Jurnal Presipitasi
Media Komunikasi dan Pengembangan Teknik Lingkungan
e-ISSN: 2550-0023

Vol 21, No 3, 2024, 950-961
Article available at homepage presipitasi

Regional Case Study

Strengthening Institutional Capacity of the Hulun Hyang Farmer Group for Advancing the Edelweiss Flower Agroecosystem: a Case Study in Edelweiss Park, Bromo Tengger Semeru National Park, Indonesia

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Abstract

The escalating demand for Edelweiss flowers as souvenirs due to tourism development threatens their availability and economic value, impacting the indigenous Tengger community, which relies on these flowers for irreplaceable traditional offerings. The Hulun Hyang farmer group was established in 2017 under the guidance of the national park to conserve Edelweiss flowers, and subsequently obtained a cultivation permit from the Ministry of Environment and Forestry. However, the sustainable management of Edelweiss Park necessitates bolstering the group's institutional capacity as a critical agent in its development. This research examines the endogenous growth and active participation of the Hulun Hyang farmer group to strengthen their institutional capacity, enabling the establishment of deeply rooted and locally responsive mechanisms. Community development initiatives aim to foster economically and socially independent communities by enhancing agroecological management capacity by employing a strategic group development approach. Findings indicate that the institutional capacity of farmer groups is directly influenced by member dynamism and participation and indirectly impacted by leadership, member capacities, the role of extension workers, external support, and farmer characteristics. Consequently, efforts to augment the group's institutional capacity focus on promoting member dynamism and active engagement in group activities.

Keywords: Edelweiss Park; group development; hulun hyang famer group; institutional capacity

1. Introduction

Bromo Tengger Semeru National Park (TNBTS) harbors diverse flora and fauna within its sub-montane, montane, and alpine ecosystems (Purnomo, 2015). Among the native flora, the Edelweiss flower is iconic in the TNBTS region. These endemic species thrive exclusively in mountainous areas, particularly on rocky, calcareous substrates at elevations ranging from 1600 to 3600 meters above sea level, often inhabiting cliffs with nutrient-deficient soils (Van Steenis, 2010). The park, characterized by a tropical climate with temperatures between 15-25 °C and an annual average rainfall of 3,712 mm, experiences distinct rainy and dry seasons (Hariyatmi and Ahmad, 2013). These specific climatic conditions in TNBTS provide an ideal habitat for Edelweiss (Anaphalis spp.) growth.

The burgeoning tourism development in the TNBTS area has heightened the demand for Edelweiss flowers as souvenirs, resulting in economic implications for this valuable commodity. The escalating market demand has stimulated interest in obtaining Edelweiss flowers, leading to unauthorized harvesting. Recognizing the ecological significance of Edelweiss flowers and their cultural importance to the residents of Wonokitri Village, Tosari District, Pasuruan Regency, the Hulun Hyang farmer group was established in 2017. This group, fostered by the Bromo Tengger Semeru National Park Center (TNBTS), aims to engage local communities in conservation efforts by developing Edelweiss Park as both a conservation area and a platform for cultivating Edelweiss flowers. Initially focused on meeting the needs of the indigenous community, Edelweiss Park became an alternative tourist attraction for TNBTS. In November 2018, TNBTS, East Java Province Natural Resource Conservation Agency, and the Pasuruan Regional Government launched Edelweiss Village tourism, with Wonokitri Village as a designated site. The Hulun Hyang farmer group has obtained an official permit for cultivating Edelweiss flowers (Anaphalis spp.) in cages from the Ministry of Environment and Forestry through a decree (Ka. BP2SDM: No. 6361/MENLHK- BP2SDM/LUH/OTL.0/7/2019) related to the Wanawiyata Widyakarya program.

Wanawiyata Widyakarya is a forestry and environmental business model owned and managed by community groups or individuals, established by the Minister of Environment and Forestry to serve as a pilot, training center, and internship site for other communities. This initiative aims to provide learning opportunities in the quality forestry/environmental business field while acknowledging and appreciating community groups and individuals who have successfully developed businesses in these fields (KEMEN-LHK, 2016). The Hulun Hyang farmer group, managing Edelweiss Park, is the sole tourist park officially permitted by the Ministry of Environment for Edelweiss flower cultivation. Edelweiss Park endeavors to function as a conservation area through captive breeding activities, ensuring the fulfillment of the Tengger indigenous community's interests and enhancing community welfare, particularly in Wonokitri Village, by developing Edelweiss Village tourism. The active involvement of local communities, channeled through the Hulun Hyang farmer group, is vital for managing ecologically based tourism businesses.

To achieve the goal of enhancing agroecological management capacity within the Hulun Hyang farmer group and ensure the sustainable development of Edelweiss Park, it is crucial to delve into the specific challenges faced by the group. Several challenges to business optimization confront the Hulun Hyang farmer group, including unclear task allocation, equitable distribution of expertise, alignment of vision and mission, standardized management and service procedures, and human resource management. Addressing these strategic issues promptly is paramount, as an influential group and business management supported by robust human resource management underpins the sustainability of Edelweiss Park. Consequently, strengthening the human resources within the Hulun Hyang farmer group becomes imperative, as Edelweiss Park's proper operation, development, and management would only be challenging with such capacity. Based on the situational analysis, the main problem to be addressed in the advanced stage of Edelweiss Park's development is enhancing the group's foundation by developing human resource capacity and ensuring sustainable agroecosystem management. This development should be fostered endogenously, facilitated by the active participation of each Hulun Hyang farmer group member, thereby establishing mechanisms deeply rooted and responsive to the existing local dynamics.

The management of Edelweiss Park necessitates an increase in the capacity of its managers, who serve as vanguards for its sustainability. Consequently, strengthening a group's foundation through the development of human resource capacity is essential. This development should be cultivated endogenously, with the active engagement of each Hulun Hyang farmer group member, facilitating the establishment of mechanisms deeply rooted and responsive to the local dynamics. Accordingly, this study is important and aims to reveal the fundamentals of the proper implementation of organizations run by indigenous peoples, thus fostering economically and socially independent communities by enhancing agroecological management capacity through strategic group development approaches.

2. Methods

2.1. Time and Location of Research

The research was conducted from October 2023 to January 2024 at Wonokitri Village, Tosari District, East Java Province, in Edelweiss Park. Wonokitri Village was selected as the study's location purposively considering the new edelweiss flower cultivation activities in Wonokitri Village.

2.2. Research Methods

This is qualitative research through an ethnographic approach. Where researchers make observations and record how indigenous people carry out an organization. The field data is then processed into a graph form for easy understanding. Research Methods include location methods, data collection methods, and data analysis.

2.2.1 Method of Determining the Location

The method of determining the location of the research is carried out deliberately (*purposive*), namely how to take the research area by considering the known research objects of the research area (Dwiastuti, 2017; Singarimbun et al., 2008) Wonokitri Village was specifically chosen as the research location due to its distinction as the first village to establish an ex-situ edelweiss flower conservation site autonomously managed by the community, which has further evolved into a prominent tourist destination. The compelling progression of group dynamics within this context rendered it an intriguing subject for in-depth investigation and subsequent analysis.

2.2.2 Data Collection Methods

This study encompasses the entire population of Wonokitri village, consisting of several individuals. The research sample was determined through purposive sampling, focusing on key stakeholders in the development of Edelweiss flower cultivation in Wonokitri Village. The selected participants include (1) the village head of Wonokitri, offering an authoritative perspective; (2) 27 members of the Hulun Hyang farmer group, representing the primary community group involved in Edelweiss cultivation; (3) three employees from the Bromo Tengger Semeru National Park Center, providing insights from the institutional perspective. Data collection was carried out through in-depth interviews utilizing a questionnaire tool. Additionally, observations and the implementation of focused group discussions (FGD) were conducted to gather comprehensive data.

2.2.3 Data Analysis Methods

The data analysis for this study employed a rigorous approach to ensure the validity and reliability of the findings. Triangulation was utilized as a fundamental methodological strategy, involving the combination of multiple data sources and methods. By employing triangulation, the researchers aimed to strengthen the study's overall robustness. Triangulation in this study encompassed both time and source triangulation (Dwiastuti, 2017; Malamatidou, 2018). Time triangulation involved the collection and analysis of data at different time points throughout the research process. This approach allowed for the examination of temporal changes and patterns within the dynamics of the Hulun Hyang Farmer Group and its institutional capacity development (Malamatidou, 2018). By capturing data from various time periods, the study observed how the group's dynamics evolved over time and identified any significant shifts or trends. Source triangulation, however, involves the utilization of diverse data sources to enrich the analysis. Multiple sources, such as interviews, observations, and documents, were employed to gather a comprehensive and multifaceted understanding of the research subject (Dwiastuti, 2017). This approach facilitated a more comprehensive exploration of the institutional capacity of the Hulun Hyang Farmer Group and the complexities of advancing the Edelweiss flower agroecosystem in Edelweiss Park.

3. Result and Discussion

3.1 Existing Condition Institutional Capacity of The Farmer Group

Based on observations with an ethnographic approach, researchers recorded how indigenous people who are members of the Hulun Hyang farmer group manage Edelweiss Park. The study findings provide valuable insights into the institutional capacity of the Hulun Hyang farmer group, highlighting the significance of group dynamism as a primary determinant. Insufficient dynamism among group members had a negative impact on the institutional capacity of the farmer group. In-depth interviews conducted with farmer group administrators and extension workers revealed that although the farmer group in Wonokitri Village had a well-defined purpose and organizational structure, there was a need for alignment with expectations. Rather than functioning as a platform for learning, cooperation, and collective production, the group primarily operated in an administrative capacity, which limited its effectiveness in terms of roles, functions, and structure, consequently leading to a low level of dynamism.

One of the key challenges is the unclear allocation of tasks among group members. Without a well-defined division of responsibilities, there is a risk of duplication or neglect of crucial tasks, leading to inefficiencies and potential conflicts within the group. Additionally, the equitable distribution of expertise is paramount for optimizing the group's performance. Each member possesses unique skills and knowledge that can contribute to the success of Edelweiss Park, and ensuring a fair distribution of expertise promotes collaboration and maximizes the utilization of available resources. Standardized management and service procedures are essential to ensure consistent quality and customer satisfaction in Edelweiss Park. By establishing clear protocols for various aspects, such as visitor management, cultivation practices, and souvenir production, the group can provide reliable and professional experiences to tourists. Standardization also facilitates knowledge transfer and scalability, allowing for the future expansion of parks and integration of sustainable practices.

The extension officer responsible for Wonokitri Village emphasized that the lack of cohesion was the underlying cause of the group's low dynamism. This finding is consistent with the study conducted by Lestari (2012), which highlights the importance of enhanced cohesiveness and the presence of a dynamic atmosphere resulting from improved cooperation and communication among board members and within the group. The participation of all farmer group members has emerged as a second influential factor directly affecting institutional capacity. Overall, member involvement in various group activities, particularly in planning, supervision, and maintenance of activity outcomes, needed improvement. Discussions with farmer group management and extension workers indicated limited member participation. However, it was observed that participation in utilizing activity outcomes increased when supported by government assistance programs that provided farming facilities and infrastructure.

These findings underscore the significance of addressing the challenges related to group dynamism and member participation to enhance the institutional capacity of the Hulun Hyang Farmer Group. By fostering a sense of cohesion, promoting effective communication, and encouraging active engagement of all members in group activities, the farmer group can enhance its institutional capacity and contribute to the sustainable development of the Edelweiss Park agroecosystem (Bijman, 2016; Kusnandar et al., 2019; Lestari, 2012; Rahma et al., 2023) Additionally, government support in terms of resources and infrastructure plays a vital role in facilitating increased member participation and utilization of activity outcomes (Kiswantoro and Susanto, 2021; Rahma et al., 2023). Effective human resource management is a key factor in the success of any organization (Woodward et al., 2020), and the Hulun Hyang farmer group is no exception. Recruiting, training, and retaining skilled individuals is crucial for maintaining a capable workforce that can adapt to changing circumstances and challenges. Furthermore, providing opportunities for professional development and empowering group members with decision-making authority fosters a sense of ownership and commitment, enhancing the group's cohesion and long-term sustainability (Bijman, 2016; Mulyani et al., 2022; Woodward et al., 2020).

Indirect factors also influence a group's institutional capacity. The analysis results, as illustrated in Figure 2, demonstrated that these factors encompassed (i) the role of the group leader, (ii) member capacity, (iii) the role of extension workers, (iv) external support, and (v) member characteristics. The analysis of the FGD results emphasized the pivotal role of the group leader, who served as a coordinator, motivator, and inspirer, as the primary indirect influencer of the group's institutional capacity. The leader's effectiveness had a bearing on the capacity level of group members, the dynamism of the farmer group, and member participation, ultimately impacting institutional capacity. Stakeholders in FGD discussions unanimously agreed upon the leader's critical role in coordinating, motivating, and inspiring farmer group members to actively engage in various activities. This finding aligns with previous research conducted by Saptorini (2013) in Kebumen Regency, Central Java, and Mutmainah and Sumardjo (2014) in Situ Udik Village, Cibungbulang District, Bogor Regency, and Hermanto and Swastika (2011) in Bangka Belitung, South Sumatra Province.

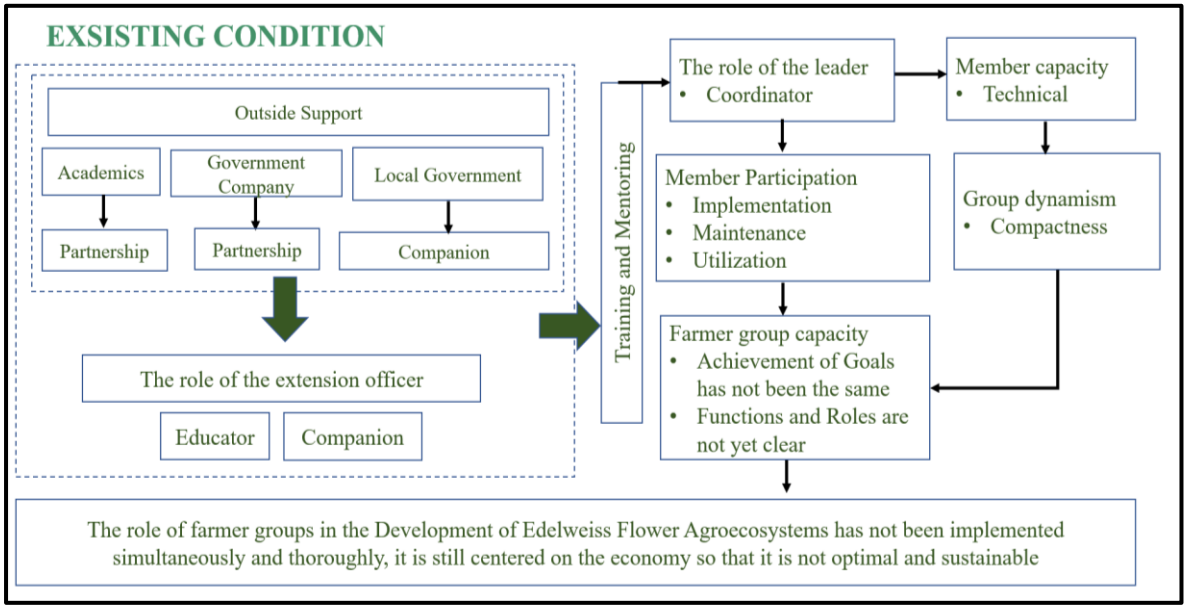

Figure 1. Existing condition institutional capacity of the farmer group

The dynamism exhibited by the group, member participation, and the role of the group leader were identified as direct factors influencing the institutional capacity of the Hulun Hyang farmer group (Kusnandar et al., 2019; Rahma et al., 2023; Reid, 2016) These factors play a crucial role in shaping the effectiveness and functioning of the group. In addition to these direct factors, several indirect factors were found to influence institutional capacity. These findings underscore the importance of comprehensive training and mentoring programs that address these factors. The role of extension workers has emerged as a critical indirect factor that affects institutional capacity. Analysis of the FGD results, depicted in Figure 2, highlighted the crucial functions of extension workers as educators, assistants, and facilitators in enhancing the effectiveness of group leaders and member capacity within the farmer group (Anantayu, 2009). Stakeholders involved in agricultural development, including the government, private sector, and farmers, emphasized optimizing extension workers' roles to develop Edelweiss flower agroecosystems in Wonokitri Village successfully. Previous research by (Anantayu, 2009) emphasized the critical role of extension workers in fostering trust, motivation, and capacity among farmer group administrators and members in various agricultural activities.

External support plays a crucial role in indirectly influencing the institutional capacity of farmer groups through partnerships with academic institutions, government companies, and local governments. Extension workers emphasized the significance of such external support in strengthening the institutional capacity of farmer groups (Kusnandar et al., 2019; Mudege et al., 2015). Study from (Sumiati, 2011) and (Anantayu, 2009) emphasized that diverse stakeholder support, including policy backing,

partnerships, funding, scientific advancements, and accompanying personnel, is pivotal for enhancing the institutional capacity of farmer groups. These partnerships provide diverse stakeholder support, including policy backing, partnerships, funding, scientific advancements, and accompanying personnel, which are pivotal in enhancing the institutional capacity of farmer groups(Kamoto et al., 2013; Ratner et al., 2017). Member characteristics were identified as another indirect influence on institutional capacity. The study examined member characteristics such as cosmopolitanism, informal education, and farming experience. Analysis of the focus group discussion (FGD) results revealed that the cosmopolitanism level of farmers had the most significant impact on member capacity development, encompassing social, managerial, and technical capacities (Koutsou et al., 2014; Mulyani et al., 2022b). However, farmers exhibited a low level of cosmopolitanism, as indicated by their limited access to diverse agricultural information sources. Consequently, the capacity of farmers was compromised. As noted by (Suprayitno et al., 2011), the cosmopolitanism level of farmers is reflected in their information accessibility. Greater access to information sources enhances farmers' insights and knowledge, positively influencing their capacity in farm management.

To improve the institutional capacity of the Hulun Hyang farmer group, it is essential to strengthen external support networks and establish partnerships with academic institutions, government companies, and local governments. These collaborations can provide the necessary resources, knowledge exchange platforms, and expertise to enhance the institutional capacity of the farmer group (Bijman, 2016; Kusnandar et al., 2019; Mudege et al., 2015). Additionally, efforts should be made to increase farmers' cosmopolitanism level by improving their access to diverse agricultural information sources(Mulyani et al., 2022c; Snapp et al., 2019) This can be achieved through initiatives such as knowledge dissemination programs, training sessions, and leveraging technological advancements to ensure farmers have access to up-to-date information and best practices in farm management (De Mello Brandão Vinholis et al., 2021; Musavengane and Simatele, 2016).

Based on the above analysis, there are several key factors that affect the dynamics and effectiveness of farmer groups. Group dynamics and member participation were the most important elements to note. Group dynamics, or the ability to adapt, innovate, and respond to change, are crucial to group effectiveness and functionality. Dynamic groups are more likely to successfully achieve their goals. Active participation and involvement of members in activities and decision-making processes contribute to better group cohesion, knowledge sharing, collective problem solving, and overall institutional capacity. A high level of participation encourages a sense of belonging, commitment, and cooperation among members, which strengthens the sustainability of the group. So there needs to be an evaluation so that the organization runs more optimally.

3.2 Efforts to increase the institutional capacity of farmer groups

The evaluation of the existing conditions regarding the institutional capacity of the farmer group necessitates a comprehensive and holistic approach (Kusnandar et al., 2019; Mudege et al., 2015; Ratner et al., 2017). To address this, the analysis results presented in Figure 3 emphasize the critical need to enhance the dynamism and participation of all members within the farmer group. These factors play a pivotal role in shaping the group's institutional capacity and have far-reaching implications for the success of agricultural development initiatives (Kamoto et al., 2013; Koutsou et al., 2014). Consequently, it is essential to delve deeper into the influencing factors outlined in Figure 3, as they provide valuable insights for augmenting the group's capacity. To increase the dynamism of farmer groups, a multifaceted strategy is required (Anam and Sudarto, 2022). This entails fostering active involvement and engagement of farmer group members at every stage of activities, including planning, implementation, supervision, evaluation, maintenance, and utilization of outcomes. By encouraging and facilitating the participation of all members, the group can effectively harness their collective knowledge, skills, and experiences, thus enhancing their overall dynamism. Additionally, the group leader's role emerges as a critical determinant in promoting dynamism within a group (Anam and Sudarto, 2022; Mudege et al., 2015). The leader's ability

to effectively coordinate, motivate, and inspire group members is crucial in fostering a dynamic and proactive atmosphere. Therefore, strategies aimed at optimizing the leadership skills and capacities of the group leader should be incorporated to bolster the overall dynamism of the farmer group.

Member participation, another vital aspect of institutional capacity, can be enhanced through various approaches. One practical approach is to optimize the role of the group leader, who acts as a catalyst in promoting and facilitating member engagement (Kusnandar et al., 2019). The group leader can inspire active participation by encouraging open communication, fostering a supportive environment, and recognizing the diverse strengths and talents of individual members. Moreover, the capacity of individual members, encompassing managerial, technical, and social aspects, is instrumental in promoting their participation. Education, training, counseling, and coaching initiatives targeting all members and the group leader can significantly contribute to their capacity development (Musavengane and Simatele, 2016). These interventions should enhance their knowledge, skills, and competencies, enabling them to contribute to the group's activities and decision-making processes actively. Acknowledging that increasing farmers' capacity and the group leader's role require strong support from multiple stakeholders is essential. Collaboration and partnerships with various entities, including government agencies, academic institutions, private sector organizations, and local governments, can provide the necessary resources, expertise, and guidance (Ratner et al., 2017). Acknowledging that increasing farmers' capacity and the group leader's role require strong support from multiple stakeholders is essential. Collaboration and partnerships with various entities, including government agencies, academic institutions, private sector organizations, and local governments, can provide the necessary resources, expertise, and guidance (Ratner et al., 2017). The involvement of these stakeholders can facilitate the implementation of comprehensive training and mentoring programs, thereby strengthening the institutional capacity of farmer groups.

Figure 2 illustrates the evaluation of the institutional capacity of the farmer group, providing a visual representation of the desired outcomes. An active and dynamic farmer group is essential to realize the group's full potential as a platform for learning, cooperation, and collective production. As highlighted by (Anantayu, 2009), an optimal institutional capacity is characterized by achieving goals, the effectiveness of functions and roles within the group's structure, innovation, and sustainability. Therefore, it is imperative to cultivate an environment that promotes the continuous growth and development of farmer groups, enabling them to effectively contribute to developing Edelweiss flower agroecosystems in Wonokitri Village. To achieve these outcomes, it is imperative to cultivate an environment that fosters the continuous growth and development of farmer groups. This requires a multi-faceted approach that addresses various aspects of institutional capacity (Kusnandar et al., 2019; Snapp et al., 2019). Firstly, goal achievement is central to the success of the farmer group. Setting clear and measurable goals, aligned with the vision and mission of the group, provides a sense of direction and purpose. These goals should be realistic, time-bound, and relevant to the specific needs and aspirations of the group. Regular monitoring and evaluation of progress towards these goals enable the group to adapt its strategies and make informed decisions to ensure goal attainment (Mulyani et al., 2022).

Furthermore, it is crucial to acknowledge that the existing condition of the institutional capacity of the farmer group serves as a foundation for implementing effective community development strategies and sustainable environmental management practices. By understanding the intricacies of the factors influencing institutional capacity, such as dynamism, member participation, leadership effectiveness, and stakeholder support, we can adopt a more holistic and informed approach toward capacity building. In light of the findings, it is evident that a multifaceted and integrated approach is necessary to address the challenges and enhance the institutional capacity of the farmer group. This approach should encompass various aspects, including organizational structure, communication channels, resource allocation, knowledge dissemination, and skill development (Kamoto et al., 2013; Kusuma, 2020). By focusing on these aspects, we can cultivate an enabling environment that fosters innovation, collaboration, and resilience within the farmer group

To begin with, the farmer group should undergo a comprehensive review of its organizational structure and functions. Clear roles and responsibilities should be established, ensuring each member understands their contributions and actively participates in decision-making. This clarity in roles will enhance the overall effectiveness of the group and promote a sense of ownership among its members (Kamoto et al., 2013). Communication channels facilitate knowledge sharing, cooperation, and collective problem-solving within the farmer group. Regular meetings, workshops, and information-sharing platforms can foster effective communication and enable members to exchange experiences, ideas, and best practices (Kusuma, 2020). Moreover, leveraging technology and digital platforms can enhance communication and facilitate access to agricultural information, market trends, and relevant research findings. By establishing clear roles and responsibilities and leveraging effective communication channels, the farmer group can promote a cohesive and collaborative working environment. This environment enables members to actively participate in decision-making processes, share valuable insights, and contribute to the group's collective intelligence. The clarity in roles and effective communication channels serve as the foundation for enhancing the institutional capacity of the farmer group, allowing it to function cohesively and effectively in achieving its objectives (Ratner et al., 2017; Reid, 2016; Snapp et al., 2019).

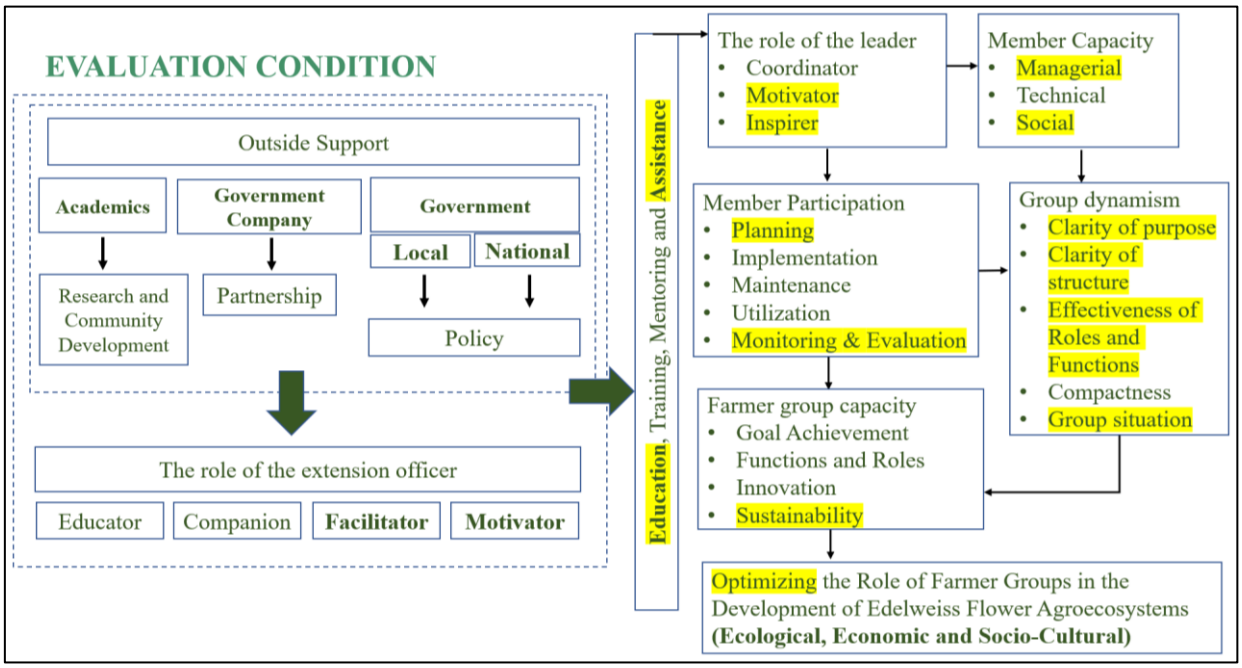

Figure 2. Evaluation condition institutional capacity of the farmer group

Efforts to increase the institutional capacity of farmer groups necessitate attention to resource allocation as a pivotal aspect. The provision of adequate financial support, infrastructure development, and access to modern agricultural technologies plays a crucial role in enhancing the productivity and efficiency of the farmer group. Collaborative partnerships with government agencies, non-governmental organizations (NGOs), and private sector entities are instrumental in addressing resource gaps and supporting the sustainable development of the farmer group. Such partnerships bring together diverse expertise and resources to facilitate the growth and success of the group (Sumarlan et al., 2012). Knowledge dissemination and skill development programs are key components in empowering farmer group members. Designing tailored training sessions, capacity-building workshops, and mentorship programs that cater to the specific needs and aspirations of the group is imperative. These initiatives should focus on enhancing technical skills related to agricultural practices, promoting effective management and leadership capabilities, and fostering social and communication skills among group members (Kamoto et al., 2013; Lestari, 2012). By equipping members with the necessary knowledge and skills, they become active contributors to the success and growth of the farmer group. Through

continuous learning and skill development, members can adapt to changing circumstances and contribute to the group's resilience and long-term sustainability.

The active participation of group members holds significant importance, extending beyond their role as implementers involved in various aspects of implementation, maintenance, and utilization. Involvement in planning and evaluation processes is equally vital. Active participation fosters self-awareness among individual members and enables them to evaluate their own progress and contributions, both on an individual level and for the group as a whole (Kamoto et al., 2013; Lestari, 2012). This self-awareness contributes to the development of a collective identity and a shared sense of responsibility within the group, promoting a stronger institutional capacity (Suprayitno et al., 2011; Woodward et al., 2020). Moreover, member involvement in the planning process influences the formulation of the group's vision and mission, which should be regularly adjusted to align with the prevailing dynamics and current needs of the group (Bijman, 2016; Lestari, 2012; Woodward et al., 2020). This adaptability ensures that the group remains responsive to changing circumstances and can effectively address emerging challenges. This balanced approach to planning and improvement enables the group to evolve and ensures that leadership roles are not concentrated solely on one individual who currently serves as the group leader. When members become accustomed to active involvement, leadership within the farmer group can be effectively passed down and sustained, aligning with the core values established by previous leaders (Kamoto et al., 2013; Rahma et al., 2023; Woodward et al., 2020). This distributed leadership approach promotes inclusivity, shared decision-making, and the development of leadership skills among group members (Reynolds and Holwell (Retired), 2020). It also provides opportunities for individuals to contribute their unique perspectives and expertise, fostering a sense of ownership and commitment to the group's goals and objectives.

In summary, evaluating the existing condition of institutional capacity within the farmer group underscores the importance of adopting a holistic and comprehensive approach to capacity building. By addressing the factors influencing institutional capacities, such as dynamism, member participation, leadership effectiveness, and stakeholder support, we can strengthen the farmer group's ability to contribute to community development, cultural geography, and sustainable environmental management (Anam and Sudarto, 2022; Kusnandar et al., 2019). The recommendations presented here provide a roadmap for empowering farmer groups, fostering resilience, and facilitating the successful development of agricultural systems that benefit the community and the environment. It requires a collaborative effort involving various stakeholders, including government agencies, NGOs, academic institutions, and private sector organizations (Kusuma, 2020; Rahma et al., 2023, 2022). Together, these stakeholders can provide the necessary resources, expertise, and guidance to support farmer groups in their journey towards enhanced institutional capacity and sustainable agricultural practices.

This evaluation holds significant importance for several reasons. Firstly, it emphasizes the need for a comprehensive and holistic approach to capacity building within farmer groups. By considering factors such as dynamism, member participation, leadership effectiveness, and stakeholder support, this approach ensures a well-rounded strategy tailored to the multifaceted nature of institutional capacity. Secondly, empowering farmer groups through active participation, leadership development, and access to resources enables them to take ownership of their development processes, fostering resilience, innovation, and self-reliance within the community. Thirdly, building institutional capacity within farmer groups contributes to the long-term sustainability of agricultural systems by equipping members with the necessary knowledge, skills, and resources to adapt to changing circumstances, address challenges effectively, and promote sustainable environmental management practices. Additionally, the emphasis on collaboration and partnerships with various stakeholders, including government agencies, NGOs, academic institutions, and the private sector, underscores the importance of bringing together diverse expertise, resources, and support systems to enhance capacity-building efforts and ensure their sustainability. Overall, this evaluation provides a roadmap for fostering resilience, promoting sustainable

agricultural practices, and facilitating community development through the empowerment of farmer groups.

4. Conclusions

The institutional capacity of farmer groups is a crucial factor for successfully implementing the Edelweiss Flower agroecosystem development program in Wonokitri Village. Strengthening the institutional capacity of the Hulun Hyang Farmer Group is paramount for advancing the Edelweiss Flower agroecosystem and achieving sustainable development goals in the region. The group's ability to effectively coordinate, mobilize resources, and engage its members directly impacts the success and longevity of the agroecosystem initiative. By focusing on enhancing dynamism, fostering active member participation, and optimizing leadership effectiveness, the Hulun Hyang Farmer Group can position itself as a key driver of agricultural innovation and community development. This evaluation, aiming to reveal the fundamentals of proper implementation for organizations run by indigenous peoples, serves a crucial role in fostering economically and socially independent communities by enhancing agroecological management capacity through strategic group development approaches. The institutional capacity of farmer groups stands as a crucial factor in the successful implementation of the Edelweiss Flower agroecosystem development program in Wonokitri Village. The dynamism of farmer groups and active member participation are direct influencers on institutional capacity, while factors such as individual member capacity, the role of the chairman, contribution of extension workers, support from external stakeholders, and member characteristics indirectly shape institutional capacity. To bolster institutional capacity, it's imperative to focus on increasing dynamism and promoting greater member participation through clear roles, effective communication, resource allocation, and knowledge dissemination. Strengthening the leadership role of the chairman, optimizing support from extension workers and external stakeholders, and fostering a vibrant institutional framework is crucial. Policymakers, agricultural practitioners, and researchers should prioritize institutional capacity development to ensure the long-term success and positive impacts. Strengthening the institutional framework of the Hulun Hyang Farmer Group not only ensures the successful implementation of the Edelweiss Flower agroecosystem but also contributes to the broader goal of building resilient and self-reliant communities in the region.

5. Suggestion

The recommendation for the local government, represented by the Bromo Tengger Semeru National Park extension institution, is to optimize the implementation of educational, training, counseling, and coaching programs for farmer groups involved in developing edelweiss flower agroecosystem activities. This will require a comprehensive approach that addresses technical, social, and economic aspects, providing practical solutions to the specific challenges faced by stakeholders in the region. In addition, through its research and development institutions, the central government should focus on providing a comprehensive cultivation technology package that is scientifically sound and capable of addressing stakeholders' specific needs and concerns. This package should encompass technical, social, and economic dimensions, providing practical guidance for developing edelweiss flower agroecosystems. The Wonokitri Village Government and Pasuruan Regency are advised to establish policies that accommodate research institutions and academic experts' findings and recommendations. These policies should ensure the systematic, targeted, and sustainable implementation of education, training, counseling, and farmer group development programs. By doing so, the local government can foster an environment conducive to the long-term success and positive impacts of edelweiss flower agroecosystem development in the region.

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