



Institutional Role and Farmer Capacity Level in Increasing Cassava Production in East Lampung Regency

Wan Abbas Zakaria^{1*}, Bustanul Arifin², Dedy Hermawan³, Lidya Sari Mas Indah⁴

^{1,2,4}Department of Agribusiness, Faculty of Agriculture, University of Lampung, Jl. Prof. Dr. Sumantri Brojonegoro No. 1 Bandar Lampung, 35145, INDONESIA

³Department of Administration, Faculty of Public Administration Department, University of Lampung, Jl. Prof. Dr. Sumantri Brojonegoro No. 1 Bandar Lampung, 35145, INDONESIA

Received: 20 October 2025

Accepted: 09 December 2025

*Correspondent Email:
wanabas.zakaria@fp.unila.ac.id



Abstract: *The role of agricultural institutions in the agribusiness system is part of the subsystem of supporting services as well as implementers of farming activities. However, the reality today is that the institutional structure of farmers in general has not been running well so that it causes a decrease in the level of farmers' welfare. The purpose of this research was to determine how big the role of farmer institutions in improving the performance of cassava farming and to determine the level of farmers capacity on implementing cassava farming in Labuhan Ratu VI Village, Labuhan Ratu District, Lampung Timur Regency. The analytical method used is descriptive qualitative, scoring method, and Likert scale. The results showed that the farmer institutions that greatly influenced the performance of cassava farming were families, communities and farmer groups and cassava farmers in the research location were considered to be independent in the implementation of cassava farming.*

Keywords: *Capacity, institutional, performance*

1. INTRODUCTION

Farmer institutions are the key to farmer welfare, with the presence of these institutions the farmer's position will be stronger and more organized in managing his farming business (Leroy, 2023; Mahindapalaa et al., 2020). An agricultural development program will be successful if there are institutions and optimal support for farmer participation. Empowering the functions and performance of program implementing institutions and the importance of including the functions and roles of local wisdom will also contribute to the success of farming (Elizabeth, 2019; Gitosaputro et al., 2020). The problem faced in agricultural development is the land owned by farmers relatively on a small scale (Ibnu et al., 2018; Worlanyo et al., 2022; Zainuri et al., 2021). This condition has continued to increase over the years with a low level of welfare (Baiyegunhi et al., 2022; Kimeli et al., 2021; Ma et al., 2022). The impact of this small agricultural business scale causes a low level of income for farmers, so that farmers are always in a cycle of poverty (Ma et al., 2022). In addition, government intervention in farmer groups can strengthen the sustainability of farming businesses and increase farmer incomes (Ghani Setiawan Cahyadi; Rahmi Yuristia, 2024).

This problem is an opportunity for Gapoktan institutions to continue to improve themselves and improve the lives of farmers. However, the institutional structure of cassava farming in the

form of Gapoktan in Lampung Province in general has not gone well and has a low level of activity and independence. This is due to a lack of assistance by extension agents, both government and private (Zakaria et al., 2022). The main cause of low agricultural growth in developing countries is weak and inefficient institutional arrangements. Institutions play an important role in agricultural development programs (Pali et al., 2023). Limited access to education, income, managerial skills, and support services, causing difficulties in adapting to price changes due to uncertain climate change (Mulwa et al., 2017; Ncoyini et al., 2022; Tripathi & Mishra, 2017). The existing condition of this ineffective Gapoktan must be corrected immediately because farmer organizations or Gapoktans are implementers of the agribusiness system. Agribusiness is very important for small farmers in order to achieve sustainable and equitable agricultural development (Schoneveld, 2022).

If agribusiness implementers are not active, the agribusiness system from upstream to downstream will not run effectively and efficiently (Hasanov et al., 2021; Morfi et al., 2020).

One of the frameworks of this research activity is to build a cassava agribusiness development model which is carried out through a partnership institutional model. Institutional partnerships include regulatory agreements (rules agreements), production agreements, sales agreements and guarantees (security agreements)



to fulfill commitments and prevent problems during the partnership agreement, use of trademarks, monitoring and effective law enforcement mechanisms in line with the opinion (Schmid, 1987; Tambunan, 1996; Williamson, 1996). Through engineering a cassava agribusiness development model, one of the final outputs is an agreement on a cassava price with a tapioca factory of IDR 1,000/Kg net at the farm level which is monitored by the Regional Government.

Through this model, of course it will guarantee the welfare of farmers in cassava farming. Based on the empirical conditions of the low level of income and welfare of farmers in rural areas, a guided and organized change is needed in the form of farmer institutions. Institutions are part of the agribusiness subsystem component, namely supporting services in the village, namely the Association of Farmers Groups (Gapoktan) and Farmer Groups (Poktan). The presence of an institution or Gapoktan is expected to contribute to determining the level of welfare of farmers (Franklin & Oehmke, 2019; Nazriah, 2020; Zakaria, Endaryanto, Sari, et al., 2021).

According to research conducted (Zakaria, Endaryanto, Indah, et al., 2021), the motivation of farmers in cultivating cassava in Labuhan Ratu VI Village, Labuhan Ratu District, East Lampung Regency will increase if there is an agreement on the price of cassava with tapioca factories as buyers single. This price certainty can provide an opportunity for farmers to calculate their farming income in a more mature and organized manner. In addition, the motivation of farmers in cassava farming is also determined by institutional support from families, farmer groups to farmer assistants.

The formulation of the problem contained in this study is what is the institutional role of farmers in improving the performance of cassava farming and what is the level of capacity of farmers in implementing cassava farming in Labuhan Ratu VI Village, Labuhan Ratu District, East Lampung Regency.

2. MATERIALS AND METHODS

2.1 Method of Collecting Data

The research method used in this study is a survey method. A survey is a comprehensive examination or research. Surveys conducted in research are usually carried out by distributing questionnaires or interviews. Surveys are a primary data collection method by asking questions to each respondent. Surveys are a method of collecting information from groups that represent the population (Sugiyono, 2012). The survey method was carried out using a questionnaire, according to (Noor, 2015). Questionnaire is a data collection technique in which respondents are offered or

distributed a list of questions in the hope that respondents can provide answers or answers to the questions asked. The number of samples determined is the minimum number of respondents to fulfill normally distributed data, namely 30 people.

2.2 Data Analysis Method

The analytical method used is descriptive qualitative and analytical based on the results of the data obtained through a questionnaire. The data is then collected and processed using the Likert scale analysis method and scoring. This analysis uses descriptive analysis and scoring by looking at how the indicators of the institutional role and capacity of farmers in Labuhan Ratu VI Village, Labuhan Ratu District East Lampung. All data obtained from the field were tabulated first, then analyzed descriptively. The Likert scale measurement uses the formula :

$$T = 50 + 10 \left[\frac{(X - \bar{X})}{s} \right]$$

Where:

T : Standar Score

X : Responden Score

\bar{X} : Average Score

S : Deviasi standar Standar deviasi

The Likert scale is a scale that uses certain items that are definitely good and definitely bad, excluding the somewhat good, somewhat less, neutral, and other rankings between the two definite attitudes above. Items that are definitely liked, liked, good, are given a negative sign (-), the way to measure the Likert scale is that the respondent's response scores are added up and this total is the total score and this total is interpreted as the respondent's position on the Likert scale. The Likert scale uses ordinal measurements, therefore it can only make rankings, but it cannot be known how many times one respondent is better or worse than another respondent in the Likert scale (Nazir, 2014).

Table 1. Limitations and categories of institutional roles and levels of capacity of cassava farmers

Description	Interval score	Category
The institutional role	12,00 – 20,00	low performance
	>20,01- 28,00	moderate performance
	>28,01 – 36,00	high performance
Capacity of farmers	14,00 -23,33	low performance
	>23,34 – 32,67	moderate performance
	> 32,68 – 42,00	high performance

Source of primary data processing, 2022



3. Results and Discussions

Institutional economics is a new paradigm of economics in which institutions (rules of the game) play a central role in creating an efficient economy. Institutional economics emphasizes the importance of institutional aspects for the functioning of economic and social systems (Ali et al., 2018; Wijianto et al., 2015). Farmer groups are one of the institutions formed to create practices for the use of existing resources and as instruments or tools for agricultural development. The existence of farmer groups is expected to increase the capacity of farmers in agriculture which has an impact on the welfare of farmers. On the other hand, support or encouragement from farming families and part of the community can determine the results of farming. Government Field Extension (PPL) can also help accelerate and increase the capacity of cassava cultivation farmers in the study area..

Agricultural institutions are institutional elements that are fundamentally related to decisive efforts in the implementation of cassava cultivation. This agricultural institution also functions as an information center for farmers in farming activities. These functions will have implications for the level of capacity of farmers in planning, implementing, evaluating and solving farming problems. Institutions in the research location from the smallest to the largest are: (1) family, (2) community, (3) Farmer Groups and (4) Field Agricultural Extension (PPL). A summary of the analysis of institutional roles in improving the performance of cassava farming is presented in Table 2.

Tabel 2. Summary of institutional role analysis in improving the performance of cassava farming

Description	Expected score	Score obtained	Achievement	Performance level
Family	36	27,40	76%	Moderate performance
Public	36	22,80	63%	Moderate performance
Farmer's group	36	20,50	57%	Moderate performance
PPL	36	18,53	51%	Low

Source of primary data processing, 2022

High performance family role has moderate performance, almost high in increasing the performance of cassava farming with a value of 27.40. The role of the family is very helpful to farmers in receiving information and implementing cassava farming activities. Most of the respondent farmers use family labor (TKDK) in the implementation of farming from the beginning of planting to harvest. The use of TKDK in cassava farming with a planting period of 6-8 months is usually the activity of preparing seeds and

procuring fertilizer for the land. In the process of procuring cassava seeds, seeds from cassava stems harvested in the previous planting season are brought home and cut into seed cuttings. Then they are brought back to the fields in the form of seeds ready for planting. Fertilizer procurement and fertilization activities are often assisted by family members. Therefore rate that the role of the family is very helpful for cassava farmers in carrying out farming. This is in line with research conducted (Syahyuti, 2016) which suggests that the family farming movement that works hand in hand will have the potential to make a major contribution to food supply, environmental health, poverty alleviation, and farmer welfare.

(Suratman, 2015) , examines the contribution of labor in the family to farm income eggplant in the Landasan Ulin Utara Village shows the income of labor in the family obtained from the results of the value of work wages in farming, it is obtained that the contribution of labor in the family is an average of 27.86%, meaning that the contribution to eggplant farming income is only 27.86% comes from of labor in the family.

The decisions of cassava farmers in harvesting at the research location are strongly influenced by the family. Annual family needs such as children's school fees are one of the farmers' considerations in making decisions when harvesting young. This also causes rafaksi or cassava pieces to be received by farmers of more than 5%.

This is in line with research (Nurjanah et al., 2020) which suggests that economic problems or poverty encourage each family member to fulfill their family's economic needs. In addition, this research is in line with research (Purwaningsih, 2018) which suggests that one of the farmers' decisions in harvesting is household consumption needs or in other words household economic needs.

Community role in farming activities can play a role in determining the motivation level of farmers. The community in question is fellow cassava farmers who live farming in the same area of residence. One of the means of meeting cassava farmers is community activities such asyaasinan, patrol, rewangor visits to people's homes. One of the characteristics of farmers in farming activities is that they often follow the behavior of the community or neighbors in carrying out farming. In this case, farmers exchange information related to farming activities with the community at the research location. This is in line with research conducted (Indraningsih, 2016) which suggests that one of the factors that influence farming performance is farmer communication behavior. One of the things that



influence the coefficient is the role of the community in exchanging farming information.

The role of the community in improving the performance of cassava farming is in the medium category with value 22.80. The community in the research location is considered to only help farmers in providing farming information. In procuring production facilities, farmers are only limited to sharing information in the form of type, number and location of shops to buy production inputs to farmers. However, in the implementation of farming, people rarely volunteer themselves to join in helping farming activities. Based on interviews and observations, the labor market outside the family (TKLK) in the community has also begun to decrease. The TKLK available in the village are limited (a few) and only for certain people. There are no more people/neighbors who are not willing to voluntarily help cassava farming activities at the study site

The role of farmer groups in business activities should be able to determine the level of welfare of farmers and help facilitate farming activities. However, in practice, farmer groups cannot contribute much to improving farming performance. The hampered and undeveloped farmers cannot be separated from the lack of assistance from Field Agricultural Extension or support from the Regional Government. This is in line with research (Nasir & Wardhono, 2018) which suggests that cassava trade institutions are not intervened by government policies or farmer groups so that the role of farmer groups in Gumukmas District, Jember Regency is not active. On the other hand, the level of quality of the human resources of members farmer groups to know, willing and able to develop groups are also very influential

The role of farmer groups in increasing cassava farming is in the medium category, almost close to low with a value of 20.50. Based on interviews and observations, farmer groups in the implementation of cassava farming helped farmers only to provide information on the type, number and location of shops to purchase production inputs. There is no voluntary assistance that helps farmers in their farming activities. On the other hand, farmer groups offer services in cultivating the fields using a hand tractor. Another service offering is the rental of a three-wheeled motorbike viar to facilitate the transportation of production facilities to the land. Service offers from several farmer groups are considered less profitable for farmers and unable to meet the household needs of each member of the farmer group.

Many farmer groups in the research locations have been inactive. Of the 27 groups that were inaugurated by the Decree (SK) of the Head of Labuhan Ratu VI Village No. 412 of 2008, only 12 farmer groups are still active today. The farmer

group at the research location was originally intended to be a container for distributing subsidized fertilizers to farming communities, but this role has shifted to that of a facility where farmers gather which is then interspersed with arisan activities. Farmers' gatherings are usually held once a month. In addition to the social gathering, the meeting was also filled with discussions on farming conditions which were activated by members of farmer groups and exchanged information on farming in the village. It can be seen that the activities of farmer groups in research locations are not innovative and economically profitable for members of farmer groups. This is in line with and answered by research (Firdaus & Suharyon, 2019) which suggests that farmer groups have an important role in farming business development, but 40 percent of farmer groups are still at the beginner level so that competent assistants or researchers are needed to empower and activate farmer groups

There is no specific activity program that aims to increase additional income for farmers. Farmer group activity programs rely heavily on the assistance of third parties such as Members of the Regional People's Representative Council (DPRD), Regional Government, fertilizer or pesticide companies which are channeled through the Association of Farmers Groups (Gapoktan). The forms of assistance received by farmer groups in the research village were cattle, goats, hand tractors, three-wheeled viar motorbikes, sprayers and yard plant seeds. This is in line with research conducted (Nur et al., 2020) showing that farmer groups are very dependent on assistance from third parties, in this case subsidized fertilizer from the Regional Government.

PPL role in increasing cassava farming is in the low category with a value of 18.53. Field Agricultural Extension (PPL) are officers from the Agricultural Extension Center (BPP) who are assisted to provide direction, guidance and counseling in the agricultural sector on an administrative basis within the scope of the sub-district. One of the outputs of PPL is that it can improve the performance of the farming of the farmers it assists. Based on interviews, the PPL assigned to Labuhan Ratu Sub-District had never conducted coaching or counseling in the village or farmer groups. For this reason, farmers do not feel the benefits of the presence of PPL in improving the performance of cassava farming activities. This was reinforced by the statement from Gapoktan of Labuhan Ratu VI Village that the PPL sent from BPP Labuhan Ratu District had never contacted Gapoktan at all. PPL only contacted Gapoktan to request data on the Definitive Group Needs Plan (RDKK) for receiving subsidized fertilizer every



year. This problem is in line with research (Saputri, 2016) which shows that the role of field agricultural extension workers in Sukoharjo Regency as a whole is in the very low category with a percentage of 56.70% so that this has implications for the level of development of farmer groups as a whole in the low category with a percentage of 60%.

(Nazaruddin & Anwarudin, 2019), researched on increasing the welfare of farmers by strengthening farmer groups which stated that in efforts to strengthen the empowerment of farmer groups this was technically carried out by agricultural extension workers. Even so, assistance in developing farmer groups can be carried out by NGOs and other organizations that are considered capable and experienced in developing community empowerment (Sujianto et al., 2018). In this case, the assistant's task is to develop an attitude of participation, attitude, knowledge and skills of farmer groups and their members in achieving a common goal.

According to farmers, the presence of PPL in the village is very helpful for farmers in opening their insights and receiving information related to cassava commodities. In addition, the activities of the farmer groups became livelier than the previous meetings. This is because all farmer group meetings in the village every month have never had assistance or guidance from agricultural extension workers.

Farmer capacity are aspects that are internalized within the farmer as shown by the knowledge, attitudes and skills to carry out farming activities. The success of farmers in conducting farming requires high capacity of farmers to be able to identify potential and take advantage of the opportunities they have so that farming is carried out in accordance with predetermined farming goals and achieving these goals appropriately. The capacity of farmers in farming cannot be separated from the influence of the family, community, farmer groups and PPL which has been described above. There are four managerial stages of farming which are divided in identifying the capacity of cassava farmers in Labuhan Ratu VI Village, namely planning, implementing, evaluating and solving farming problems.

Table 3. Summary of the analysis of the capacity level of cassava farmers in farming

Uraian kapasitas	Expected score	Score obtained	Achievement
Planning farmer	15	11,63	78%
Implementation Farming	21	18,23	87%
Farm Evaluation	3	2,40	80%
Solution of problem	3	2,40	80%

Average	42	34,67	83%
Source of primary data processing, 2022			

Based on Table 3, the capacity level of farmers in cassava farming is at a high performance with a value of 34.67. This shows that in general the capacity of cassava farmers in Labuhan Ratu VI Village, Labuhan Ratu District, East Lampung Regency has a high level of capacity in cassava farming from upstream to downstream. At the planning stage, most farmers have prepared all the production facilities needed before planting, especially seeds and fertilizers. However, the pesticides that will be used will be purchased several days before the first herbicide spraying. The seeds used by farmers for farming use seed cuttings from previous crops. Cassava seeds can also be requested from the village community or neighbors for free because the availability of cassava seeds in the village is very excessive. On the other hand, Fertilizer availability in Labuhan Ratu VI Village is very low because there is only one official subsidized fertilizer kiosk. Therefore, farmers must immediately buy fertilizer at the kiosk as soon as there is stock replenishment of fertilizer at the kiosk. Alternative fertilizer purchases can be obtained at other fertilizer kiosks outside Labuhan Ratu VI Village, but farmers need special vehicles such as three-wheeled viar motorbikes to transport the fertilizer. Viar three wheeled motorbikes can be borrowed or rented by certain neighbors or farmer groups. Alternative fertilizer purchases can be obtained at other fertilizer kiosks outside Labuhan Ratu VI Village, but farmers need special vehicles such as three-wheeled viar motorbikes to transport the fertilizer. Viar three-wheeled motorbikes can be borrowed or rented by certain neighbors or farmer groups. Alternative fertilizer purchases can be obtained at other fertilizer kiosks outside Labuhan Ratu VI Village, but farmers need special vehicles such as three-wheeled viar motorbikes to transport the fertilizer. Viar three-wheeled motorbikes can be borrowed or rented by certain neighbors or farmer groups.

In the implementation stage of cassava farming, farmers carry out land preparation activities, planting, fertilizing, spraying herbicides, treating (wiwilan), harvesting and marketing to factories or stalls through agents. Farmers in Labuhan Ratu VI Village have never carried out processing activities for cassava farming products. Processing of cassava products in the village was previously carried out through the People's Tapioca Flour Industry agro-industry (ITTARA) in the 1990s. However, ITTARA was never active again several years after it was built in the village due to illegal fees from members of the community. On the other hand, ITTARA was unable to compete with the BW



Tapioca Factory from the Labuhan Ratu unit. The cassava processing activities carried out in the village are the processing of tiwul rice from cassava varieties of Medan and Garuda. According to research conducted (Indrayana et al., 2018) argues that the efficiency of alternative cassava processing businesses apart from being tapioca flour and tiwul rice is snacks such as cassava, cassava flour and various cakes. Utilization of cassava waste can be used as an alternative to additional farming income for farmers or farmer groups as stated by (Rezkiya Amien et al., 2021), namely processing cassava stems into animal feed and organic fertilizer for cassava

During farming activities, most farmers evaluate the performance of farming in the previous planting season. The important things that farmers pay attention to are the productivity level of cassava, the use of fertilizers and pesticides. The productivity level of cassava is closely related to the use of fertilizers. Based on interviews with farmers, the application of cassava fertilizer varies in each growing season. The difference in fertilizer doses applied each growing season is intended to determine the ratio of cassava production produced until farmers find the maximum production amount with the dose of fertilizer used. Therefore, it can be seen that farmers always experiment in using fertilizers every planting season. The same thing is done with the evaluation of the use of pesticides.

The farming problem that is usually encountered by farmers is the scarce availability of fertilizer at the kiosk. In addition, the increase in fertilizer prices due to the removal of cassava commodity subsidized fertilizers has resulted in farmers needing alternative fertilizers such as manure or chicken or goat manure. Manure in Labuhan Ratu VI Village is available every month with a price range of IDR 10,000-12,000/sack or 30-50 Kg. The alternative use of manure is considered to be the best choice because the price is cheap compared to buying expensive non-subsidized fertilizers.

Another problem is the fluctuating price of cassava causing farm income to break even and even lose. If farmers experience this, farmers will borrow farming capital from agents to cover the shortage of farming costs. Therefore, farmers anticipate price problems by doing additional daily work such as farm laborers. Additional work is considered to be able to meet the household's daily or weekly needs so that farming income is positioned as additional annual income. In addition, another solution implemented by farmers in dealing with price fluctuations is to reduce the amount of chemical or inorganic fertilizers used and allocate them using manure. This problem is in line with research (Refiana et al., 2021) which

shows that cassava farmers in Banjar Regency are faced with limited capital in purchasing production facilities. Apart from that, another problem is the cassava price fluctuation which causes unpredictable cassava farming income.

The research conducted (Manik, 2019; Wibowo & Haryanto, 2020) shows that because the performance of each individual farmer is different, a method or step is needed where the difference in results can be used as a strength to carry out agricultural activities. The solution to increasing farmer efficiency is to provide counseling to farmers and village groups on ways to solve problems, especially in infrastructure management so that farming activities run smoothly.

4. CONCLUSIONS

Based on the results, several conclusions can be put forward as follows. The role of institutions in general in Labuhan Ratu VI Village, Labuhan Ratu District, East Lampung Regency is considered to greatly influence the performance of cassava farming. PPL in the low performance category. Cassava farmers in Labuhan Ratu VI Village, Labuhan Ratu District, East Lampung Regency in the implementation of farming are considered to be independent from the stages of planning, implementing, evaluating and solving farming problems so that the level of capacity of cassava farmers is assessed as having high performance.

ACKNOWLEDGMENTS

Author would like to express his gratitude for the support of LPPM Universitas Lampung in the BLU Grant for Professor Research Scheme.

REFERENCES

- Ali, M. S. S., Yunus, A., Salman, D., & Demmallino, E. B. (2018). Racionalitas Petani Dalam Merespons Perubahan Kelembagaan Penguasaan Lahan dan Sistem Panen pada Usahatani Padi. *Jurnal Sosial Ekonomi Pertanian*, 14(1), 1–14.
- Baiyegunhi, L. J. S., Akinbosoye, F., & Bello, L. O. (2022). Welfare impact of improved maize varieties adoption and crop diversification practices among smallholder maize farmers in Ogun State, Nigeria. *Heliyon*, 8(5), e09338. <https://doi.org/10.1016/j.heliyon.2022.e09338>
- Elizabeth, R. G. (2019). Peningkatan Partisipasi Petani, Pemberdayaan Kelembagaan Dan Kearifan Lokal Mendukung Ketahanan Pangan Berkelanjutan. *Agricore: Jurnal Agribisnis Dan Sosial Ekonomi Pertanian Unpad*, 4(2), 48–61. <https://doi.org/10.24198/agricore.v4i2.26509>
- Franklin, K., & Oehmke, J. (2019). Building African Agribusiness through Trust and Accountability. In *Journal of Agribusiness in*



- Developing and Emerging Economies* (Vol. 9, Issue 1, pp. 22–43). Emerald.
<https://doi.org/10.1108/jadee-01-2018-0005>
- Ghani Setiawan Cahyadi; Rahmi Yuristia. (2024). *The Factors That Affect The Existence Of Agricultural Farmer Groups (A Study in Cempaka Permai Village, Gading Cempaka Sub-district, Bengkulu City)*. 06(1), 177–192.
<https://doi.org/10.31186/jaseb.6.1.177-192>
- Gitosaputro, S., Rangga, K. K., & Listiana*, I. (2020). Utilization of ICT by Rural Farmers in Lampung, Indonesia. *International Journal of Innovative Technology and Exploring Engineering*, 9(4), 2628–2631.
<https://doi.org/10.35940/ijitee.a4551.029420>
- Hasanov, M., Trienekens, J., & Dolfsma, W. (2021). Advancing food and agribusiness management research: IFAMA 2020 best papers. In *International Food and Agribusiness Management Review* (Vol. 24, Issue 6, pp. 901–904). Wageningen Academic Publishers.
<https://doi.org/10.22434/ifamr2021.x003>
- Ibnu, M., Offermans, A., & Glasbergen, P. (2018). Perceived impacts of certification and farmer organization: benefits from the Indonesian smallholders' point-of-view. *Bulletin of Indonesian Economic Studies*, 49(18), 1–25.
<https://doi.org/10.1080/00074918.2018.1506093>
- Indrayana, K., Sirappa, M. P., & Ricky, M. (2018). Diversifikasi pengolahan ubi kayu dalam meningkatkan ketahanan pangan di Sulawesi Barat. *Jurnal Agrotan*, 4(1), 37–45.
- Kimeli, P., VanLeeuwen, J., Gitau, G., Heider, L., McKenna, S., & Greenwood, S. (2021). Impact of calf housing improvement and farmer training on finances, management and animal welfare perceptions of Kenyan smallholder dairy farmers. *Journal of Development and Agricultural Economics*, 13(2), 119–129.
<https://doi.org/https://doi.org/10.5897/jdae2021.1259>
- Leroy, D. (2023). An empirical assessment of the institutional performance of community-based water management in a large-scale irrigation system in southern Mexico. *Agricultural Water Management*, 276(December 2022), 108051.
<https://doi.org/10.1016/j.agwat.2022.108051>
- Ma, M., Lin, J., & Sexton, R. J. (2022). The Transition from Small to Large Farms in Developing Economies: A Welfare Analysis. *American Journal of Agricultural Economics*, 104(1), 111–133.
<https://doi.org/10.1111/ajae.12195>
- Mahindapalaa, K. G. J. P., Jayathilakaa, M. W. A. P., & Jayawardana, L. N. A. . (2020). Role of agriculture cooperatives as a farmer-based organization in Sri Lanka: Case study in Morawak Korale tea producers' cooperative society. *Journal of Agriculture and Value Addition*, 3, 56–72.
- Manik, J. R. (2019). The transformation of agricultural counseling to the management of innovation in order to strengthen food security in the Kabupaten Dairi. *JASc (Journal of Agribusiness Sciences)*.
- Morfi, C., Nilsson, J., Hakelius, K., & Karantininis, K. (2020). Social networks and member participation in cooperative governance. *Agribusiness*, 37(2), 264–285.
<https://doi.org/10.1002/agr.21660>
- Mulwa, C., Marenja, P., Rahut, D. B., & Kassie, M. (2017). Response to climate risks among smallholder farmers in Malawi: A multivariate probit assessment of the role of information, household demographics, and farm characteristics. *Climate Risk Management*, 16, 208–221.
<https://doi.org/10.1016/j.crm.2017.01.002>
- Nazriah, A. (2020). Improvement Strategy of Farmers Well-Being for Sustainable Agricultural Industry. *Kaav International Journal of Law, Finance & Industrial Relations*, 7(2).
<https://doi.org/10.52458/23492589.2020.v7.is2.kp.a4>
- Ncoyini, Z., Savage, M. J., & Strydom, S. (2022). Limited access and use of climate information by small-scale sugarcane farmers in South Africa: A case study. *Climate Services*, 26(September 2021), 100285.
<https://doi.org/10.1016/j.cliser.2022.100285>
- Noor, J. (2015). *Metodologi Penelitian*. Prenada Media Group. Jakarta.
- Pali, P. N., Tebeka, Y. A., Schut, M., Mangheni, M. N., Wairegi, L. W., Manyong, V. M., & van Asten, P. J. A. (2023). Elaborating institutional arrangements to better enhance sustainable crop intensification in Uganda: A farmers' perspective. *Journal of Rural Studies*, 98, 68–79.
<https://doi.org/https://doi.org/10.1016/j.jrurstud.2023.02.002>
- Refiana, F., Triatmoko, E., & Fitriadi, S. (2021). Produktivitas Dan Pendapatan Usaha Tani Ubi Kayu (Manihot Utilisima) Di Desa Tungkaran Kabupaten Banjar. *Ziraa'Ah Majalah Ilmiah Pertanian*, 46(2), 185.
<https://doi.org/10.31602/zmip.v46i2.4583>
- Rezkia Amien, E., Asmara, S., Kurnia, F., Suharyatun, S., Teknik Pertanian, J., Pertanian, F., Lampung, U., Sumantri Brojonegoro No, J., & Lampung, B. (2021). Studi Analisis Kelayakan Ekonomi Mesin



- Perajang Batang Singkong (Rabakong) Tipe TEP 2 Economic Feasibility Analysis Study of Cassava Stems Chopper (Rabakong) Type TEP 2. *Open Science and Technology*, 01(01), 2776–169.
- Schmid, A. A. (1987). *Property, Power, and Public Choice: An Inquiry into Law and Economics* (Second Ed.). Praeger Publishers, New York.
- Schoneveld, G. C. (2022). Transforming food systems through inclusive agribusiness. *World Development*, 158, 105970. <https://doi.org/10.1016/j.worlddev.2022.105970>
- Sugiyono. (2012). *Memahami Penelitian Kualitatif*. Alfabeta. Bandung.
- Tambunan, M. (1996). Kebijakan Aspek Ekonomi Agribisnis dan Industrialisasi Pertanian: Kendala dan Agenda. *Jurnal Keuangan Dan Moneter Departemen Keuangan RI, Jakarta*, 3(2).
- Tripathi, A., & Mishra, A. K. (2017). Knowledge and passive adaptation to climate change: An example from Indian farmers. *Climate Risk Management*, 16(2017), 195–207. <https://doi.org/10.1016/j.crm.2016.11.002>
- Wibowo, H. T., & Haryanto, Y. (2020). Kinerja penyuluh pertanian dalam masa pandemi covid-19 di Kabupaten Magelang. *Jurnal Penelitian Peternakan Terpadu*, 2(2).
- Wijianto, A., Widiyanto, W., & Anantanyu, S. (2015). ANALISIS KELEMBAGAAN GAPOKTAN DALAM KEGIATAN LEMBAGA DISTRIBUSI PANGAN MASYARAKAT (LDPM) DI KABUPATEN GROBOGAN. *Caraka Tani: Journal of Sustainable Agriculture*, 30(2), 76.
- Williamson, O. E. (1996). *The Mechanisms of Governance*. Oxford University Press. Oxford.
- Worlanyo, A. S., Alhassan, S. I., & Jiangfeng, L. (2022). The impacts of gold mining on the welfare of local farmers in Asutifi-North District in Ghana: A quantitative and multi-dimensional approach. *Resources Policy*, 75(March 2021), 102458. <https://doi.org/10.1016/j.resourpol.2021.102458>
- Zainuri, Sjah, T., Prameswari, N., Werdiningsih, W., & Tarmizi, and. (2021). Good agricultural and postharvest handling practices of Cocoa pods in Lombok to meet Cocoa bean quality for the global market. In *IOP Conference Series: Earth and Environmental Science* (Vol. 712, Issue 1, p. 12028). IOP Publishing. <https://doi.org/10.1088/1755-1315/712/1/012028>
- Zakaria, W. A., Endaryanto, T., Indah, L. S. M., & Hermawan, D. (2021). The Development of Cassava Agribusiness in Lampung Province (The Implications for The Cassava Agribusiness Partnership Model). *Jurnal Manajemen Dan Agribisnis*, 18(3), 330–341. <https://doi.org/10.17358/jma.18.3.330>
- Zakaria, W. A., Endaryanto, T., Sari, L., Indah, M., & Hermawan, D. (2021). THE DEVELOPMENT OF CASSAVA AGRIBUSINESS IN LAMPUNG PROVINCE (THE IMPLICATIONS FOR THE CASSAVA AGRIBUSINESS PARTNERSHIP MODEL). *Jurnal Manajemen Dan Agribisnis*, 18(3), 330–341. <https://doi.org/10.17358/jma.18.3.330>
- Zakaria, W. A., Indah, L. S. M., Endaryanto, T., Marlina, L., & Ibnu, M. (2022). Rekayasa Model Kelembagaan Kemitraan Ubikayu Di Provinsi Lampung. *Jurnal Ilmiah Membangun Desa Dan Pertanian*, 7(5), 177–187. <https://doi.org/10.37149/jimdp.v7i5.44>