

---

OPEN ACCESS: Research Article 

## Participation of Local Farmer's Organizations in Supporting the Cocoa Plant Revitalization Program

Masitah<sup>1\*</sup>, Campina Illa Prihantini<sup>1</sup>, Nursalam<sup>1</sup>, Pitra Yani<sup>1</sup>, Khaerunnisa<sup>2</sup>, Dennis Mark Onuigbo<sup>3</sup>

<sup>1</sup>Department of Agribusiness, Faculty of Agriculture, Fishery and Animal Husbandry, Universitas Sembilanbelas November Kolaka, Indonesia

<sup>2</sup>Department of Agribusiness, Faculty of Agriculture, Universitas Borneo Tarakan, Tarakan, Indonesia

<sup>3</sup>Tasmania School of Business and Economics, University of Tasmania, Australia

\*Correspondence e-mail: [masitah.malla@gmail.com](mailto:masitah.malla@gmail.com)

Received : June 19, 2023

Accepted : July 24, 2023

Published : July 30, 2023

---

### Abstract

Cocoa is a promising plant for farmers as one of the plantation crops that plays a significant role in the national economy by providing employment, income, and foreign exchange source. In addition, it encourages regional and agro-industrial developments in the revitalization program of cacao plants in North Kolaka Regency, Southeast Sulawesi, Indonesia. This activity becomes the Ministry of Agriculture's efforts to return the success of Indonesian plantation commodities by distributing free excellent seeds to the local farmers. This study aimed to determine the Local Farmers Organization's participation in supporting the cocoa plant revitalization program. The research employed qualitative and quantitative descriptive methods with a Likert scale. The results show that, in terms of the organization participation of farmers in supporting the cocoa plant revitalization program, Local Farmer's Organization as farmer groups mainly plays the role of an information-sharing forum, a discussion place, a learning process, and a collaborative platform with an average value of 58.72%. This implies that the government should strengthen the role of local farmer's organizations to encourage production.

### Keywords

Cocoa, Farmer group participation, Revitalization

### 1. Introduction

Cocoa is highly regarded as an essential commodity because it plays two strategic roles in the Indonesian economy. First, cocoa provides income in the form of cocoa exports, and second, it provides a source of employment for millions of Indonesian rural smallholder farming households (Arsyad et al., 2014). One of Indonesia's cocoa bean production centers is Southeast

Sulawesi Province, with a production value of 115.023 tons, a direct export value of 20 tons, and a total export value of US\$ 1.5 billion in 2019. The export value of Indonesian cocoa has fluctuated where it has decreased and occurred during the last 10 years (Masitah & Hasbiadi, 2022).

In Southeast Sulawesi, cocoa is one of the leading commodities, most of which farmers cultivate in community plantations. The area of Southeast Sulawesi cocoa plants in 2021 will reach 244,700 hectares with a production of 114,800 tons. Cocoa plantations in Southeast Sulawesi are dominated by smallholder cocoa plantations, around 98.70% (244,031 ha) of the total area of cocoa plantations in Southeast Sulawesi, with a total production of 114,800 tons in 2021 (BPS, 2022). The productivity of smallholder cocoa farms in Southeast Sulawesi is 0.48 tons/ha/year, lower than that in Central Sulawesi, which is 0.52 tons/ha/year, and cocoa productivity has decreased in the last 10 years. This happens every year and affects the level of welfare of farmers (Budiman et al., 2020).

The minimal level of farmers' welfare is evident through the temporary results of the agricultural census and the various efforts that have been carried out by the government to optimize the standard of living of farmers and increase agricultural production, one of which is through strengthening farmers institutions or Local Farmers Organizations from the village to the national level to become farmers institutions based on profit and economy. (Haryanto et al., 2022). Institutions in farming play a crucial role in almost all stages of farming. It's just that the reality shows that farmers' institutions in developing countries tend to be weak, and there are various obstacles to growing institutions in farming communities (Anantanyu, 2011; Prihantini & Lutfiyanto, 2020). Through existing institutions, farmers must be to increase their competency, capacity, and independence, as well as master cocoa farming technology such as seed fermentation, making organic fertilizer from cocoa pod shells, using botanical pesticides, and increasing partnerships between industry and farmers (Managanta et al., 2019).

The reality shows that it is increasingly more work for development programs to reach many individual small farmers. The existing economic situation, infrastructure, and policies created by the government often push farmers with narrow land and farm laborers to be marginalized economically and socially. In addition to limited control of agricultural land and low agricultural exchange rates, agricultural policies that do not favor farmers have further pushed farmers into poverty (Anantanyu, 2011). If farmers have high competitiveness, the income level of farmers will increase. So we need a forum that encourages farmers to increase their productivity further to produce competitive products (Rahayu et al., 2018; Prihantini & Lutfiyanto, 2019).

In connection with the program carried out by the regional government of North Kolaka Regency through the Plantation and Livestock Service, it carries out activities based on regulations and technical guidance for cocoa farming communities from the local government through the plantation and livestock services, namely cocoa revitalization in the sense of cocoa rejuvenation, so that new plants are now replacing old cocoa plants to increase the cocoa production. As for the role of local government in increasing the production of cocoa plants through the implementation stage, to realize increased production of cocoa plants.

The plantation revitalization program aims to accelerate the development of smallholder plantations through expansion, rejuvenation, and rehabilitation of plantation crops. It plays a vital role in cocoa production because that's where everything related to cocoa itself is regulated. Considering that year after year, cocoa production is decreasing because the existing mechanism still needs to be relevant to the rules. Therefore, the government seeks outreach to the public to follow the rules so that cocoa production will increase again. This study aims to determine the role of farmers' institutions in supporting the cocoa plant revitalization program.

## **2. Materials and Methods**

The research was conducted in Pakue Tengah District, North Kolaka Regency, Southeast Sulawesi, Indonesia. It was conducted for nine months, from September 2022 to May 2023. The study population consisted of 328 farmers who joined the 14 farmer Groups. The sample for this research was taken in a proportional random sampling with a total of 35 cocoa farmers who are members of a farmers group. Data collection techniques used are observation, interviews, recording, and documentation. Complete the first problem formulation using the descriptive analysis method. According to (Sudaryono, 2012) is an analysis that is carried out by explaining or describing or describing the information that can be extracted from the data comprehensively by describing the data in various ways. These methods include presenting data using a Likert Scale. The tools used in this study include questionnaires, SPSS, and Excel software. This study used a closed questionnaire or questionnaire in the form of a Likert scale, in the form of questions or statements whose answers were in the form of a descriptive scale. This questionnaire reveals data about the role of farmer groups in increasing the income of lowland rice farmers. The concept of measuring farmer groups on the income of paddy rice farmers shown in Table 1.

**Table 1.** Variable and Indicator for Measuring the Role of Local Farmer’s Organization

No	Variable	Indicator
1	As a forum for sharing information	<ul style="list-style-type: none"> <li>Delivering information to group farmers regarding knowledge, skills, or farming methods.</li> <li>The ability of group farmers to receive, understand, disseminate, and apply the information obtained.</li> </ul>
2	As a discussion group	<ul style="list-style-type: none"> <li>Develop information results through discussion of solutions to the problems found.</li> <li>The group's ability to discuss through suggestions and questions and answers.</li> </ul>
3	As a learning process forum	<ul style="list-style-type: none"> <li>Group farmers to learn to improve knowledge, skills, and attitudes.</li> <li>Frequency of attending group meetings to grow and develop self-sufficiency in farming.</li> </ul>
4	As a collaborative platform	<ul style="list-style-type: none"> <li>Strengthen cooperation among fellow members in the group and with other parties.</li> <li>Collaboration in searching for information on farming and production facilities.</li> <li>Cooperation in farm management, including planning, implementation, and evaluation.</li> </ul>

These indicators can be measured using a Likert scale. According to (Riduwan, 2011), using a Likert scale, the variables to be measured are translated into dimensions, the dimensions are translated into sub-variables then the sub-variables are translated again into measurable indicators. Finally, these measurable indicators can be used as a starting point for making instrument items in the form of questions or statements that need to be answered by respondents. Then calculate the role of farmer groups used score below:

$$Score = T \times Pn \dots \dots \dots (1)$$

where:

T = total number of respondents

Pn = Likert scale score

To calculate the questionnaire score interpretation, the analysis employed following formula:

$$Index\ Score\ (\%) = \frac{Total\ Score}{Maximal\ Score} \times 100 \dots \dots \dots (2)$$

Meanwhile, the score interpretation criteria based on the index are shown in Table 2.

**Table 2.** Level of Role in Measuring the Role of Farmer Groups

No	Rating	Percentage (%)	Score
1	Highly-participative	80 - 100	5
2	Participative	51 – 79.99	4
3	Intermediate	40 – 50	3
4	Lowly-participative	20 – 39.99	2
5	No participation	0 – 19.99	1

### 3. Results and Discussions

The institutional role of farmers is a task that farmer Groups must carry out based on recommendations by the assistant, which farmer Groups and their members apply in carrying out cocoa farming. With the role of farmer Groups, farmers can exchange ideas between other farmers, assistants, and people who understand cocoa maintenance to increase and restore the success of cocoa in North Kolaka. The existence of a cocoa revitalization program can help accelerate the potential area where the cocoa production decline has occurred. In this case, the cocoa revitalization program established by the government has been increasing cocoa production, which has declined drastically in recent years. A counseling effort from the government also exists in cocoa plant handling against pests or diseases. Therefore, the farmer Groups are enthusiastic and fully support the cocoa revitalization program.

#### 3.1. The Role of Local Farmers in Supporting Cocoa Plant Revitalization

##### Farmer Groups as Information-Sharing Forums

Farmer groups as a forum for sharing information are farmer groups that receive information from extension workers, mentors, and parties who understand cocoa. Farmer Groups obtain information about cocoa maintenance, pest, and disease management. Table 3 shows that farmer groups act as a forum for various information, namely farmer groups get the information they get from extension agents and assistants regarding cocoa plant revitalization activities, maintenance, and handling of cocoa pests and diseases and others with a value of 50% -68%. The farmer group held a meeting at the house of the chairman or members of the farmer group. Farm farmer groups currently own information on cocoa maintenance and pest and disease control. Good and highly recommended cocoa maintenance consists of regular pruning, fertilizing, spraying, and harvesting. Meanwhile, in handling pests and diseases, farmers use chemical or natural poisons according to the pests and diseases that attack the farmers' cocoa plants.

**Table 3.** Farmers Group for Information Sharing Platform

No	Statements/Questions	Score Interpretation (%)	Likert Scale Assessment
1	Information obtained by farmer Groups is understandable	40	Intermediate
2	Information presented by extension workers and guides can be accepted well by farmer Groups	50	Intermediate
3	Extension workers and guide provides information on cacao maintenance well	38	Lowly-participative
4	Information presented by extension workers and guides βcan be noticed well by farmers and apply it in their lands	60	Participative
5	The way extension workers and guides provide the information to the absent farmer Groups	58	Participative

This is very beneficial for farmers in line with the research conducted (Eman et al., 2017; Suryantini, 2003), that assistance plays a very important role in empowering cocoa farmer groups both at beginner and advanced level farmer groups in intensification and rehabilitation activities. The role of the assistant belongs to the very influential category, namely 88.3%, because cocoa farmers feel very helped by the assistance activities for farmer groups through the information provided (Prihantini & Lutfiyanto, 2020; Kaskoyo et al., 2017) argues that open communication and fair leadership will build and develop a level of trust in the group. Extension institutions in the Cocoa Institutional Model still play a very important role, especially in providing technological information to farmers through farmer Groups, advocating and motivating farmers regarding good and correct cocoa cultivation, as well as the process of fermented cocoa processing and information on cocoa prices and quality (Abubakar et al., 2013; Listyati et al., 2014; Sisfahyuni et al., 2011).

### Farmer Groups as a Discussion Group

Farmer Groups as a discussion place are established to provide information about cocoa revitalization activities. In the discussion activity, the farmer Groups work with the extension workers and guide them to solve problems regarding the Revitalization of cocoa plants. Also, cocoa farmers obtain information from the extension workers and guide about the problem faced by cocoa farmers (Table 4).



**Table 4.** Farmers Group for Discussion Forum

No	Facts	Score Interpretation (%)	Likert Scale
1	Extension workers and guides perform discussions with farmer Groups routinely	70	Participative
2	Extension workers and guides provide solutions to problems faced by farmer Groups in cacao revitalization	75	Participative
3	The farmers' group members implement the solution provided by Extension workers and guides	62	Participative
4	Members' activeness in discussion	70	Participative
5	Problems faced by farmer Groups in cacao revitalization	75	Participative

Table 4 clearly shows that farmer groups play a role as a place for discussion. The farmer groups are a place for its members to get solutions to every problem they get in cocoa farming. Farmer Groups complain about the ridiculously high cost of fertilizer, which makes farmers unable to buy fertilizer for their cocoa plants. As long as fertilizer is expensive, farmers rarely fertilize their cocoa. Meanwhile, the pests that attack cocoa farmers are cocoa pod borers, squirrels, and expensive poisons for spraying grass. Facing these problems, the farmer Groups formed a place for discussion attended by group members, leaders, extension workers, village heads, assistants, and from the relevant agencies (Akudugu et al., 2012; Albus & Ro, 2017).

### Farmer Groups as a Learning Process

Farmer Groups are formed as a place for learning, i.e., for group members and leaders to communicate to increase knowledge in cocoa plant revitalization. In this place, the group members obtain much knowledge, conveyed by extension workers and guides about cocoa As clearly presented in Table 5, that farmer groups as a place of learning, that is, play a role. Farmer groups as a place of learning, namely farmer groups, are a place for members to get knowledge directly from extension workers and mentors. And the farmer groups saw firsthand what the instructors and assistants taught them, and the farmers also directly practiced it in their gardens. One of the lessons learned by the farmer groups is how to maintain good cocoa. With good cocoa maintenance, farmers can get the maximum cocoa yield. The function of farmer Groups as a learning class is very significantly related to each participation stage in the planning, implementation, utilization, and evaluation stages (Ramadoan et al., 2013; Suryantini, 2003)

**Table 5.** A Farmers Group for Learning Process

No	Facts	Score Interpretation (%)	Likert Scale
1	Group farmers can distribute the knowledge to other absent groups	37	Lowly-participative
2	Extension workers and guides cooperate in establishing a learning place and providing knowledge for farmer Groups	20	Lowly-participative
3	Cooperation among members in the learning place for better cacao maintenance	62	Participative
4	Farmer Groups plan and carry out meetings to revitalize the problems faced by farmers in cocoa cultivation	75	Participative
5	Farmer Groups utilize the learning place for cacao cultivation	62	Participative

### Farmer Groups as a Collaborative Platform

Farmer Groups as a collaborative place mean that the groups are a place for collaboration with extension workers, guides, and other groups who carry out cocoa cultivation or Revitalization. This collaboration needs farmers' group members to manage their cocoa to obtain information from other groups on maintaining good cocoa. Table 6 presented that Farmer Groups has a collaboration role. Farmer groups as a collaboration carried out by farmer groups and their members regarding cocoa maintenance in the form of pruning using either scissors or machetes. The cooperation carried out by farmer Groups is in the form of pruning because pruning is a cocoa maintenance activity and requires the right technique so that not all members of the farmers' group understand it well; some farmers rarely prune their cocoa. Why does the pruning get direct sun if it is not pruned, the cocoa is lush; normally, it bears little fruit, while when it is pruned, it has lots of flowers/fruits. Meanwhile, planting cocoa requires proper spacing so that farmers do not plant their cocoa carelessly. This is in line with the opinion (Hermanto & Swastika, 2011) that increasing group members' participation will increase the group's dynamics. This dynamic will provide the greatest opportunity for members to work together and participate in group activities to achieve common goals (Santoso & Darwanto, 2015).



**Table 6.** Farmers Group for A Collaborative Platform

No	Facts	Score Interpretation (%)	Likert Scale
1	Collaboration between the head of the farmers and members performs well	60	Participative
2	The head of farmer groups in coordinating the members to participate in the activities	62	Participative
3	The farmers' group members perform their roles well	58	Participative
4	The farmer groups gain benefits by collaborating with other groups	64	Participative
5	Farmer groups work together with other groups to conduct cocoa maintenance	75	Participative

### 3.2. Indicators for Local Farmers' Organization Participation in Cocoa Revitalization

As clearly depicted in Table 7, the average value of each indicator in the institutional role of farmers in supporting the cocoa crop revitalization program. The first is a forum for sharing information in the category of quite a role because farmers who are members of farmer Groups do indeed get information about cocoa cultivation. This is in line with research that stated that institutional innovation through the establishment of land transfer service centers to promote the land leasing market and reduce transaction costs, policy support to accelerate land consolidation, and agricultural mechanization services were the main driving forces in the evolution of China agricultural operations (Huang & Ding, 2016).

**Table 7.** Farmers' group participation indicator

No	Indicator	Average (%)
1	Information Sharing	49.20
2	Discussion forum	70.40
3	Learning process	51.50
4	Collaborative platform	63.80
<b>Average</b>		<b>58.72</b>

Furthermore, the second indicator plays a role in the discussion place so members can exchange ideas between the chairperson and members of the farmers' group regarding the problems faced. A third indicator is a place for learning, namely playing a role, in this case, this occurs because previous members did not understand cocoa cultivation now they know after joining the farmers' group, while the indicator of cooperation means that the role is caused by group members working together to solve a problem faced by farmers regarding cocoa maintenance carried out by extension workers, assistants, field technicians, and *manbun*. It indicates that the four indicators in the institutional role of farmers in supporting the cocoa plant revitalization program, are in the role category with an average value of 58.72%.

#### 4. Conclusion

The participation of Local Farmers' Organizations in supporting the cocoa plant revitalization program is included in the participatory category. In detail, farmer groups as information forums have a participation value of 49.20%, discussion sites have a value of 70.40%, learning sites have a value of 51.50%, and collaborative places have a value of 63.80%. Thus, the average value of the participation assessment is 58.72%. This means that the participation of local farmers in supporting the cocoa plant revitalization program is very high in the program. This implies that the government should strengthen the role of local farmer's organizations to encourage cocoa production in the country.

#### References

- Abubakar, I., Yantu, M. R., & Asih, D. N. (2013). Kinerja Kelembagaan Pemasaran Kakao Biji Tingkat Petani Perdesaan Sulawesi Tengah : Kasus Desa Ampibabo Kecamatan Ampibabo Kabupaten Parigi Moutong. *E-J. Agrotekbis*, 1(1), 74–80.
- Akudugu, A. M., Guo, E., & Dadzie, S. K. (2012). Adoption of modern agricultural production technologies by farm households in Ghana: what factors influence their decisions? *Journal of Biology, Agriculture and Healthcare*, 2(3), 1-14.
- Albus, H. & Ro, H. (2017). Corporate social responsibility: the effect of green practices in service recovery. *Journal of Hospitality and Tourism Research*, 41(1), 41-65. <https://doi.org/10.1177/1096348013515915>.
- Anantanyu, S. (2011). *Kelembagaan Petani: Peran Dan Strategi Pengembangan Kapasitasnya*. 7(2), 102–109.
- Arsyad, M., Nuddin, A., Yusri, M., Zamhuri, & Yusuf, S. (2014). The Poverty Reality of Coastal and Agriculture: How Severe the Seaweed Farmers and Cocoa Smallholders Are? *International Journal of Agriculture System*, 2(2), 119–131. <http://pasca.unhas.ac.id/ijas/pdf/3> IJAS Vol. 2 Issue 2 December 2014.pdf
- Budiman, K., Prihantini, C.I., Hasbiadi & Masitah. (2020). Financial Analysis of Annual Plant-Cocoa Intercropping Farming at Kolaka Regency. IOP Conf. Ser.: Earth Environ.

- Sci. 518 012024. <https://doi.org/10.1088/1755-1315/518/1/012024>
- BPS. (2022). Statistik Perdagangan Luar Negeri Ekspor Impor. In *Statistik Perdagangan Luar Negeri Ekspor Impor*.
- Eman, J. J., Baroleh, J. . ., & Loho, A. E. (2017). Peran Pendamping Terhadap Pemberdayaan Kelompok Tani Kakao Di Kabupaten Bolaang Mongondow Utara. *Agri-Sosioekonomi*, 13(1A), 1. <https://doi.org/10.35791/agrsosek.13.2.2017.16340>
- Haryanto, Y., Rusmono, M., Aminudin, A., Pury Purboingtyas, T., & Gunawan, G. (2022). Analisis Penguatan Kelembagaan Ekonomi Petani pada Komunitas Petani Padi di Lokasi Food Estate. *Jurnal Penyuluhan*, 18(02), 323–335. <https://doi.org/10.25015/18202241400>
- Hermanto, & Swastika, D. K. S. (2011). Analisis kebijakan pertanian = Agricultural policy analysis. *Jurnal Analisis Kebijakan Pertanian*, 9(4), 371–390.
- Huang, J., & Ding, J. (2016). Institutional innovation and policy support to facilitate small-scale farming transformation in China. *Agricultural Economics (United Kingdom)*, 47, 227–237. <https://doi.org/10.1111/agec.12309>
- Kaskoyo, H., Febryano, I. G., & Yuwono, B. (2017). Kajian Kelembagaan Gabungan Kelompok Tani Dalam Program Kemitraan Di Kphp Way Terusan. *Jurnal Hutan Tropis*, 5(1), 1–7.
- Listyati, D., Wahyudi, A., & Hasibuan, A. M. (2014). Penguatan Kelembagaan untuk Peningkatan Posisi Tawar Petani dalam Sistem Pemasaran Kakao. *Jurnal Tanaman Industri Dan Penyegar*, 1(1), 15. <https://doi.org/10.21082/jtidp.v1n1.2014.p15-28>
- Managanta, A. A., Sumardjo, Sadono, D., & Tjitropranoto, P. (2019). Institutional Support and Role in Increasing the Interdependence of Cocoa. *Jurnal Tanaman Industri Dan Penyegar*, 6(2), 51–60. <http://ejurnal.litbang.pertanian.go.id/index.php/bultri/article/view/10274/8556>
- Masitah, M., & Hasbiadi, H. (2022). Daya Saing Komoditas Ekspor Unggulan Kakao Sulawesi Tenggara, Indonesia di Pasar Internasional. *Agro Bali : Agricultural Journal*, 5(3), 559–567. <https://doi.org/10.37637/ab.v5i3.1025>
- Prihantini, C. I. & Lutfiyanto. (2019). Analisis persepsi wisatawan terhadap kualitas atraksi dan fasilitas wisata di kawasan wisata Jumiang, Kabupaten Pamekasan (pp 39-47). Prosiding SEMNASDAL (Seminar Nasional Sumberdaya Lokal) II, Pamekasan 30 November 2019. Pamekasan): UIM Press.
- Prihantini, C.I., & Lutfiyanto. (2020). Employee Perceptions of Institutional Quality of Tourism Area in Jumiang, Pamekasan District. *Jurnal Penelitian Sosial dan Ekonomi Kehutanan*, 17 (3): 177-192. <https://doi.org/10.20886/jpsek.2020.17.3.177-192>
- Rahayu, S. E., & Harahap, M. (2018). Model Peningkatan Daya Saing Petani Dengan Pendekatan Koperasi Agribisnis di Kota Medan. *JASc (Journal of Agribusiness Sciences)*, 2(1), 18–25. <https://doi.org/10.30596/jasc.v2i1.2590>
- Ramadoan, S., Muljono, P., & Pulungan, I. (2013). Peran PKSM Dalam Meningkatkan Fungsi

- Kelompok Tani Dan Partisipasi Masyarakat Di Kabupaten Bima, NTB. *Jurnal Penelitian Sosial Dan Ekonomi Kehutanan*, 10(3), 199–210.  
<https://doi.org/10.20886/jsek.2013.10.3.199-210>
- Riduwan. (2011). *Skala Pengukuran Variabel-variabel Penelitian*. Alfabeta.
- Santoso, P. B. & Darwanto. (2015). Strategi penguatan kelompok tani dengan penguatan kelembagaan. *Jurnal Ekonomi Pembangunan*, 16(1), 33-45.
- Sisfahyuni, Saleh, M. S., & Yantu, M. R. (2011). Institutional of marketing for cocoa beans at farm level in Parigi-Moutong Regency, Central Sulawesi Province. *Jurnal Agro Ekonomi*, 29(i), 191–216.  
[http://pse.litbang.deptan.go.id/ind/index.php?option=com\\_content&task=category&sectionid=8&id=112&Itemid=42](http://pse.litbang.deptan.go.id/ind/index.php?option=com_content&task=category&sectionid=8&id=112&Itemid=42)
- Sudaryono. (2012). *Statistika deskriptif for IT*. CV. Andi Offset.
- Suryantini, H. (2003). Kebutuhan Informasi dan Motivasi Kognitif Penyuluh Pertanian Serta Hubungannya dengan Penggunaan Sumber Informasi (Kasus di Kabupaten Bogor, Jawa Barat). *Jurnal Perpustakaan Pertanian*, 12(2), 33–41.