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Development of Institutions, Participation and Independence of Farmers' Groups in Supporting the Palm Cattle Integration Program in Paser Belengkong

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Abstract

The objectives of the study are: (1) strategies in improving management and changing mindset (2) analyzing the influence of farmer groups that are still unstructured. (3) analyze efforts in fostering independence and participation. (4) analyze the steps in creating social relationships as well as intense communication. The research method used is quantitative method with data collection instruments. The results of the study are: (1) Strategies in improving management and changing mindsets have a significant influence (2) Unstructured institutions can have a negative influence (3) Independence and participation of members can have a negative influence (4) Social relationships and intense communication can have a significant influence on the development of farmer groups. Conclusion: (1) A mindset that has not been well managed will have a negative influence (2) Various efforts need to be made in developing farmer group institutions (3) the ability of farmer groups to make decisions (4) Social relations and communication that are not harmonious and intense can have a negative influence on farmer groups.

Keywords: Institutional, Participation, Self-Reliance, Officer, Farmer, Farmer Group

Introduction

Livestock development is part of the development of the agricultural sector which has a strategic role in meeting increasing food needs increases (Dinesha et al., 2024), as well as as a consequence of the increase in population in Indonesia. The development of people's consumption patterns determines policy direction Development in the livestock sub-sector is also experiencing changes (X. Wang et al., 2024). According to (Soeprapto and Abidin, 2006), At the beginning of independence, agricultural development was more directed to meet

carbohydrate needs, but currently, when income per capita of the Indonesian people is increasing, then agricultural policy begins shifted to meet protein needs.

Farmer group institutions have a very important role in running the wheels of organization in farmer groups (Gangkur et al., 2023). Efforts to increase independence and the welfare of farmers, as well as sustainable agriculture requires existence an institution (Basri et al., 2023). Institutions are a forum where every party related parties can jointly study and find a way out of each problem faced by farmers. Traditionally, farmer institutions have developed from generation after generation, but the challenges of the times demand more institutionalization appropriate to meet farmers' needs (Anantanyu, 2011). Local institutions which function as a forum for solving problems, continuously independently.

Institutional development, participation and independence of farmer groups has a very important role and contribution to the development of animal husbandry (Malaxa & Berzovan, 2024). One way is through program-based livestock population development integration of palm cattle. The livestock sub-sector places its main priority on development of cattle farming business. Population increase is very necessary meeting the need for national meat self-sufficiency (Leung et al., 2024)(Leung et al., 2024). Some efforts This has been done, including increasing the number of births of calves/cow calves and increase in prospective breeding stock. Apart from these efforts, through the Ministry Agriculture and the Indonesian National Police have also collaborated in a program to save productive/pregnant female cows (L. Wang et al., 2024). Rescue program It is hoped that this productive/pregnant female parent will be so that the breeding community can get more maximally maintain his female cattle, so that the cattle population can grow continue to increase weakened because it was eroded by centralized and massive development (Adina, 2012). Apart from that, farmer institutions are only positioned as a tool for implementing government projects, not yet as an effort to empower which is more basic (Syahyuti, 2007).

Accelerate the achievement of increasing domestic meat production in order to meet consumption demands of the Indonesian people (Ekun et al., 2024), reducing dependence on imports meat and feeder livestock as well as increasing the efficiency and effectiveness of cultivation businesses ruminant livestock, the Ministry of Agriculture launched a Special Effort program Acceleration of Pregnant Cow and Buffalo Population (UPSUS SIWAB). Upsus SIWAB includes two main programs, namely increasing population through Artificial Insemination (AI) and Intensification of Natural Mating (INKA). The program is outlined in the Regulations Minister of Agriculture Number 48 / Permentan / PK.210 / 10 / 2016 concerning Special Efforts Acceleration of Increasing the Population of Pregnant Cows and Buffaloes, signed by the Minister Agriculture on October 3 2016 which was then replaced by Regulations The latest is Minister of Agriculture Regulation Number 17 of 2020 concerning Improvement Production of Cattle and Buffalo Mainstay Commodities of the Country (SIKOMANDAN). this effort carried out as a form of the government's commitment to pursuing meat self-sufficiency President Joko Widodo's target is to be achieved in 2026 as well realizing an independent Indonesia in fulfilling food of animal origin, and while improving the welfare of smallholder farmers.

Increasing the cattle population in Paser Regency, especially compliance the need for food from livestock, besides being actively implemented This policy has also implemented other efforts such as maximizing carrying out pregnancy checks, carrying out livestock introduction activities / collecting livestock at one point, rescuing productive/pregnant female cows as well implementation of livestock birth intensification activities.

Literature Review

Institutional Concept

According to Anantanyu (2011), farmer institutions contribute to acceleration socioeconomic development of farmers, accessibility to agricultural information, accessibility to capital, infrastructure and markets and adoption of agricultural innovation. The existence of farmer institutions will make things easier for the government and stakeholder other interests in facilitating and providing empowerment to farmers. The existence of farmer institutions depends on institutional development policies by all parties. Coaching is needed in order to grow and development of farmer groups into strong and internally independent farmer groups increase the income of farmers and their families. Growth and development Farmer groups are based on the principle of, by and for farmers (Wahyuni, 2015).

Institutional development of farmers needs to be carried out continuously, directed at changing farmers' mindsets in implementing agribusiness systems. Institutional development of farmers is also directed at growth and development farmer groups and farmer group combinations in carrying out their functions, as well as increasing the capacity of farmer groups and farmer group associations through development of cooperation in the form of networks and partnerships.

The current condition of farmer groups requires internal guidance and assistance responding to the challenges of changing times. The development of farmer groups is directed at increasing the ability to carry out its functions, increasing the ability of para members in developing agribusiness, strengthening community groups to become more resilient, strong and independent. The characteristics include, among other things, the existence of management meetings held periodically and continuously, there is a work plan groups together and implemented by implementers in accordance with mutual agreement, and at the end of each implementation, a participatory evaluation is carried out, administratively there are rules/norms that are agreed upon and adhered to together, there are facilities for joint business activities in the upstream and downstream sectors up to with commercial and market-oriented farming, as a source as well information and technology services for the businesses of farmers in general and members farmer groups in particular, there is a channel of cooperation between farmer groups and other parties, as well as the presence of business capital, whether contributions from members or allowance for results of group business/activities.

Problems that often arise in farmer institutions include: the quality of managing farming businesses efficiently is still low ability to collaborate with agribusiness actors and institutions other rural economies, still weak institutional capacity of farmers and farmer economic

institutions (not yet legal entities), access is still limited farmers regarding sources of financing/capital and marketing and so on limited access of farmers to science and technology and information.

The solution to overcome these problems is to become a farmer group resilient, namely through group empowerment. Targets to be achieved is institutional empowerment of farmer groups by developing potential what is in an individual becomes strength in a group because we know together with empowering human resources is an important key to achieving quality of a farmer group.

Community empowerment

Empowerment or empowerment is the process of building dedication and high commitment so that farmer groups can be very effective in achieve its goals in a quality manner. In farmer groups that have Empowered relationships will be created between people who share with each other authority, responsibility, communication, expectations, and recognition as well award. Such an employment relationship is very different from an employment relationship which is traditionally based on hierarchical relationships within farmer groups. Asset The most valuable thing in a farming group is the people who work there depth as demonstrated by knowledge, skills, mental attitude, creativity, their motivation and ability to collaborate. For counselor agriculture, empowerment is a need that they must obtain.

On the other hand, administrators start from the highest to the lowest empowerment is a function that they must perform or provide to his group. For a group of farmers who desire quality performance continuously increasing empowerment is a process that must occur. No process empowering a farmer group will be difficult to win the competition which is getting louder nationally and internationally.

Basically, empowerment is a way to implement cooperation in farmer groups so that everyone participates fully. In Group farmers who have been empowered, the administrators and members feel responsible not only about the work he does, but also about the whole farmer groups to function better. Farmer groups that have Empowered people are expected to work together to improve their performance sustainable, achieving high levels of productivity and quality. Dynamics of a Farmer groups lie in the creativity, participation and initiative of the people is in it. If farmer groups and existing people want quality better performance, then what must be done is to find out how how to harness the potential for creativity and initiative that exists in the person.

The agricultural sector has a strategic role, especially as a provider food for the Indonesian people, making a real contribution in providing food and materials industrial raw materials, bioenergy, labor absorption which will have an impact on reducing poverty levels and preserving the environment. For Realizing sovereignty and food independence requires Main Actors and Businessmen. Capacity and ability of Main Actors and Business Actors continues improved, one of which is through counseling with a coaching approach farmer institution which include institutional growth and development farmers, so that farmers can

come together to grow and develop the institution becomes a competitive Farmer's Economic Institution (KEP). high, productive, implementing good business governance, and sustainable.

Toto Rudianto (2019) explains the essence of empowering farmer groups This is the delegation of power and decision making to different levels lower by using the concept of giving a vision for the future, involve all members in an activity so that they can automatically grows a sense of pride in themselves, honor and sense responsibility.

Society participation

Participation is closely related to development activities, so that business growing and developing community participation occupies a position very important in the entire development process in a broad sense. Participation Farmer group members are an inseparable role in efforts to develop farmer group institutions. According to Mardikanto (2007) participation is a person's participation in an activity as a person the act of taking part in an activity with the intention of gaining benefit. Mardikanto further explained that participation is a form active and voluntary involvement and participation, both for reasons from within (intrinsic) and from outside (extrinsic) in the entire process activities that include: decision making in planning, implementation, monitoring and evaluation of the results achieved.

Community participation in development according to Slamet (2003) is possible is defined as community participation in development, taking part development activities, and participate in utilizing and enjoying the results of development. Meanwhile, according to Hasyim (2006) Farmer participation in Participating in activities in farmer groups is influenced by many factors. A number of Factors related to the level of participation include factors originating from society itself, for example from socio-economic characteristics farmers themselves. In the sociology dictionary it is stated that participation is a person's participation in a social group to take part in community activities, outside of their own work or profession (Novisma & Iskandar, 2023).

Hikmat (2006:3) suggests that participation is a component important in generating independence in the empowerment process. Ofuoku and Isife (2009:54) conveys the need for adoption in participatory planning for all stakeholders in order to build reputation. Pali et.al. (2005:98) stated about monitoring and evaluating participation in society is a tool for empowering local communities of poor farmers to improve well-being of his life (Cedano-Castro et al., 2023). Farmer groups are also an important point for implement and translate the concept of farmers' rights into policies, strategies, and worthy programs in a unified whole and inward development operational steps (Djiwandi, 1994).

Mastering abilities in the form of knowledge and skills only not enough (Mossie et al., 2023). Farmer group members need to participate actively as well have the willingness to apply their knowledge and skills in order to be able to produce higher quality performance (Mesfin et al., 2023). To produce quality performance better motivation, preparation of human resources and its institutions in a programmatic, systematic and sustainable manner which is very determining factor for the success and sustainability of development farmer groups in achieving common goals (Zhang et al., 2023).

Concept of Independence

In the organizational aspect, independent farmer groups are groups farmers who are able to make decisions according to developments and needs farmers and their members. Ability to make decisions in every aspect Activities must be supported by the capabilities of members of the farmer group within management of existing organizational components.

According to Wrihatnolo and Dwidjowijoto (2007:148) stated that Community empowerment itself is centered on the economic sector because the main target is community independence. Hikmat (2006:3) suggests that people who have achieved collective goals are empowered through independence, it is even a necessity to be more empowered through their own efforts and accumulated knowledge, skills and other resources in order to achieve their goals without relying on help from external relations.

The independence of farmer groups can be interpreted as an attitude of the group farming obtained cumulatively, where farmer groups will continue to learn to be independent in dealing with various situations they face, so that in the end, farmer groups will be able to choose their own path to achieve this develop better and more steadily. Institutional independence of farmers, Department of Agriculture (2007) through Minister of Agriculture Regulation Number: 273/Kpts/OT.160/4/2007 concerning Guidelines for Farmer Institutional Development stated that the development of farmer institutions was directed at strengthening Farmer groups become strong and independent farmer organizations.

Livestock Population Development Efforts

This is related to the strategic role of farmer group members as providers people's food, especially in meeting the community's animal protein needs, there are several efforts made to maximize implementation regulations regarding increasing the cattle population in Paser Regency. One of including through the ministry of agriculture program which is one flagship program from the Directorate General of Animal Husbandry and Animal Health. The program referred to is the implementation of Special Effort activities Parent cows must be pregnant (Upsus Siwab) as outlined in Minister of Agriculture Regulation Number 48 / Permentan / PK. 210 / 10 / 2016 About Efforts Specifically for the Acceleration of Increasing the Population of Pregnant Cows and Buffaloes signed by the Minister of Agriculture on 03 October 2016 replaced by Minister of Agriculture Regulation Number 17 of 2020 concerning Increasing Cattle and Buffalo Production, the Country's Mainstay Commodities (SIKOMANDAN) which was determined on May 12 2020.

There has been quite a lot of policy implementation through the Sikomandan program problems encountered both from handling livestock, management to the problem of the final output of the activity is birth. Implementation of Artificial Insemination (IB) which in fact is the leading sector of Sikomandan in reality can only be done on livestock that are raised intensively and semi-intensively. Meanwhile, it is quite well known that cattle maintenance in Paser district is 65% higher refers to an extensive maintenance pattern with an integrated cattle-palm system. In carrying out livestock birth intensification activities, directly involving

farmers/breeders, livestock officers, Technical Management Unit/UPT Animal Husbandry, Department / Sector in charge of animal husbandry functions and the Government.

Research Method

Research design is related to institutional development, participation and independence of farmer groups in an effort to support the palm oil cattle integration program in Pasir Belengkong District, Paser Regency, East Kalimantan Province, namely using a research design with quantitative methods. The population in this study was 620 members of farmer groups breeders in Pasir Belengkong District, Paser Regency. In this study the total sample size was 25/100 x 620 breeders = 155 Breeders. Primary data in this research was obtained directly from the object this research was through observation and interviews with breeders. Secondary data in this research is data obtained in the form of publication. In this research, researchers made observations by doing direct observation of livestock locations. In this research, researchers conducted interviews with livestock owners. In this research, researchers will distribute questionnaires to livestock owner. The analysis in this research involves SWOT analysis. SWOT analysis consisting of on Strength (strength), Weakness (weakness), Opportunity (opportunity) and Threts (threat), in principle, is a strategy that pays attention to the internal an organization consisting of strengths and weaknesses and external conditions consisting of opportunities and threats. Internal conditions are conditions that are characteristic controlable (can be influenced/controlled), while external conditions are more characteristic uncontrolabel (cannot be influenced/controlled). With the use of analysis SWOT in this research method, the strengths and weaknesses are the internal factors of the research will be known with certainty. Likewise with existing opportunities and threats that will arise during the process research is underway.

Result/Findings

The influence of the strategy that will be implemented in an effort to improve management and changing the mindset of farmer group members in supporting the program integration of palm cattle. Management is a process carried out in organize activities carried out by individuals or groups. System or management must be carried out to meet the targets to be achieved by individuals or groups in collaboration by optimizing existing resources. From the results of the t test for variable X it is 5.991 if compared with the t table of 0.676 or 5.991 > 0.676, it can be concluded that the strategy is carried out in an effort to improve management as well changing the mindset of farmer group members has a significant influence in supporting the palm oil cattle integration program. Meanwhile, from regression calculations simple (Y = 10.065-0.037(X)) that has been carried out can be concluded management and mindset of existing farmer group members can has a negative influence on the palm oil cattle integration program.

The influence of the efforts made in developing farmer groups is still not structured either from an institutional point of view or as a group a business entity. From the results of the t test

for variable X it is 5.991 when compared with t table 0.676 or 5.991 > 0.676, it can be concluded that the efforts carried out in developing farmer groups that are still unstructured has a significant influence on farmer group institutions. Meanwhile, from simple regression calculations (Y = 10.065-0.037(X)) you can tt was concluded that unstructured farmer group institutions could provide this negative influence on the farmer group itself.

The influence of the efforts made in fostering independence and participation of farmer group members so that farmer group institutions can improve progress and develop. The independence of farmer groups can be defined the ability of farmer groups to make decisions in accordance with developments and needs of farmers and their members. Group independence Farming requires a process that is not easy. Retrieval ability Decisions in every aspect of activities must be supported by the abilities of the staff members of farmer groups in managing existing organizational components. From The t test result for variable X is 5.991 when compared with the t table of 0.676 or 5.991 > 0.676, it can be concluded that the efforts made can have a significant influence in fostering independence and participation of farmer group members so that farmer group institutions can improve progress and develop. Meanwhile, from the simple regression calculation (Y = 10.065-0.037(X)) can be translated as member independence and participation Farmer groups can have a negative influence on progress and development of farmer groups.

The influence of the steps taken in creating social relations and intense communication between members of farmer groups, officer livestock in the field and livestock employees in internal agencies support, supervise and handle farmer groups in developing development of the farmer group. Based on research results, from answers 66 people were less active, 63 people were quite active and 26 people were active. Meanwhile, according to respondents, the relationship between livestock officers in the field is also the livestock employee at the agency explained that a relationship had been established which is quite good. This can be seen in the respondents' answers as many as 78 respondents answered that it was well established, 3 respondents answered not well connected, 68 respondents answered well and 6 respondents answered answered very well. Related to the role of livestock officers towards farmer groups, based on a recapitulation of answers given by Respondents were dominated by playing quite a good role as many as 82 respondents, playing a role 8 respondents played a bad role, 66 respondents played a good role and played a role very good as many as 3 respondents. From the results of the t test for variable X it is 5.991 if compared with the t table of 0.676 or 5.991 > 0.676, it can be concluded that the steps taken in creating social relationships as well intense communication between members of farmer groups, livestock officers in the field and livestock employees in agencies provide influence which is significant in supporting, supervising and handling internal farmer groups develop the development of farmer groups. Meanwhile from calculations simple regression (Y = 10.065-0.037(X)) can be concluded that in creating social relationships and intense communication between group members Farmers, livestock officers in the field and livestock employees in agencies can have a negative influence in supporting, supervising and handling farmer groups in developing the development of a farmer group.

Conclusion

Efforts and strategies carried out in an effort to improve management and changing the mindset of farmer group members has provide a significant influence in supporting the integration program palm cattle. Meanwhile, the mindset of farmer group members is not yet managed well will have a negative impact towards the palm oil cattle integration program.

Various efforts need to be made to develop institutions Farmer groups are still unstructured, so it is hoped that groups Farming can be better and develop better from the institutional point of view of the group or as a business entity.

The ability of farmer groups to make decisions in accordance with developments and needs of farmers and their members, where the ability to make decisions in every aspect of the activity must be supported by the ability of farmer group members in management existing organizational components. There are various efforts and steps. It is hoped that the concrete steps taken can change and provide quite good influence in fostering independence and participation members of farmer groups so that farmer group institutions can improve progress and develop both from the point of view of the independence of farmer groups and from the perspective of participation of the farmer group members themselves.

Steps taken in creating social relationships as well intense communication between members of farmer groups, livestock officers in the field and livestock employees in the agencies providing significant influence in supporting, supervising and handling farmer groups in developing the development of their farmer groups. Meanwhile, social relations and communication are disharmonious and intense between members of farmer groups, livestock officers in the field and employees Livestock farms located in agencies can have a negative influence on supporting, supervising and managing internal farmer groups develop the development of a farmer group.

References

- Awwaabiin, Salmaa (2021). Teknik Analisis Data: Pengertian, Macam, dan Langkahlangkahnya. https://penerbitdeepublish.com/teknik-analisis-data/
- Audina, Winda Sarah (2022, Juli 07). Contoh Teknik Analisis Data Kuantitatif, Pemula Wajib Tahu. https://www.dqlab.id/contoh-teknik-analisis-data kuantitatifpemula-wajib-tahu Biro Humas Sekretariat Provinsi Kalimantan Timur (2018). Derap Langkah Pembangunan Kaltim 2008 2018. Pemerintah Provinsi Kalimantan Timur. httml
- Basri, Z., Bulkis, S., Arsyad, M., & Bdr, M. F. (2023). Identifying Agribusiness Institutions and their Role in Increasing Cocoa Production: Evidence from Polewali Mandar, Indonesia. *International Journal of Sustainable Development and Planning*, 18(1). https://doi.org/10.18280/ijsdp.180105
- Bidang Peternakan dan Kesehatan Hewan (2019, Oktober). Data Dinas Pertanian Kabupaten Paser. Dinas Pertanian Kabupaten Paser.

- Development of Institutions, Participation and Independence of Farmers' Groups in Supporting the Palm Cattle Integration Program in Paser Belengkong
- Cedano-Castro, J. I., Jiménez, R., Huamán, A., Gutiérrez Reynoso, G., & Wurzinger, M. (2023). Farmers' perceptions and acceptance of crossbred guinea pigs in Mantaro Valley, Peru. *Tropical Animal Health and Production*, 55(2). https://doi.org/10.1007/s11250-023-03465-y
- Dinas Peternakan dan Kesehatan Hewan (2020, Desember 30). Dokumen Dinas Peternakan dan Kesehatan Hewan Kalimantan timur. Pemerintah Provinsi Kalimantan Timur
- Dinesha, S., Hosur, S. R., Toushif, P. K., Bodiga, D., Dechamma, N. L. D., Ashwath, M. N., & Pradhan, D. (2024). Sustaino-resilient agroforestry for climate resilience, food security and land degradation neutrality. In *Land and Environmental Management through Forestry*. https://doi.org/10.1002/9781119910527.ch9
- Ekun, V. S., Adenipekun, C. O., Idowu, O., & Etaware, P. M. (2024). Mushroom husbandry: A tool for pollution control and waste management with job opportunities and revenue for rural communities and farm settlements. *Waste Management Bulletin*, *1*(4). https://doi.org/10.1016/j.wmb.2023.08.001
- Gangkur, F., Cordanis, A. P., & Jandu, I. H. (2023). PENGUATAN KELOMPOK TANI MELALUI UPAYA PEMAHAMAN HAKIKAT KELOMPOK TANI. *JMM (Jurnal Masyarakat Mandiri)*, 7(3). https://doi.org/10.31764/jmm.v7i3.14887
- Kementerian Pertanian (2016, Oktober). Upaya Khusus Percepatan Peningkatan Populasi Sapi dan Kerbau Bunting. Peraturan Menteri Pertanian Nomor 48/Permentan/PK.210/10/2016.
- Kementerian Pertanian (2016, Desember). Pembinaan Kelembagann Petani Peraturan Meteri Pertanian Republik Indonesia nomor 67/PERMENTAN/ SM.050/12/2016
- Kementerian Pertanian (2017), Penjelasan Tentang Program UPSUS SIWAB https://nusakini.com/news/ini-penjelasan-tentang-program-upsus-siwabkementan
- Kementerian Pertanian (2020). Peningkatan Produksi Sapi dan Kerbau Komoditas Andalan Negeri. Peraturan Menteri Peraturan Menteri Pertanian Nomor 17 Tahun 2020.
- Lala (2010), Penelitian Kualitatif: Pengertian, Ciri-Ciri, Tujuan, Jenis, dan Prosedurnya. Gramedia Blog. https://www.gramedia.com/literasi/penelitian-kualitatif/
- Leung, F., Doherty, P. D., Liu, M., Metcalfe, K., Godley, B., & Lee, S. Y. (2024). Rise and fall of an avian oasis: Tracking the impacts of land use change in a key coastal wetland in the world's largest megalopolis. *Science of the Total Environment*, 906. https://doi.org/10.1016/j.scitotenv.2023.167231
- Mahkamah Konstitusi (2013, November). Pengujian Undang-Undang Nomor 19 Tahun 2013 tentang Perlindungan dan Pemberdayaan Petani terhadap Undang-Undang Dasar Negara Republik Indonesia Tahun 1945. Putusan Mahkamah Konstitusi Nomor 87/PUU-XI/2013 https://www.mkri.id/public/ content/persidangan/putusan/putusan_sidang_2081_87%20PUU%202013-UU_19_2013_Perlindungan&Pemberdayaan_Petani-telahucap-5Nov2014-%20wm ActionWiz.pdf
- Malaxa, D., & Berzovan, A. (2024). IDENTIFICATION OF ANIMAL RESOURCES FROM THE DOBROVĂŢ-LA LIVADĂ LATE IRON AGE SETTLEMENT (4TH-3RD CENTURIES BC). Journal of Ancient History and Archaeology, 10(2).

- https://doi.org/10.14795/j.v10i2.892
- Malotes. Jibran (2016. Desember). Strategi Pengembangan Usaha Peternakan Sapi Potong di Kecamatan Tinangkung Utara Kabupaten Banggai Kepulauan. Program Study Magister Agribisnis Program Pascasarjana Universitas Tadulako Kota Palu Sulawesi Tengah. file C://Users/EdiSuherman/Downloads/8318-27287-1-PB.pdf
- Materi belajar, Admin (2023, Mei 06). Pengertian Sampel Menurut Para Ahli dan Secara Umum. https://materibelajar.co.id/pengertian-sampel-menurut-para-ahli/
- Matondang, Rasali H dan Rusdiana, S (2013). Langkah Langkah Strategi Dalam Mencapai Swasembada Daging Sapi / Kerbau. Pusat Penelitian dan Pengembangan Peternakan. https://ppski.or.id/id/berita/246-target-pemerintahmendongkrak-angka-kelahiran-sapi,-jauh-panggang-dari-api.html
- Mesfin, D., Assefa, E., & Simane, B. (2023). Farmers and scientific-based assessment of soil quality in the Choke agroecosystem, Upper Blue Nile Basin, Ethiopia. *Environmental and Sustainability Indicators*, 19. https://doi.org/10.1016/j.indic.2023.100279
- Mossie, M., Gerezgiher, A., Ayalew, Z., Nigussie, Z., & Elias, A. (2023). Characterization of fruit production and market performance in northwest Ethiopia. *CABI Agriculture and Bioscience*, *4*(1). https://doi.org/10.1186/s43170-023-00149-3
- Novisma, A., & Iskandar, E. (2023). The study of millennial farmers behavior in agricultural production. *IOP Conference Series: Earth and Environmental Science*, 1183(1). https://doi.org/10.1088/1755-1315/1183/1/012112
- Priwanti S, Nani (2016, Mei 09). Meningkatkan Keberhasilan Perkawinan Sapi Potong dengan mengoptimalkan Perkawinan Alam dan IB. PP PPMKP Ciawi / dari berbagai sumber tabloid sinar tani. https://tabloidsinartani.com/detail/indeks/mimbar-penyuluhan/3571-meningkatkan-keberhasilan-perkawinan-sapi-potong-dengan-mengoptimalkan-perkawinan-alam-da
- Putri, Septiana. (2019). Analisis Kinerja Kelembagaan Gapoktan Sidolestari di desa Tulus Rejo Kecamatan Pekalongan Kabupaten Lampung Timur. Sekolah Tinggi Ilmu Pertanian (STIPER) Dharma Wacana Metro Lampung
- Rada (2021. Maret 05). Teknik Pengumpulan Data. Dosenpintar.com. https://dosenpintar.com/teknik-pengumpulan-data/
- Rudianto, Toto. (2012, April 03). Konsep Pemberdayaan Kelompok Tani (Deptan 2008). UPTD Pertanian Cibingbin. https://diatsujatman.wordpress.com/2012/04/03/pemberdayaan-kelembagaan-petani/
- Suresti, A dan Wati, R. (2012). Strategi Pengembangan Usaha Peternakan Sapi Potong di Kabupaten Pesisir Selatan.
- Suhbi, Andi Rezky Adzan (2015). Analisis Perkembangan Populasi Ternak Sapi Potong di Kabupaten Bulukumba. Universitas Islam Negeri Alauddin Makassar.
- Siswanto, Adhis (2018, April 13) Perlu, Sinergi dalam Upaya Peningkatan Populasi Sapi di Indonesia.
- Wang, L., Qin, T., Zhang, Y., Zhang, H., Hu, J., Cheng, L., & Xia, X. (2024). Antimicrobial Peptides from fish: Main Forces for Reducing and Substituting Antibiotics. In *Turkish*

- Journal of Fisheries and Aquatic Sciences (Vol. 24, Issue 1). https://doi.org/10.4194/TRJFAS23922
- Wahyudi, Tri,. Trisna Insan Noor,. dan Agus Yuniawan Isyanto. (2021). Strategi Pengembangan Usaha Peternakan Sapi Potong Rakyat. Jurnal Ilmiah Mahasiswa. Fakultas Pertanian Universitas Galuh. https://jurnal.unigal.ac.id/index.php/agroinfogaluh/article/view/5350
- Zhang, T., Wang, S., Liu, R., Liu, T., Zhang, Y., Yang, L., Kang, L., Xie, J., Jin, Y., & Duan, Y. (2023). Effects of different feeds on growth performance and meat quality of hybrid lambs. *Quality Assurance and Safety of Crops and Foods*, 15(1). https://doi.org/10.15586/QAS.V15I1.1252
- Zulkifli., Amri., dan Jenny Mulyadi. (2015, November). Populasi Sapi dan Pendapatan Peternak Sapi di Kecamatan Montasik Aceh Besar. Jurnal ekonomi dan Kebijakan Publik Vol. 2.
- Wang, X., Cheng, X., Liu, H., Mu, X., & Zheng, H. (2024). Food nutrition and toxicology targeting on specific organs in the era of single-cell sequencing. *Food Science and Human Wellness*, 13(1). https://doi.org/10.26599/FSHW.2022.9250006