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Research Article

The Significance of Agricultural Extension Activities for Wetland Rice Farmers in Serang, Indonesia

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ABSTRACT

In the context of Serang, Indonesia, agricultural extension activities have recently faced challenges related to reduced participation, as observed by the majority of agricultural extension officers. This reduced participation manifests through the limited attendance of farmers in meetings, the passive engagement of farmers and their respective groups in facilitating extension activities, and the generally muted response to agricultural technology content presented during these sessions. Conversely, fostering greater participation in agricultural extension activities can be achieved through coordinated efforts with supportive assistance or the provision of incentives. This study aims to assess the significance of agricultural extension activities for wetland rice farmers in Serang, Indonesia. It adopts a qualitative research approach, focusing on the phenomenology of extension activities within the realm of rice farming in Serang. Data analysis for this study employs Husserl's transcendental phenomenology data analysis method, which is incorporated within the interactive model data analysis framework. The information pertaining to the experiences of agricultural extension activities, as recounted by the informants (farmers), was extracted by identifying specific statements made by the farmer informants during interviews. A total of 133 individual verbatim statements provided by informants were systematically categorized. Three overarching themes, or units of meaning, emerged from this categorization, revealing the essence of agricultural extension activities and the informants' perceptions. These themes are as follows: Extension as a Source of Information, Extension as a Source of Technology, and Extension as a Source of Assistance. They encapsulate the texture and structure of the farmers' experiences with rice farming extension activities. The textural description highlights aspects closely linked to the transmission of information, technology, government initiatives, and assistance delivery. The structural aspect examines the meaning of extension activities within the economic, learning, and participation contexts of the participants. Subsequently, the combined meaning and essence of the rice farming extension experiences for each farmer informant are synthesized, collectively painting a comprehensive picture of their experiences. These experiences extend beyond the acquisition of agricultural knowledge and technology; they also encompass the provision of much-needed assistance for farmers to effectively adopt and implement these innovations.

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INTRODUCTION

Agriculture stands as one of the most pivotal sectors in underpinning food security, given that sustenance is a fundamental human requirement. According to the stipulations of Law No. 18 of 2012, food is a cornerstone commodity and a key stratagem for Indonesia, recognizing it as a fundamental human necessity that necessitates a collaborative endeavor by both the government and society. Food security is epitomized by the presence of an adequate, safe, diverse, nutritious, equitable, affordable food supply that respects the religious, cultural, and belief systems of the community (Ferguson et al., 2023).

The pursuit of meeting the populace's nutritional needs hinges on the sustainable growth of the agricultural sector and the fortification of competent human resources (HR). This equips primary and agricultural business participants with the wherewithal to leverage economic prospects, drawing from essential insights on technology, capital, and market dynamics essential for advancing their farming endeavors. Consequently, agricultural extension emerges as a strategic endeavor in agricultural development, spanning both regional and national contexts. Through agricultural extension, agricultural knowledge is systematically disseminated to the farming community, providing them with a deepened comprehension, augmented attitudes, and enhanced skills that bolster their business competitiveness and individual prosperity (Fadamiro et al., 2022; Tamsah & Yusriadi, 2022).

The agricultural landscape in Banten is auspicious, marked by several key facets. Firstly, its strategic geographical location places it in proximity to consumers and markets. Secondly, the region boasts relatively robust infrastructure, which leads to diminished transportation costs. Thirdly, Banten serves as a pivotal trade hub, accentuated by the presence of international ports and airports. Moreover, the steady population growth in Banten translates into increased food consumption needs, signifying promising opportunities for agricultural enterprises (Putri, 2019).

In the context of Serang, agriculture plays a significant role in the realm of economic development. The potential of this agricultural sector is discernible through vast expanses of arable land, the cultivation of staple crops such as rice and corn, the growing availability of agricultural human resources, and the rapid proliferation of agricultural technology and equipment.

A salient feature in the current agricultural landscape in Serang is a perceived lack of participation in agricultural extension activities, with this observation stemming from the scant attendance of farmers in meetings, farmers and their groups showing limited initiative in orchestrating activities conducive to the implementation of agricultural extension, and farmers exhibiting muted responses to the technological content delivered during these initiatives. Conversely, it is conceivable that agricultural extension endeavors could foster more active participation if harmoniously aligned with support mechanisms or incentivized interventions.

This study is geared toward unraveling the significance of agricultural extension activities for wetland rice farmers in Serang. While previous research has emphasized the pivotal role of extension activities in steering behavioral changes from the perspective of extension stakeholders, research scrutinizing the significance of extension for wetland rice farmers remains relatively underexplored.

Amanah (2007) delves into the profound implications of extension and its role in effecting transformations in the behavior of individuals, groups, and communities. It highlights how misinterpretations of extension by the public result from incongruities between the execution of extension and the established principles. The core tenet of extension hinges on the enhancement of community behavior via non-formal educational methodologies, enabling individuals to independently navigate and resolve the challenges they face. Although extension employs a myriad of approaches, it consistently prioritizes a participatory framework, encompassing diverse methods, all tailored to address the needs of extension participants while ensuring sustainability.

Another study, by Setiawan (2005), examines a spectrum of agricultural extension issues. These issues exhibit substantial variability, contingent upon the particular scientific vantage point from which they are viewed. The fundamental role of extension lies in assisting farmers in making decisions by presenting a range of alternative solutions to the issues at hand. However, the prevailing issue in contemporary extension activities is the prevalent shift toward a service-oriented model, as opposed to the original intent of empowering farmers to independently make informed decisions. Furthermore, it is beset by challenges stemming from farmers' limited knowledge and insight into understanding problems, devising solutions, and selecting the most appropriate problem-solving strategies to realize their goals.

In a separate inquiry, Putri et al. (2019) investigate farmers' engagement in extension activities and their adoption of wetland rice fertilization in Kersamanah, Garut, Indonesia. The study reveals that the majority of farmers in Kersamanah grapple with limited landholdings, often necessitated by economic constraints and subsistence demands. Their approach to extension activities encompasses the dissemination of agricultural

knowledge and technology to enrich members' understanding, the consolidation of farmer groups to promote cooperative endeavors, the provision of a platform for information verification, the cultivation of behavioral changes (comprising knowledge, attitudes, and skills), and a non-formal teaching and learning process. However, there are indications that extension activities are inadequately organized, attributable to members' busy schedules and their reluctance to actively participate. Notably, farmer participation in extension activities is reported as low by the majority of respondents (70.11%).

Furthermore, Budiman and Sadono (2010) investigates the level of participation and autonomy of alumni farmers from integrated crop management field schools. Their findings indicate that the most significant participation level (50 percent) falls within the medium category, with the remainder distributed between farmers with high (26.2 percent) and low (23.8 percent) levels of participation. These percentages encapsulate participation across the entirety of the planning, execution, monitoring, and evaluation phases. Specifically, the majority of farmers exhibit low participation in planning and evaluation activities, with participation rates at 83.3 percent and 64.3 percent, respectively. The underwhelming involvement in the planning phase largely stems from a paucity of information regarding the SL-PTT planning activities.

Purukan et al. (2021) assessed the Performance of Agricultural Extension Officers in Enhancing Food Self-Sufficiency in Ranoyapo, South Minahasa. Their findings revealed that agricultural extension activities face suboptimal implementation across Ranoyapo's villages. This inadequacy primarily arises from the dearth of government-provided resources. The government's support in terms of facilities and infrastructure for the Agricultural Extension Center in Ranoyapo is yet to reach its full potential, hampering the effective execution of field agricultural extension officers' duties in the area. The Ranoyapo Agricultural Extension Office (BPP) contends with a shortage of staff, as a mere three agricultural extension officers serve twelve villages. Ideally, each officer should be responsible for a single village, but due to this deficiency, each officer must oversee four villages. Consequently, the agricultural extension activities fall short of optimal performance, and the community struggles to fully grasp the intricacies of the agricultural learning process.

Hamyana (2017) phenomenological research delves into Work Motives in Agriculture within the Farmer Youth Group in Batu, East Java, Indonesia. This inquiry identified two overarching motives that either encourage or hinder the involvement of young individuals in agriculture. These motives are characterized as moral-cultural base motives and rational-structural base motives. From the moral-cultural perspective, engagement in agriculture is not solely a matter of profit or loss, but is perceived as a profound calling of the soul and a moral obligation. Conversely, from the rational-structural viewpoint, participation in agriculture is a deliberate choice influenced by the potential economic, social, and environmental benefits it offers.

Demmallino et al. (2018) conducted a Phenomenological Study concerning the Effects of Policy Implementation on the Lives of Farmers in Morowali, specifically focusing on the Mining Ring Area in Bahodopi, Central Sulawesi, Indonesia. This study sought to comprehensively evaluate the living conditions of farming communities residing in the vicinity of the mining ring, particularly within Bahodopi. It aimed to analyze the repercussions of nickel mining and proffer policy recommendations for the sustainable management of natural resources beneficial to farming communities. Employing a descriptive qualitative approach, the study incorporated methods such as participant observation, in-depth interviews, and documentation. The research data collection process involved purposive sampling to select informants, followed by data reduction through data presentation, snowballing, and the derivation of conclusive insights.

METHOD

This study employed qualitative research to explore the phenomenology of agricultural extension activities for wetland rice in Serang, Indonesia. Qualitative research is a method that seeks to comprehend the meanings individuals or groups attribute to social and human issues. This investigative process entails significant steps, including posing questions, collecting specific data from participants, inductively analyzing data to identify specific themes and overarching patterns, and interpreting the significance of the data (Creswell, 2017).

The research was carried out in Serang, located in Banten, Indonesia, and encompassed three purposively selected sub-districts. Data collection took place from February to May 2022.

Both primary and secondary data were collected in this study. Primary data encompassed firsthand information directly obtained from key participants, which involved their explanations of agricultural extension activities within the research site.

The selection of informants was based on their extensive experience as rice farmers spanning a decade, their ability to articulate their insights and experiences related to agricultural extension activities, and their willingness to partake in recorded interviews and the publication of outcomes.

This phenomenological research employed four data collection techniques, namely interviews, observations, documentation reviews, and audio-visual materials (Creswell, 1998). Primary data were gathered through in-depth interviews conducted in an informal and interactive manner, using open-ended statements and questions (Moustakas, 1994). Data collection concluded when saturation was achieved during interviews, indicating that the data provided by informants exhibited commonalities and reached a saturation point despite diverse perspectives.

To validate the data, communicative validity was applied, and the research results' validity was tested through source triangulation, involving the examination of evidence from multiple sources to construct a coherent substantiation of themes (Creswell, 2013).

Data analysis adopted Husserl's transcendental phenomenology data analysis, as outlined in the interactive model data analysis components (Miles & Huberman, 2007). The data analysis process encompassed data preparation and organization, comprehensive data review, meticulous data coding, the application of coding to delineate settings, categories, and analyzed themes, the determination of strategies for restating descriptions and themes within qualitative narratives, and data interpretation (Creswell, 2013).

In qualitative research, data analysis proceeds concurrently with data collection, following the methodology described by Miles and Huberman. The components of the analysis process outlined by Miles and Huberman include:

a. Data Collection

The initial step involves the acquisition of data. Data collection is achieved through recorded interviews with informants, subsequently transcribed into interview transcripts for each participant.

b. Data Reduction

Data reduction encompasses the selection, concentration, simplification, abstraction, and transformation of the raw data collected during the research. This process commences by identifying specific statements within each interview transcript that pertain to the meaning of agricultural extension activities and how informants perceive them (horizontalization). These specific statements are distinctive in that they are non-repetitive, non-overlapping, convey complete ideas, and represent subjective inferences from the interview transcripts. Subsequently, an array of typifications and patterns within these significant statements, relating to the meaning of agricultural extension activities and the informants' experiences, is analyzed to create primary constructs based on specific themes or meaning units derived from the informants' perspective.

c. Data Display

Data presentation takes the form of a narrative text display, a structured representation of information facilitating the formulation of conclusions and action steps. This stage initiates by organizing themes or units of meaning pertaining to informants' experiences with agricultural extension activities into tables, allowing for a clear view of data typification. The terminology used by informants in these thematic units is elucidated using quotations from the relevant literature review.

d. Conclusion Drawing and Verification

The process of drawing and verifying conclusions involves interpreting the significance of each observation from the research field. This phase seeks to identify regularities, explanatory patterns, potential configurations, causal connections, and propositions. Each conclusion derived is provisional, open, and subject to ongoing scrutiny until a valid and well-grounded conclusion is reached. During this stage, the textural meaning of the significance of agricultural extension activities is articulated to describe what informant farmers experience, while the structural meaning defines how these activities are experienced, based on the thematic analysis. Both descriptions, portraying the essence of informant farmers' experiences with agricultural extension activities, are then synthesized into a comprehensive depiction (textural and structural) of the phenomenon's significance.

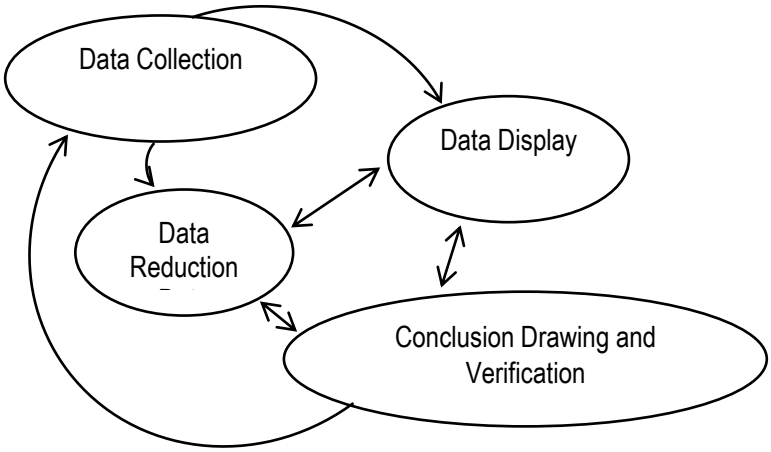

Figure 1: Components of interactive data analysis model
(Miles dan Huberman, 2007)

Each stage of data analysis is integral and interconnected, forming a continuous process that commences with the formulation of research problems prior to fieldwork. This process encompasses the compilation, categorization, review, and interpretation of research data, revealing patterns and relationships between concepts. These findings are then formulated into associations with other elements, rendering them easily comprehensible.

RESULTS AND DISCUSSION

The research was carried out in Serang, Banten, with a purposive selection of research sites in the Baros, Padarincang, and Pontang sub-districts. This study involved a total of six informants, with two informants from each sub-district. In-depth interviews pertaining to agricultural extension activities with these informants took place between February and May 2022.

The Significance of Agricultural Extension

The analysis of the significance of agricultural extension activities for wetland rice farmers followed Moustakas' systematic procedure of transcendental phenomenological data analysis. The process initiated with the practice of epoche, during which the researcher suspended personal biases and preconceptions concerning agricultural extension activities. This allowed the researcher to perceive the phenomenon of agricultural extension activities with fresh eyes and an open mind. Subsequently, the analysis involved the identification of meaningful statements made by the informants (horizonalization), the categorization of these statements into meaning units and themes, the synthesis of these themes to create both textural and structural descriptions of individual experiences, and finally, the development of a comprehensive account encapsulating the significance and essence of the informants' experiences (Moustakas, 1994).

Statement of Significance

To gather insights into the experiences of farmer informants regarding agricultural extension activities, an analysis of interview transcripts was conducted. A total of 133 distinct verbatim statements in the transcripts were identified. These statements were carefully selected, ensuring they were substantial, non-repetitive, and offered unique perspectives. Each of these statements represented complete sentences and conveyed subjective perspectives drawn from the interview transcripts. These statements were instrumental in providing a comprehensive understanding of how the informants conceptualized agricultural extension activities and the nuanced facets of their experiences (Nechully & Pokhriyal, 2019).

Themes (Units of Significance) of Agricultural Extension Activities

The essential facets of agricultural extension activities, as perceived by informant farmers, were distilled by filtering out statements that diverged from the research focus, were redundant, or overlapped. The resultant statements encapsulate the textural significance or horizons of agricultural extension activities based on the

experiences of the farmer informants. These discerned statements were then meticulously categorized into distinct themes, yielding three pivotal themes (units of significance) that encompassed agricultural extension activities and the manner in which the informants encountered them. These themes include (1) Extension as a source of assistance, (2) Extension as a source of information, and (3) Extension as a source of technology. To elucidate these units of significance, the terminology employed by farmer informants in each thematic context was expounded with reference to pertinent literature.

Agricultural extension activities: Extension as a source of assistance

In pursuit of elevating agricultural production, particularly in the realm of rice cultivation, to align with the escalating dietary demands of the populace, various agricultural development programs have been introduced since the 1960s. These programs encompass a spectrum of initiatives, commencing with the Rice Self-Sufficiency Mass Demonstration (Demas SSB), followed by Mass Assistance (Bimas), Special Intensification (Insus), and Supra Insus (an enhancement of the Insus program aimed at sustaining rice self-sufficiency achieved through the Bimas program in 1984), and so forth. These programs have been instrumental in the introduction of contemporary agricultural technologies, such as superior seeds, artificial fertilizers, and improved irrigation practices. Moreover, they have fostered a sense of unity among farmers, promoting proper crop cultivation and the establishment of farmer groups to facilitate effective communication between farmers and their supporting entities (BPLPP, 1978; Tim Faperta IPB, 1992 in Sadono 2008). The impetus behind these efforts was the national imperative to boost rice production and attain self-sufficiency. The necessity for increased rice production was driven not only by population growth but also by the burgeoning welfare of the populace, leading to a heightened per capita rice consumption. This urgency was further underscored by the shifting dietary preferences of communities across diverse regions, with rice becoming the primary staple alongside their improving economic well-being. Simultaneously, the landscape of agricultural extension evolved. It transitioned from primarily offering assistance for proficient farming practices to knowledge dissemination and technology transfer aimed at empowering farmers to enhance their productivity, with a pronounced emphasis on achieving national, regional, and local rice production targets (Tjitropranoto, 2003). This era is often referred to as the "*Revolusi Hijau* (Green Revolution)" and proved to be a pivotal phase that enabled Indonesia to attain rice self-sufficiency by 1984. This accomplishment marked a remarkable turnaround, as Indonesia had been one of the world's largest rice importers in 1974, importing over one million tons of rice (Rusli 1989).

Nevertheless, the notable achievements of the "*Revolusi Hijau* (Green Revolution)" have precipitated contemporary challenges. Farmers have become increasingly reliant on subsidies, and extension services accompanied by financial incentives tend to garner a more favorable response from them. As one informant expressed,

“Yang mau tanam 4:1 di selip saya bayar 350ribu, bayarnya sayakan dari bantuan yang 72 juta itu. Pupuk organik berapa sehari, sehektar seton. Setahun dijalanin siapa yang mau pupuk silahkan pake, banyak yang pake, saya minta satu ton campur, satu ton berapa hektar itu, saya minta ganti ini aja 100 ribu nurunin juga kan nurunin uang rokok saya juga”

"Those who want to plant in the 4:1 ratio, I pay 350,000, using the aid money of 72 million. How much organic fertilizer do they use per day? It's a ton per hectare. If someone needs fertilizer for a year, they can use it, and many do. I ask for one ton mixed. One ton is enough for how many hectares? I just ask for this compensation of 100 thousand, and I also reduce my cigarette expenses."

It has become a challenge to convene farmers for agricultural deliberations, primarily because they have grown accustomed to receiving incentives. Members inquire with their group leaders about the availability of envelopes, and leaders notify them of forthcoming assistance. As articulated by an informant,

"Kalo dulu mah gampang, kalo sekarang mah susah sih ngumpulin orang itu ini sih nyariinnya amplop aja”

"In the past, it was straightforward, but nowadays, it's challenging to gather people. They are just looking for the paycheck. "

Kottak (1988) and Uphoff (1988), drawing insights from various projects across countries, contend that development strategies that overlook the sociocultural and socioeconomic dimensions of the local population can impede or even jeopardize the functionality of local institutions, curtail farmers' autonomy, and undermine the sustainability of agricultural development initiatives.

Agricultural extension activities: Extension as a source of information

Agricultural extension represents an extracurricular educational system designed to empower farmers and their families. Its primary objective is to equip them with the knowledge, willingness, and self-sufficiency to enhance their agricultural practices, subsequently bolstering their income and overall welfare, thus contributing to the betterment of society at large. The advent of agricultural extension allows for effective mentoring and support for farmers, fostering robust communication and instilling in them the confidence to embrace and appreciate innovative methods and practices (Batlayeri et al., 2013). The practical implementation of agricultural extension is envisioned as a conduit for the dissemination of information pertaining to emerging scientific and technological advancements, as well as the elucidation of government regulations and policies. These regulations necessitate farmers' awareness and compliance, facilitating the realization of predetermined developmental objectives.

In the realm of agricultural development, extension activities serve as a vital link connecting the day-to-day practices of farmers with the ever-evolving domain of agricultural knowledge and technology. To equip farmers with the tools required to engage in practices conducive to agriculture, there is a pressing need for agricultural innovations. Information regarding these innovations is made accessible to farmers through Field Agricultural Extension Officers (PPL) via the implementation of agricultural extension activities. The fundamental goal of agricultural extension activities, as realized by PPL, is to empower farmers to propagate information pertinent to agricultural enhancement independently.

This assertion is harmonious with the sentiments expressed by farmer informants, as one conveyed,
“Enaknya atuh iya belajarnya gitu yah, kitakan tau kalo ini harus apa, harus apa yakan jadi ngasih tau yang ini yang bagus yakan gimana yakan cara tanamnya cara apanya gitu. kalo gada penyuluhan mungkin sulit bu, kitakan ga tau yang bagus gimana yang jelek gimana gitu jadi banyak pengaruhnya gitu bu ada penyuluh itu, banyak manfaatnya buat tani gtu".

"Learning is enjoyable, we comprehend what needs to be done, the right way to plant, and the essential steps. In the absence of extension services, the situation might become challenging. We remain uninformed about best practices and pitfalls, emphasizing the pivotal role of extension agents and the manifold benefits they confer upon farmers."

Similarly, another informant articulated,
“Penyuluhan mah yah yang penting kita lebih apa yah, penyuluhan dari PPL yang penting kita mah tiap mau mulai ada kumpulan, kalo ada hama - hama ada juga gropyokan gitu, klo mau panen juga ada kumpulan dimana maunya. Kadang-kadang kan ada dari penangkaran kerjasama, itu ada di fotonya kita waktu kerjasama dengan pihak lain itukan yang nyambungin penyuluh kita gak bisa sendiri harus dibimbing".

"Counseling is instrumental in bolstering our understanding and collaboration with PPL is paramount. Each time we commence a new endeavor, we establish a group, ensuring readiness for pest infestations and unifying during harvest. Additionally, collaborations with breeding programs are documented in photos, underscoring the indispensable role of extension agents in facilitating and guiding us in these collaborations."

Agricultural extension activities: Extension as a source of technology

Mosher (1985) underscores technology as an essential prerequisite for agricultural advancement. Moreover, Hernanto (1991) postulates that introducing novel technologies into farming hinges upon the consideration of four pivotal factors: (1) technical feasibility, (2) economic viability, (3) social acceptability, and (4) adherence to government regulations.

Meanwhile, Mardikanto (1993) divulges that the acceptance of new technologies or ideas by farmers is contingent on several key criteria. These include the technology's capacity to: (1) confer economic advantages when implemented (profitability); (2) align with the local cultural milieu; (3) coexist harmoniously with the physical environment (physical compatibility); (4) be user-friendly; (5) save labor and time; and (6) entail minimal financial outlays upon implementation.

Agricultural extension, functioning as a wellspring of technology, serves as an educational platform for instructing farmers in optimal rice cultivation techniques geared toward achieving heightened yields. This educational process equips farmers with the know-how required to enhance rice production. The information and technology disseminated through extension services can be practically implemented by farmers, as one informant attests,

"Kalo PPL tu yah biasanya dari benih dan penanaman, bedanya memang ada kesenjangan beda, kalo dari orang tua pengalaman dari jaman dulu tanam itu tidak teratur gitu loh, misal, kita kan kita pakai legowo, kalo jaman orangtua dulu engga pakai legowo. Sekarang sudah hampir pakai legowo, ternyata emang yang pertama legowo itu irit pupuk, yang kedua itu benih, kalo jaman dulu langsung main cabut main ini aja tidak terukur berapanya dan tidak pakai legowo juga dan hasil padinya pun ternyata yang saya dalami di padi itu kita tanam satu, tumbuhnya yah lebih dari satu kalo kita tanam banyak misal sepuluh biji kan, tanaman kan dikali sepuluh jadi seratus dengan area lahan yang dia tumbuh itu misalkan dua puluh kali dua puluh sentimeter apakah mungkin tumbuh semua. Akhirnya itu yang sering diamati petani sekarang"

"PPL agents primarily focus on seeds and planting. The key differentiation lies in the utilization of *legowo* (is a planting pattern featuring alternating rows of rice and empty spaces). This practice proves to be economically advantageous in terms of both fertilizer and seed usage. Our predecessors did not adopt *legowo*; they sowed seeds indiscriminately without regard for spacing. What I have learned is that, for instance, planting a single seed yields superior results compared to sowing multiple seeds. For instance, with a land area of twenty by twenty centimeters, a single seed can yield abundant produce. This observation resonates with what many farmers commonly discern nowadays."

Textural and Structural Descriptions

Thematic analysis was employed to compile a textual description, providing an account of the individual experiences of farmer informants concerning agricultural extension activities. This textual representation meticulously conveys their statements. The outcome of this textual depiction served as the foundation for constructing a structural description, elucidating the contextual and situational factors that shaped the informants' encounters with agricultural extension activities.

Textural Descriptions

Farmer informants employed various terms when discussing agricultural extension activities, including "*informasi dari pertanian* (information from agriculture)," "*kumpulan* (gatherings)," "*pertemuan di saung* (meetings in saung)," "*ngajarin mupuk* (teaching fertilization)," "*legowo* (*legowo* cultivation system)," "*bantuan benih* (seed assistance)," "*ikut pelatihan* (participation in training)," "*sharing dengan penyuluh* (interaction with extension officers)," "*ngajarin langsung terjun ke sawah* (on-field instruction)," "*kalo ada bantuan dirembugin* (having discussions on program proposed)," and " *kumpul saat gropyokan* (gathering during pest control), with pesticide and assistance." These terms underscore the close association between extension activities and the dissemination of information, technology, and government initiatives or aid. A participant emphasized the significance of collective efforts in pest control, especially when supported by programs or assistance, stating, "*Tapi iya kalo tani engga kompak, karena bikin jides ada duitnya, kan dibayar itu bu yang ngerjainnya, yang kerja dibayar biarpun kelompok kalo gak kerja gak dikasih duit* (Farmers must be unified; the expenses are covered when we work together, even if the group doesn't work, payments are still made). Another informant detailed their financial investment in agricultural practices and the role of assistance, saying, "*Yang mau tanam 4:1 di selip saya bayar 350 ribu, bayar nya saya kan dari bantuan yang 72 juta itu. Pupuk organik berapa sehari, sehektar seton. Setahun dijalanin siapa yang mau pupuk silahkan pake, banyak yang pake, saya minta satu ton campur, satu ton berapa hektar itu, saya minta ganti ini aja 100 ribu nurunin juga kan nurunin uang rokok saya juga* (Those who want to plant in the 4:1 ratio, I pay 350,000, using the aid money of 72 million. How much organic fertilizer do they use per day? It's a ton per hectare. If someone needs fertilizer for a year,

they can use it, and many do. I ask for one ton mixed. One ton is enough for how many hectares? I just ask for this compensation of 100 thousand, and I also reduce my cigarette expenses.").

Structural Descriptions

Economics significantly influences informants' participation in agricultural extension activities. Many informants emphasized the importance of various forms of assistance in boosting farmers' engagement in these activities. For instance, some mentioned that it's challenging to gather participants without incentives like monetary rewards or the provision of resources. This economic aspect is best encapsulated in their statements, such as "*yang mau tanam 4:1 di selip saya bayar 350 ribu* (those who want to plant 4:1 in a plot, I pay 350 thousand)," or "*Pemerintah kasih modal, kasih bantuan kasih segala gala bapak - bapak ibu - ibu ikut semua* (The government provides capital, offers assistance, and hosts various events – you all participate)." Kosam further illustrated the changing dynamics by saying, "*Sekarang mah bedanya dulu dan sekarang. Kalo sekarang suruh kumpul ada rokok ada kopi. Sekarang mah wih ada ininya ga (menunjukan tangan minta uang) kalo gada mah engga* (Nowadays, the difference between the past and present is that we are asked to gather, and we have cigarettes and coffee. Nowadays, if there's no incentive, there's no participation)." This highlights how farmers' responses to agricultural extension activities are influenced by economic considerations.

Within the learning context, informants' experiences of participating in agricultural extension activities are underpinned by the desire to acquire knowledge and improve their farming practices. They discussed gaining insights into effective rice cultivation, sharing tips on farming without urea, and obtaining pest control information from extension workers. Yadi emphasized the value of learning and the benefits it brings, stating, "*Enaknya atuh iya belajarnya gitu yah. Kita kan tau kalo ini harus apa, harus apa ya kan jadi ngasih tau yang ini yang bagus yakan gimana yakan cara tanamnya cara apanya gitu. kalo gada penyuluhan mungkin sulit bu, kitakan ga tau yang bagus gimana yang jelek gimana gitu jadi banyak pengaruhnya gitu bu ada penyuluh itu, banyak manfaatnya buat tani gtu* (It's good to learn. We know what to do, what's best. If there is no counseling, it might be difficult, as we lack knowledge about good and bad practices)." When discussing the application of pest control technology, farmers primarily frame it in economic terms. For example, Kosam explained, "*Kalo kita ada serangan wereng, jadi kita langsung lapor ke pertanian, gimana ini ada serangga yakan,caranya gimana, langsung dia turun orang pertanian itu ngasih tau dia ini obatnya kita praktekin, beli obatnya langsung, kadang kadang dikasih ada sumbangan dari dia gratis dikasih sama pertanian* (When we face a leafhopper attack, we report it to the farm, and they advise us on the treatment. We buy the required medicine directly, sometimes receiving donations)." Another informant added, "I gave it for free ... starting with the many people who are willing to join in using legowo system"

The extent of participation significantly influences informants' experiences in agricultural extension activities. Some informants revealed a limited level of engagement in these activities. For instance, they expressed that involvement varied depending on the ease or complexity of the task. One informant shared, "*Ya gampang mah gampang, susah mah susah, kadang mah ada isitilahnya itu anggota lagi isitrahat kerja ada dirumah, kalo seandainya lagi susah ibu maya juga maklum. Paling isitilahnya satu atau dua orang jadi* (Yes, it's easier when it's easy, and more challenging when it's difficult. Sometimes, members are occupied with their personal work. Mrs. Maya understands that. Most of the time, only one or two people are available)." In contrast to earlier times when larger groups gathered, nowadays, participation tends to be smaller, with at most twenty people attending. This decrease is not necessarily negative, and in some cases, meetings may be attended by as few as five individuals.

This lower level of participation also correlates with reduced technology adoption, as exemplified by remarks such as "*iya, engga sama semua petani disini, disini mah jawabnya gini sih bu..kaya makannya sama aja, susah suruh serempaknya* (Not all farmers here respond the same way, ma'am. It's challenging to get them all on the same page, much like trying to make everyone eat the same food)." In this context, farmer participation is sometimes limited. Samhudi noted that his group had grown in size due to the attraction of assistance distributed to all members. However, during agricultural extension meetings, only a small number of members actively participate. This observation underscores the varying levels of engagement within different farmer groups and their implications for the effectiveness of these extension activities.

The Essence of Experience

The textural and structural descriptions, encapsulating the essence of agricultural extension experiences, are amalgamated into a comprehensive portrayal of each farmer informant's engagement with this agricultural extension. These activities center on farmers as the principal actors in agriculture, serving as a conduit for imparting knowledge on effective farming practices that can enhance their financial prospects and overall well-

being. In principle, agricultural extension endeavors to empower farmers, fishermen, and their families by enhancing their knowledge, skills, attitudes, and self-reliance. This, in turn, equips them with the willingness and ability to enhance their business competitiveness, individual welfare, and community prosperity.

Nonetheless, various studies have indicated that the effectiveness of agricultural extension activities is hampered by low farmer participation. Agricultural extension primarily functions as a vehicle for acquiring agricultural know-how for improved farming. The decision to apply these acquired skills is ultimately left to the farmers, who tend to adhere to established agricultural practices. Thus, farmer participation in these activities is often contingent on the provision of assistance, which either facilitates their participation in these activities or offers tangible benefits to meet their needs, reduce expenses, or mitigate farming-related risks.

This interpretation underscores the economic context within which farmer informants perceive agricultural extension activities. These activities extend beyond the mere acquisition of agricultural knowledge to include the provision of essential assistance, which is crucial for fostering farmer participation. Assistance may take the form of financial support, agricultural inputs (such as seeds, fertilizers, tools, and machinery), or concurrent learning and support in agricultural technology, all of which tend to elevate farmer engagement compared to activities solely focused on disseminating agricultural knowledge.

CONCLUSION

Farmer informants construe agricultural extension activities within an economic framework. Agricultural extension encompasses more than just the acquisition of agricultural knowledge; it also involves the provision of the necessary support for farmers to apply these insights. The sequencing of these two components significantly influences the extent of farmer engagement in agricultural extension activities. Farmer participation is more pronounced when agricultural extension activities offer comprehensive assistance, encompassing financial support and the provision of essential agricultural inputs, such as seeds, fertilizers, and farming equipment. Alternatively, when agricultural technology learning and support are delivered in tandem, as opposed to solely imparting agricultural knowledge, it elicits higher levels of participation from farmers. These activities, from the farmers' perspective, must offer direct benefits to address their needs, curtail expenses, and mitigate the risks associated with farming.

The role of agricultural extension activities within the economic context should undergo a gradual yet steadfast transformation, shifting from its current focus towards fostering learning and empowerment among farmers, their families, and agribusiness communities. This transformation is geared toward enabling them to attain self-reliance and achieve elevated income and welfare. In light of this, the following recommendations are put forward:

1. Agricultural extension officers should persist in conducting extension activities that align with their underlying philosophy.
2. Chairpersons of Farmer Groups should commence instilling in their members an understanding that extension activities serve as a platform for the exchange of information among stakeholders, primarily concerning the enhancement of agricultural practices. This should be done without the expectation of material assistance, as it may enhance member participation.
3. The Department of Agriculture in Serang, Banten, is advised to conduct a comprehensive evaluation of agricultural development programs that have not effectively contributed to the self-sufficiency, income, and welfare of farmers..

REFERENCES

Amanah, S. 2007. Makna Penyuluhan dan Transformasi Perilaku Manusia. Institut Pertanian Bogor. Bogor.

Batlayeri, M., Adam, F. P., & Far-Far, R. A. 2013. Tingkat Kepuasan Petani Terhadap Penyuluhan Pertanian pada Desa Waiheru Kecamatan Kota Ambon.

Budiman M. F., & Sadono D. 2016. Tingkat Partisipasi dan Kemandirian Petani Alumnsi Sekolah Lapang Pengelolaan Tanaman Terpadu (Kasus Desa Kebon Pedes, Kecamatan Kebon Pedes, Kabupaten Sukabumi, Provinsi Jawa Barat). Jurnal Penyuluhan. Vol *6* No. 2

Creswell, J.W. 2017. Research Design Pendekatan Kualitatif, Kuantitatif dan Mixed. Edisi Ketiga. Pustaka Pelajar. Jakarta.

Demmallino, E.B. Ibrahim, T. Karim, A. 2018. Petani di Tegah Tambang, Studi Fenomenologi Efek Implementasi Kebijakan Terhadap Kehidupan Petani di Morowali (Studi Kasus Pada Kawasan Lingkar

Tambang Kecamatan Bahodopi, Kabupaten Morowali, Provinsi Sulawesi Tengah). Universitas Hasanudin. Makasar

Fadamiro, A. O., Lawal, H. O., & Ogunti, E. O. (2022). Development of A Web Based Agricultural Extension Services Using Knowledge Management (Km). Futa Journal of Engineering and Engineering Technology, 16(1), 27–32. https://doi.org/10.51459/futajeet.2022.16.1.360

Ferguson, M., Tonkin, E., Brimblecombe, J., Lee, A., Fredericks, B., Cullerton, K., Mah, C. L., Brown, C., McMahon, E., Chatfield, M. D., Miles, E., & Cadet-James, Y. (2023). Communities Setting the Direction for Their Right to Nutritious, Affordable Food: Co-Design of the Remote Food Security Project in Australian Indigenous Communities. International Journal of Environmental Research and Public Health, 20(4), 2936. https://doi.org/10.3390/ijerph20042936

Hamyana, 2017. Motif Kerja Generasi Muda di Bidang Pertanian, Studi Fenomenologi Tentang Motif Kerja di Bidang Pertanian Pada Kelompok Pemuda Tani di Kota Batu. Malang.

Hernanto, F. 1991. *Ilmu Usaha Tani.* Penebar Swadaya. Jakarta.

Kottak, C.P. 1988. Bila Manusia yang Utama: Beberapa Hikmah Sosiologi dari ProyekProyek yang Telah Selesai dalam M.M. Cernea (eds). 1988. Mengutamakan Manusia di Dalam Pembangunan: Variabel-variabel Sosiologi di Dalam Pembangunan Pedesaan (Publikasi Bank Dunia). Penerjemah B.B. Teku. Jakarta: UI Press.

Mardikanto T, 1993. Penyuluhan Pembanguna Pertanian. Sebelas Maret University Press. Surakarta.

Miles, Mattew B dan Amichael Huberman. 2007. Analisis Data Kualitatif Buku Sumber tentang Metode-Metode Baru. Terjemahan Tjetjep Rohendi Rohisi. Jakarta: Universitas Indonesia.

Mosher, 1985. *Menciptakan Struktur Pedesaan Progresif.* Cv. Yasaguna. Jakarta.

Moustakas, Clark. 1994. Phenomenological Research Methods. New Delhi : Sage Publications.

Nechully, S., & Pokhriyal, S. K. (2019). Choosing Grounded Theory and Frame Work Analysis as The Appropriate Qualitative Methods for The Research. *Journal Of Management*, *6*(1). https://doi.org/10.34218/JOM.6.1.2019.014

Purukan, Brigita N dkk. 2021. Kinerja Penyuluh Pertanian Dalam Meningkatkan Swasembada Di Kecamatan Ranoyapo Kabupaten Minahasa Selatan. 2021. Jurnal Governance. Vol.1, No. 2, 2021. ISSN: 2088-2815.

Putri, C. A. dkk, 2019. Partisipasi Petani dalam Kegiatan Penyuluhan dan Adopsi Pemupukan Padi Sawah di Kecamatan Kersamanah Kabupaten Garut. Jurnal Agribisns Terpadu. Vol 12 No.1

Putri, E. dkk. 2019. Daya Saing Sektor Pertanian Tanaman Pangan di Provinsi Banten. Jurnal Agribisnis Terpadu. Untirta.

Rusli, S. 1989. Perkembangan Penduduk dan Masalah Swasembada Pangan di Indonesia. Jurnal Mimbar Sosek, Nomor 3 Desember 1989. Jurusan Ilmu-ilmu Sosial Ekonomi Pertanian, Fakultas Pertanian IPB. Bogor.

Sadono, Dwi. 2008. Pemberdayaan Petani : Paradigma Baru Penyuluhan Pertanian di Indonesia. Institut Pertanian Bogor. Bogor.

Setiawan, I Gede. 2005. Masalah-Masalah Penyuluhan Pertanian. Institut Pertanian Bogor. Bogor.

Tamsah, H., & Yusriadi, Y. (2022). Quality of agricultural extension on productivity of farmers: Human capital perspective. *Uncertain Supply Chain Management*, *10*(2), 625–636. https://doi.org/10.5267/j.uscm.2021.11.003

Tjitropranoto, P. 2003. Penyuluhan Pertanian: Masa Kini dan Masa Depan dalam I. Yustina dan A. Sudradjat (eds). Membentuk Pola Perilaku Manusia Pembangunan: Didedikasikan kepada Prof. Dr. H.R. Margono Slamet. Bogor: IPB Press.

Uphoff, N. 1988. Menyesuaikan Proyek pada Manusia. dalam M.M. Cernea (eds). 1988. Mengutamakan Manusia di Dalam Pembangunan: Variabel-variabel Sosiologi di Dalam Pembangunan Pedesaan (Publikasi Bank Dunia). Penerjemah B.B. Teku. Jakarta: UI Press.