

Exploring the Economic Diversification of Small-Scale Mining Communities in Taneg, Mankayan, Benguet

Khenan Doreen L. Kigis

Benguet State University

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Abstract:

Economic diversification plays a crucial role in the resilience and sustainability of communities dependent on a single industry. This study explores the economic diversification strategies of small-scale mining communities in Taneg, Mankayan, Benguet, analyzing the factors driving diversification, commonly pursued alternative livelihoods, and the socio-economic impacts of these shifts. Utilizing secondary data from government reports, academic literature, policy documents, and NGO research, the study employs thematic analysis to identify key patterns and trends.

Findings reveal that economic diversification in Mankayan is primarily driven by the volatility of the mining industry, government policies and support programs, and concerns over environmental and health risks. Residents have shifted to alternative livelihoods such as agriculture, small-scale businesses, and eco-tourism, which provide more sustainable income sources. The socio-economic impacts of diversification include improved income stability, increased community empowerment, and persistent challenges such as limited access to capital and skill development.

The study highlights the necessity of strengthening support programs and policy interventions to ensure sustainable livelihood transitions. By understanding the economic shifts within mining communities, stakeholders can develop strategies that foster long-term economic resilience. Future research may explore the lived experiences of individuals undergoing livelihood transitions to further contextualize the findings.

Keywords: Economic Diversification, Small-Scale Mining Communities, Alternative Livelihood, Socio-Economic Impact, Mankayan

Introduction:

What happens when an entire community's livelihood depends on an unpredictable livelihood like mining? For decades, Mankayan, Benguet, has thrived on small-scale gold mining, which has provided employment and shaped the town's socio-economic structure. However, with fluctuating gold prices, increasing environmental concerns, and stricter government regulations, the sustainability of mining as the primary source of income has become uncertain. As a result, many

residents have begun seeking alternative livelihood opportunities to secure their financial stability and future.

Economic diversification was defined by the United Nations as "the process of shifting an economy away from a single income source toward multiple sources from a growing range of sectors and markets" (CS Global Partners, 2024). This is a widely recognized strategy for resilience in mining-dependent communities. It allows

individuals and communities to mitigate economic risks by developing multiple income streams, fostering stability amid industry fluctuations. This concept is particularly important in resource-dependent areas, where overreliance on mining makes communities vulnerable to economic downturns.

While economic diversification is a well-documented approach in large-scale mining operations and national economies, there is limited research on how small-scale miners and their families in Mankayan navigate this transition. The motivations behind diversification, the specific industries they shift to, and the broader social and economic impacts of these changes remain underexplored. This study will fill this gap by examining how the people of Mankayan adopt diversification strategies to sustain their livelihoods.

This research is significant as it will provide practical insights for local policymakers, NGOs, and community leaders seeking to promote sustainable development and mitigate the negative impacts of overreliance on mining. It will help to inform strategies that can foster economic resilience, not only in Mankayan but also in other similar mining-dependent regions across the Philippines.

Through qualitative analysis of secondary data, such as government reports, academic research, and policy documents, this study will explore the factors driving the transition to diversified livelihoods, the alternative income sources being pursued, and the impact of these changes on the community's socio-economic stability. By investigating these aspects, the study aims to contribute to discussions on economic resilience and provide valuable insights for stakeholders interested in fostering long-term sustainability in mining communities.

While the study will focus specifically on Taneg, Mankayan, its findings are expected to offer broader implications for mining-dependent communities in the Philippines. However, this

study will exclude other regions in Benguet to provide an in-depth analysis of Mankayan's unique context.

Statement of the Problem

The study aims to explore how residents of Mankayan are diversifying their income sources. Specifically, it aims to answer the following research questions:

1. What are the primary drivers of economic diversification in Mankayan?
2. What alternative livelihoods are most commonly pursued by the residents?
3. What impact does economic diversification have on the socio-economic stability of Mankayan households?

Conceptual Framework

This study explores the transition of small-scale mining communities toward alternative livelihoods, considering the drivers of diversification and the resulting socio-economic impacts. The conceptual framework follows a cyclical process, illustrating how each factor influences and reinforces the others. A cyclical process is defined as a sequence of events or factors that recur in a continuous cycle, where the outcomes of one cycle influence and drive the next, creating a feedback loop (Cyclical Factors: Definition & Examples | StudySmarter, n.d.). This process is particularly relevant in the context of livelihood transitions, where changes in one area (e.g., economic activity) continuously impact other aspects (e.g., social and environmental conditions), leading to ongoing adjustments and adaptations.

The framework shows a cycle where small-scale mining communities face challenges that drive them to seek alternative livelihoods. These drivers lead them to explore activities, which then create socio-economic impacts. Depending on the outcomes, these impacts influence the communities' future decisions, potentially leading them back to mining or further diversification. The cycle continues as long as these factors interact. This cyclical process highlights the

dynamic relationship between mining livelihoods, and socio-economic impact. communities, diversification drivers, alternative

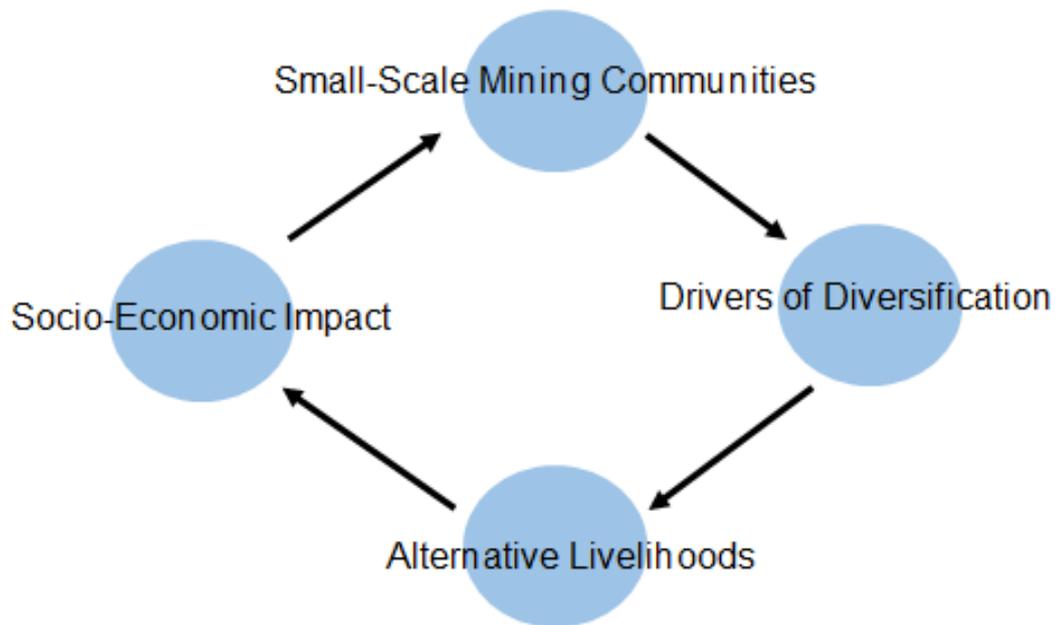


Figure 1. Paradigm of the study

Methodology:

This study explored the economic diversification strategies of small-scale mining communities in Taneg, Mankayan, Benguet, using secondary data due to time constraints. The research analyzed existing government reports, academic literature, and policy documents to understand the factors driving diversification and its socio-economic impact.

A qualitative research design was employed, with data analyzed through thematic analysis. Key themes such as drivers of diversification, alternative livelihoods, and socio-economic impacts were identified and interpreted. Thematic analysis allowed for the systematic identification of recurring patterns in the data, helping to explain the underlying factors influencing economic change in the community (Braun & Clarke, 2006).

Ethical considerations were minimal, as the study used publicly available data, and proper citations were provided to maintain academic integrity.

The study's reliance on secondary data had limitations, including the potential lack of recent developments and the absence of specific

community experiences that direct interviews might have provided. However, the findings offered valuable insights into the processes and outcomes of economic diversification in Mankayan.

Results and Discussion:

The analysis of the secondary data on economic diversification in Mankayan revealed several significant findings related to the community's shift from a mining-dependent economy to alternative livelihoods.

Drivers of Economic Diversification

The findings reveal several key drivers that have influenced economic diversification in Mankayan. One of the most significant factors is the volatility of the mining industry. Fluctuating gold prices and the uncertainty of mining earnings have pushed many residents to explore alternative income sources (Department of Trade and Industry, 2023). Since the local economy has historically been dependent on gold mining, price drops have caused financial instability, making it necessary for households to seek more sustainable livelihoods.

Additionally, government policies and support programs have played a crucial role in facilitating economic diversification. The Mankayan Local Government Unit (LGU) has implemented various livelihood programs, including agricultural training, entrepreneurship workshops, and financial assistance to encourage residents to shift to other industries (Mankayan LGU, 2021). These initiatives have helped former miners acquire new skills, easing their transition into alternative forms of employment.

Another major driver of diversification is environmental and health concerns. Mining-related activities have led to deforestation, soil degradation, and contamination of water sources, adversely affecting the health of residents (Philippine Environmental Governance Project, 2022). Exposure to harmful chemicals, such as mercury and cyanide, has resulted in chronic illnesses among miners, pushing many to seek safer, non-mining-related jobs. Consequently, a growing number of families have turned to agriculture and small businesses as a means of livelihood.

Beyond these external factors, a cultural shift has also contributed to economic diversification. Younger generations, influenced by education and exposure to digital opportunities, have sought employment in industries outside of mining. This shift has contributed to a gradual transformation of Mankayan's economic landscape.

Commonly Pursued Alternative Livelihoods

Several alternative livelihoods have emerged as the most common sources of income outside of mining. Agriculture has been the most significant sector into which many residents have transitioned. Shifting from a primarily mining-based economy to one centered on farming has provided a viable alternative for many households. Crops such as rice, vegetables, coffee, and other high-value crops have been cultivated to meet both local demand and external markets. Government-supported agricultural programs have provided the necessary tools, knowledge, and

technical assistance to help farmers improve productivity and sustainability. This transition is also seen as a long-term investment, ensuring food security for families while also generating income from local markets.

Alongside agriculture, some residents have ventured into small-scale businesses as an alternative means of livelihood. Retail businesses such as sari-sari stores, food stalls, and even transportation services have provided a steady source of income (Bureau of Small and Medium Enterprises, 2022). These businesses often require relatively low capital investments but offer the potential for consistent returns as they cater to the daily needs of the local community. Such small-scale businesses are crucial in fostering economic resilience, as they generate income and offer flexibility in terms of working hours and labor requirements. Moreover, these ventures contribute to local economic circulation, strengthening the community's economic foundation.

Another significant area of growth has been ecotourism. Mankayan's natural beauty and its rich cultural heritage have attracted interest from tourists seeking unique experiences. Residents have capitalized on this by offering homestays, organizing local tours, and selling locally-made handicrafts (Department of Tourism, 2023). These activities not only provide a source of income but also help to preserve local traditions and culture, creating a sense of pride among residents. Ecotourism also promotes environmental awareness, as it encourages the sustainable use of natural resources, providing a means to protect the environment while generating income for the community.

Socio-Economic Impacts of Economic Diversification

Economic diversification has had both positive and challenging socio-economic impacts on the community. Households that have diversified their income sources report greater financial stability compared to those who rely solely on mining. Diversifying income sources has made households

more resilient to external economic shocks, such as fluctuations in global gold prices or disruptions in mining activities (CS Global Partners, 2024). This stability allows families to meet basic needs and invest in long-term goals like education, healthcare, and infrastructure improvements, which would have been more challenging to achieve through mining alone.

The engagement in alternative livelihoods, particularly agriculture and tourism, has also led to increased community empowerment, with residents gaining more independence and self-reliance (Philippine Social Welfare and Development Agency, 2022). The economic diversification efforts have fostered local leadership and community participation, as individuals take ownership of their ventures and contribute to local development. This shift in mindset has enabled the community to become more adaptive to changes in the economy and has enhanced social cohesion as people work together to create a more diversified and sustainable economy.

However, economic diversification has not been without challenges. Despite the positive strides, there are still significant barriers to achieving full economic resilience. One of the most pressing challenges is limited access to capital. Many residents lack the necessary financial resources to invest in larger-scale businesses or more productive farming equipment (Bureau of Small and Medium Enterprises, 2022). While government programs have provided some assistance, the demand for capital often exceeds the available resources. Additionally, there is a lack of specialized skills in sectors outside of mining. For many residents, transitioning into new industries requires skills that they may not have developed through their previous work in mining. Without adequate training or education in fields like agriculture, tourism, or retail, it can be difficult for individuals to fully capitalize on alternative livelihood opportunities.

Additionally, environmental challenges, such as soil degradation, have affected agricultural

productivity, making it more difficult for farmers to succeed (Philippine Environmental Governance Project, 2022). The shift to farming has been challenging for some households, particularly those whose land has been affected by past mining activities. The fertility of the soil has been compromised, making it harder to grow crops successfully. Additionally, climate change poses a growing threat to agricultural yields, as unpredictable weather patterns and extreme weather events can disrupt planting and harvesting cycles.

These results suggest that while economic diversification in Mankayan has improved household financial stability and empowered the community, there are still hurdles to overcome in ensuring the sustainability of these alternative livelihoods. These barriers are consistent with challenges faced by other rural mining communities in the Philippines, where local governments struggle to provide sufficient resources for economic diversification (World Bank, 2015).

Conclusion:

This study examined the economic diversification strategies employed by the residents of Mankayan, Benguet, and explored the factors driving this shift, the alternative livelihoods being pursued, and the socio-economic impacts of these strategies. The findings indicate that economic diversification has contributed to improved financial stability for households in Mankayan, but challenges such as limited access to capital and infrastructure remain.

The results underscore the importance of government support in facilitating the transition to diversified livelihoods, particularly through programs that provide training, financial assistance, and infrastructure development. While agriculture and small-scale businesses have been successful, greater investments in eco-tourism and other sustainable industries could provide long-term resilience.

Future research should explore the perspectives of residents directly to provide a deeper understanding of their lived experiences during the transition to alternative livelihoods and assess the effectiveness of government policies at the community level.

References:

1. Bureau of Small and Medium Enterprises. (2022). Supporting local enterprises for economic resilience. Department of Trade and Industry. Retrieved from <https://www.dti.gov.ph>
2. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
3. CS Global Partners. (2024). Economic diversification and sustainable growth. Retrieved from <https://www.csglobalpartners.com>
4. Cyclical Factors: Definition & Examples | StudySmarter. (n.d.). StudySmarter UK. <https://www.studysmarter.co.uk/explanations/hospitality-and-tourism/tourism-economics/cyclical-factors/>
5. Department of Tourism. (2023). Eco-tourism initiatives in mining communities. Retrieved from <https://www.tourism.gov.ph>
6. Department of Trade and Industry. (2023). Livelihood programs for transitioning industries. Retrieved from <https://www.dti.gov.ph>
7. Mankayan Local Government Unit (LGU). (2021). Livelihood Programs in Mankayan. Retrieved from <https://www.mankayan.gov.ph>
8. Philippine Environmental Governance Project. (2022). Sustainable environmental practices in resource-dependent communities. Retrieved from <https://www.dai.com/our-work/projects/philippines-environmental-governance-phase-ii-ecogov2>
9. Philippine Social Welfare and Development Agency. (2022). Social programs for sustainable livelihoods in mining communities. Department of Social Welfare and Development. Retrieved from <https://www.dswd.gov.ph>
10. World Bank. (2015). Rural Development and Sustainable Livelihoods in Mining Communities. World Bank Group. Retrieved from <https://www.worldbank.org/en/topic/ruralevelopment>