

Implementation of the Pentahelix Model in Community-Based Downstreaming of Non-Timber Forest Products (NTFPs) in Kerinci Regency

Yenny Oktavia; Sri Wahyuni; Herri Bahrizal; Sofyan Fairuzi; Tata

Andalas University

Abstract

Accelerated down streaming of Non-Timber Forest Products (NTFPs) products can be achieved if cooperation and coordination between relevant stakeholders (multi-stakeholders) goes well, so that sustainable adoption of innovation can occur. This research aims to analyze the effectiveness of multi-party communication in community-based down streaming of non-timber forest products. The research was carried out in August-October 2023 in Kerinci Regency. This research used a qualitative method, with key informants being the Head of the Kerinci Production Forest Management Unit (KPHP), the Social Forestry Business Group (KUPS), Companions, Non-Governmental Organizations (NGOs), as well as community members of the HHBK processing business. Data collection was carried out through Focus Group Discussion (FGD), using questionnaires, interview guides and observations. Secondary data was obtained from KPHP, Forestry Service and Kerinci Agriculture Service. Data were analyzed using N-Vivo analysis. The research results show that multi-party communication between non-timber forest product managers has not been effective. The interaction patterns of parties in the forest management network are not evenly distributed. The forest farmer group assisted by KPHP Kerinci has attempted to downstream processed products such as robusta coffee, kawa leaf, honey, cinnamon bark, cinnamon tea, coffee leaf dent, various taro chips, serundeng and so on, but are still constrained by market access and capital, as well as its institutions. This means that the success of social forestry is not enough to only rely on strengthening one aspect, but must go hand in hand and complement each other.

Key words: *Communication effectiveness, multi-party, innovation*

Introduction

Kerinci Regency has quite high potential in producing non-timber forest products (NTFPs), where around 34,000 hectares of forest resources in Kerinci Regency have promising business opportunities for non-timber forest products (NTFPs) such as produce, honey, coffee, cinnamon and others. However, the development of non-timber forest product products in Kerinci Regency cannot be separated from the existing challenges, especially in the downstreaming of non-timber forest product products. The challenges faced include limited adequate infrastructure to process non-timber forest products, limited market access, lack of community knowledge and skills in processing and marketing non-timber forest products, as well as a lack of guidance provided to non-timber forest product entrepreneurs.

In developing innovative non-timber forest product products and overcoming existing challenges, collaboration between various stakeholders is needed, one of which is using the pentahelix model. The pentahelix model involves effective collaboration between government, entrepreneurs, society, academics, and non-government organizations (NGO). In line with the results of research conducted by Virgawati and Mardiyanto (2020) which states that multi-stakeholder collaboration is the main key to successful innovation in coffee development in the Kaloran cluster. Collaboration between the five parties is non-negotiable, and each party plays a role according to its ideal role. This is also in accordance with the opinion of Soemaryani (2016) and Rampersad (2017) who stated that the Pentahelix model is a reference in developing synergy

between related agencies in supporting joint innovation goals, and that Pentahelix collaboration has an important role to support joint innovation goals and contribute on regional socio-economic progress.

Literature Review

Pentahelix model

The multi-stakeholder actor role theory based on the pentahelix model emphasizes the collaboration of five key actors, namely government, academics, business, society and media, in the empowerment process. This model recognizes the importance of balanced roles and collaboration among these actors in achieving successful community development initiatives. The government plays an important role in facilitating and supporting the empowerment process, while academics contribute through research, technological stimulus, and bringing influential figures to society. Meanwhile, the business sector actively participates in the empowerment process, and the community acts as a key actor and contributes to the empowerment process. Lastly, the media plays a role in disseminating information and helping product marketing.

The pentahelix model is better known as the ABCGM concept, namely Academician, Business, Community, Government and Media (Slamet et al, 2017) in Ikasari (2018:109). The main key to the success of this model is the existence of synergy and strong commitment between stakeholders in carrying out their duties. The pentahelix model is very useful for managing actor-based complexity. The Pentahelix model is designed to manage the complexity of multi-party initiatives and is characterized by strong synergy and commitment among stakeholders. This model is important for addressing community development challenges and ensuring the active participation of all relevant actors. Collaboration and commitment among actors is critical to the success of the Pentahelix model, as it enables effective management of diverse community development initiatives.

Overall, the pentahelix model emphasizes collaborative and balanced participation from government, academia, business, society, and media in community empowerment initiatives. This model is designed to manage the complexity of multi-party initiatives and relies on strong synergy and commitment among stakeholders for its success.

Convergence Communications

The concept of convergence communication refers to a communication model that involves collaboration and interaction between various parties to achieve common goals in the communication process. The convergence communication model aims not only to convey information, but also to prioritize learning experiences, sharing and gaining better mutual understanding (Syandi, 2017).

Entrepreneurship Concept

The concept of entrepreneurship refers to a person's ability to create jobs by combining creative and innovative sides that are useful for society. Entrepreneurship is not just about creating a new business, but also involves the ability to recognize opportunities, take advantage of opportunities, have a high sense of responsibility, and have other entrepreneurial traits. Some basic concepts in entrepreneurship include creative and innovative abilities which are used as the basis for creating something new and different through creative thinking and innovative action to create business opportunities. Apart from that, entrepreneurship also involves several things that an entrepreneur needs to understand and possess, such as the basic concept of entrepreneurship, goals, traits, characteristics and types of entrepreneurship. In its application, entrepreneurship can help create jobs, improve community welfare, and provide economic benefits for entrepreneurs and society.

Innovation

According to Drucker (2012) in Makmur and Thahier (2015) innovation is a specific tool for companies where innovation can explore or utilize changes that occur as an opportunity to run a different business. Innovation is a positive change in method or technology that is useful and departs from previously existing ways of doing something.

Methodology

The method used in this paper is literature study. Data and information were obtained through analysis of various relevant literature sources such as journals, books and related publications.

Results And Discussion

In the context of downstream non-timber forest products in Kerinci Regency, the pentahelix model can be an effective strategy to overcome existing challenges. *The* government has the responsibility to create policies that support the development of non-timber forest products. This includes regulations that support the production, processing and marketing of NTFP products. The government can contribute by providing fiscal incentives, providing technical guidance, and creating a conducive business environment for NTFP entrepreneurs. They can also facilitate market access, overcome infrastructure problems, and increase community capacity in product processing.

Local entrepreneurs play a role in managing and developing NTFP businesses in Kerinci Regency. They can create innovations in product production, processing and marketing. Entrepreneurs can also play a role in increasing the competitiveness of NTFP products in local and global markets. Entrepreneurs' contributions can bring technological and management innovation, create new market opportunities, and increase efficiency in the NTFP product supply chain. Collaboration with the government can help in overcoming regulatory and infrastructure barriers.

The community, especially farmers and local producers, plays a role in the production of NTFP raw materials. They can also become consumers of the product. Community participation in the product development process can increase local acceptance of innovation and ensure business sustainability. The community can provide input on local needs and environmental sustainability. Increasing community knowledge and skills in product processing can improve the quality and added value of NTFP products.

Academics such as educational and research institutions can provide technical knowledge and skills to the community and NTFP entrepreneurs. They can also carry out research to develop new technology in processing and innovating NTFP products. Academics can be a source of knowledge and research, provide training and education to the public and entrepreneurs, and collaborate with governments and entrepreneurs to develop innovative solutions.

Non-Government Organizations, can act as intermediaries between society, government and the business sector. They can provide technical support, education, and ensure environmental and social sustainability in the development of NTFP products. NGOs can fight for environmental sustainability, facilitate partnerships between the private sector and society, and provide policy support to ensure that the development of NTFP products runs in accordance with sustainability principles.

Lastly, media. The media has an important role in disseminating information about NTFP products, promoting innovation, and creating awareness among the public. Media can also help overcome communication challenges and build a positive image of NTFP products. The media can provide coverage that supports innovation and development of NTFP products. They can also provide a platform for entrepreneurs, governments, academics and NGOs to share information and experiences. In addition, the media can play an important role in increasing market attractiveness for NTFP products.

Through effective collaboration of the above, the Pentahelix model can help overcome challenges such as limited infrastructure, lack of market access, and lack of community knowledge and skills. In this way, the development of innovative non-timber forest product products in Kerinci Regency can be more sustainable and have a positive impact on the local economy and environment.

Conclusion

Kerinci Regency has quite high potential as a producer of non-timber forest products (NTFPs). However, in its development, the community in Kerinci Regency experienced several challenges such as limited infrastructure, market access, lack of skills and knowledge of the community in processing wood forest products and also a lack of guidance to the community as entrepreneurs of non-timber forest products. Implementation of the pentahelix model can be a solution to overcome challenges and develop the potential of non-timber forest products in Kerinci Regency.

Through the collaboration of various parties through the Pentahelix model, Kerinci Regency can achieve the full potential of non-timber forest products (NTFPs). By involving the government, entrepreneurs, society, academics and the media, an ecosystem can be created that supports innovation, improved infrastructure and increased market access for NTFP products. This joint effort will not only overcome the challenges faced, but also have a positive impact on people's skills and knowledge, making them better prepared to process and market their products.

Overall, the Pentahelix model is a solid foundation for creating synergy between the various parties involved in developing NTFP products in Kerinci Regency. With effective collaboration, it is hoped that we will be able to create an environment that supports sustainable growth, empowers the community, and makes Kerinci Regency a center of excellence for non-timber forest products at regional and national levels.

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