i01.1585
- Liu, F., Li, L., Zhang, Y. Q., Ngo, Q. T., & Iqbal, W. (2021). Role of Education in Poverty Reduction: Macroeconomic and Social Determinants form Developing Economies. *Environmental Science and Pollution Research*. 28(44), 63163-63177. doi: 10.1007/s11356-021-15252-z
- Liu, Y., Amin, A., Rasool, S. F., & Zaman, Q. U. (2020). The Role of Agriculture and Foreign Remittances in Mitigating Rural Poverty: Empirical Evidence from Pakistan. *Risk Management and Healthcare Policy*, 13(1), 13-26. doi: 10.2147/RMHP.S235580
- Lulun, F. N., Sahusilawane, A. M., & Siwalette, J. D. (2019). Pengaruh Modal Sosial terhadap Tingkat Pendapatan Petani di Desa Waiheru Kecamatan Baguala Kota Ambon. *Agrilan: Jurnal Agribisnis Kepulauan*, 7(2), 120-134. doi: 10.30598/agrilan.v7i2.889
- Matthew, O. A., Osabohien, R., Ogunlusi, T. O., & Edafe, O. (2019). Agriculture and Social Protection for Poverty Reduction in ECOWAS. *Cogent Arts and Humanities*, 6(1), 1-15. doi: 10.1080/23311983.2019.1682107

- McKillop, D., French, D., Quinn, B., Sobiech, A. L., & Wilson, J. O. S. (2020). Cooperative Financial Institutions: A Review of the Literature. *International Review of Financial Analysis*, 71 (1), 1-11. doi: 10.1016/j.irfa.2020.101520
- Mgeni, C. P., Müller, K., & Sieber, S. (2018). Sunflower Value Chain Enhancements for the Rural Economy in Tanzania: A Village Computable General Equilibrium-CGE Approach. *Sustainability (Switzerland)*, 11(1), 1-22. doi: 10.3390/su11010075
- Naminse, E. Y., Zhuang, J., & Zhu, F. (2019). The Relation Between Entrepreneurship and Rural Poverty Alleviation in China. *Management Decision*, 57(1), 1-8. doi: 10.1108/MD-11-2017-1153
- Nelly, Rahmi, Mahdani, & Ismail, D. (2020). A Pattern of Empowerment of Traditional Values Mawah as A Model of Poverty Alleviation Based On The Supply Chain Strategy. *International Journal of Supply Chain Management*, 9(1). 2593-2611. doi: 10.1108/MD-11-2017-1153
- Osabohien, R., Matthew, O., Gershon, O., Ogunbiyi, T., & Nwosu, E. (2019). Agriculture Development, Employment Generation and Poverty Reduction in West Africa. *The Open Agriculture Journal*, 13(1), 6-12. doi: 10.2174/1874331501913010082
- Radosavljevic, S., Haider, L. J., Lade, S. J., & Schlüter, M. (2021). Implications of Poverty Traps Across Levels. *World Development*, 144, 1-12. doi: 10.1016/j.worlddev.2021.105437
- Saleh, L. (2020). Analisis Pemasaran Padi Sawah di Kecamatan Wawotobi Kabupaten Konawe. *JAS (Jurnal Agri Sains)*, 4(2), 1-10. doi: 10.36355/jas.v4i2.425
- Singh-Peterson, L., & Iranacolaivalu, M. (2018). Barriers to Market for Subsistence Farmers in Fiji – A Gendered Perspective. *Journal of Rural Studies*, 60, 1-8. doi: 10.1016/j.jrurstud.2018.03.001
- Wang, H., Zhao, Q., Bai, Y., Zhang, L., & Yu, X. (2020). Poverty and Subjective Poverty in Rural China. *Social Indicators Research*, 13(1), 82-89. doi: 10.1007/s11205-020-02303-0
- Wardana, L. W., Handayati, P., Narmaditya, B. S., Wibowo, A., Patma, T. S., & Suprajan, S. E. (2020). Determinant Factors of Young People in Preparing for Entrepreneurship: Lesson from Indonesia. *Journal of Asian Finance, Economics and Business*, 7(8). 555-565. doi: 10.13106/jafeb.2020.vol7.no8.555
- Zainal, M., Raba'ah Hamzah, S., & M. Z., R. (2020). The Role of Social Assets on Community Well-Being in Urban Farming Project. *Journal of Asian Scientific Research*, 10(4), 255-263. doi: 10.18488/journal.2.2020.104.255.263

Zhang, C. hong, Benjamin, W. A., & Wang, M. (2021). The Contribution of Cooperative Irrigation Scheme to Poverty Reduction in Tanzania. *Journal of Integrative Agriculture*, 20(4), 953-963. doi: 10.1016/S2095-3119(21)63634-1