

Sustainability of livelihood programs for marginalized communities: A 5Ps framework analysis



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ABSTRACT

Livelihood programs are widely promoted as tools for poverty alleviation and empowerment in marginalized communities, aligning directly with the United Nations Sustainable Development Goals (SDGs), particularly SDG 1: No Poverty, SDG 5: Gender Equality, and SDG 8: Decent Work and Economic Growth. This study investigates the sustainability of livelihood programs for marginalized communities by extending the traditional Sustainable Livelihoods Framework (SLF) into a comprehensive 5Ps model: People, Planet, Profit, Partnership, and Policy. Using a mixed-methods design, incorporating a survey of 200 beneficiaries and 10 in-depth qualitative interviews, the research assesses program sustainability across these five dimensions. Findings show that while many initiatives provide immediate benefits in terms of income and resource access, livelihood sustainability is weakened by limited capacity building among beneficiaries, inadequate resource mobilization, and socio-economic inequities. Environmental resilience and policy alignment also remain underemphasized, creating risks for program sustainability. Additionally, institutional sustainability is affected by fragmented partnerships and exclusionary governance, affirming that policy processes are highly contested and that marginalized communities are frequently excluded. The study concludes that short-term financial gains from livelihood programs are insufficient to ensure long-term resilience. This requires implementing holistic entrepreneurial reskilling for beneficiaries, expanding beneficiaries' networks through partnerships, and integrating climate-resilient technologies to protect the natural resource base upon which rural livelihoods depend. To address these challenges, the paper highlights that livelihood programs must fully integrate the 5Ps framework, where empirical partnerships and qualitatively derived institutional policies act as the essential scaffolding supporting the delicate equilibrium between people, planet, and profit.

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1. Introduction

Livelihood programs have surged to the forefront of global development discourse. The World Bank's economic inclusion portfolio alone encompasses 276 initiatives financed by approximately \$19.3 billion as of 2023, commanding urgent attention as potent catalysts for dismantling entrenched poverty affecting 839 million people worldwide and unleashing economic empowerment in marginalized communities.

Rooted in the capability approach championed by Amartya Sen, a sustainable livelihood is understood not merely as the absence of income poverty, but as the enhancement of what people can do and be, focusing on the capabilities, assets, and activities necessary for a resilient means of living (Morse, 2025). These initiatives typically aim to enhance the capacities, capital, and activities that individuals and households utilize to secure their sustenance and well-being, especially in vulnerable contexts. A livelihood is fundamentally characterized by the capabilities, assets, and activities necessary for a means of living, which must be resilient enough to cope with and recover from various stresses and shocks while maintaining or enhancing its foundational elements without undermining the natural resource base (Karki, 2021). The sustainability of these livelihoods, therefore, hinges on their intrinsic ability to persist and evolve

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positively over time, ensuring long-term well-being and environmental integrity. This includes providing net benefits to other livelihoods at local and global levels, both in the short and long term, critically, ensuring opportunities for future generations (Brown, 2026). Crucially, a sustainable livelihood not only secures immediate sustenance but also fosters enduring security, alleviating tension and promoting long-term well-being.

The concept of sustainable livelihoods is increasingly recognized as pivotal in rural agricultural development, poverty alleviation, and resource management within developing nations. This framework is particularly valuable for understanding the complex interplay of factors that enhance or constrain livelihood opportunities for the impoverished. It offers a comprehensive lens through which to analyze the diverse portfolios of activities and social support mechanisms that rural families construct to survive and improve their living standards (Habib et al., 2023). However, despite the growing emphasis on livelihood programs, their actual success and long-term sustainability, particularly in regions like the Philippines, remain a significant challenge, with many initiatives failing to achieve their intended impact. The complex nature of marginal societies, often characterized by limited access to resources, volatile environmental conditions, and socio-economic inequities, further exacerbates the difficulties of establishing robust, self-sustaining livelihood strategies. Consequently, a thorough examination of the conceptual underpinnings and practical applications of sustainable livelihood approaches is imperative to address these persistent challenges and foster genuine resilience among vulnerable populations (Nef et al., 2023).

Traditional livelihood interventions often prioritize short-term economic outcomes while neglecting the systemic role of partner institutions and policies, whereas this study investigates the multifaceted dimensions of sustainability. It extends traditional livelihood analysis to a comprehensive 5Ps framework: People, Planet, Profit, Partnership, and Policy, to capture the intervening role of collaborative governance, infrastructure development, and legislation in achieving long-term community resilience. Specifically, it investigates the sustainability of livelihood programs in terms of the 5Ps factors and determines significant differences in the sustainability of livelihood programs across socio-demographic profiles. Furthermore, this analysis will evaluate how various external and internal factors, including policy frameworks and local knowledge systems, influence the adaptive capacities of these societies in achieving long-term livelihood security. This rigorous assessment aims to identify best practices and critical gaps in current livelihood interventions, thereby contributing to the formulation of more effective, context-sensitive strategies to empower marginalized communities (Castillo and Mantillas, 2024).

This study also considers the limitations inherent in current analytical methodologies for assessing livelihood sustainability, pointing towards emerging research directions that could enhance predictive and evaluative capacities. This includes exploring the involvement of various stakeholders that are instrumental in shaping the outcomes of these programs (Syakirotn et al., 2025). It further considers how foundational frameworks, like the sustainable livelihoods approach, have evolved from academic theory to practical application in guiding such interventions, emphasizing their role in understanding complex community dynamics and informing project design and evaluation. The sustainable livelihood perspective offers a relevant framework for understanding rural entrepreneurship, particularly when considering rural communities' resource constraints and capacities to address poverty (Tabares et al., 2022).

Therefore, this study delineates current and emerging challenges in livelihood projects, with a deliberate focus on marginalized communities predominantly comprising women, out-of-school youth, persons with disabilities, and senior citizens. It advances a deeper interrogation of the interdependencies among livelihood assets such as human, natural, financial, physical, and social capitals and their synergistic contributions to sustainable development. Central to this inquiry is the strategic utilization of programmatic support and policy instruments to bolster community adaptive capacities against exogenous shocks and stressors, while foregrounding the pivotal role of stakeholders in promoting empowerment and financial inclusion. Moreover, the research underscores the imperative of cultivating multi-stakeholder partnerships and citizen engagement to ensure the long-term viability of livelihood initiatives. By rigorously examining these dynamics, this paper proposes a tailored analytical model for evaluating livelihood sustainability that seamlessly integrates robust theoretical frameworks with empirical insights from heterogeneous, marginalized contexts (Natarajan et al., 2022).

The significance of this work lies in its potential to bridge existing gaps in rural development through the introduction of the 5Ps Framework, which illuminates context-specific pathways to resilience and equips policymakers and practitioners with actionable, evidence-based strategies to foster inclusive economic growth. However, the study's analysis of the "People, Planet, and Profit" pillars relied heavily on self-reported data from program beneficiaries, which limits its validity. There is a risk of social desirability bias, in which participants may overstate the success of livelihood outcomes or downplay the failures of local policy to secure continued support or funding. Furthermore, while out-of-school youth and PWDs were active qualitative participants in focus groups, they were not quantitatively isolated as independent profile variables due to sample allocation limitations.

2. Methodology

This study employs a mixed-methods research design anchored in a pragmatic philosophy to comprehensively assess program effectiveness and community resilience among livelihood projects in Northern Iloilo. By combining quantitative surveys and a qualitative phenomenological approach, the research captures both the statistical breadth of program impacts and the nuanced, lived experiences of the beneficiaries within a sustainable livelihoods framework (Odebo et al., 2021). Critically, this study utilizes an explanatory sequential mixed-method approach wherein the Policy dimension is not treated as a baseline quantitative variable, but is instead uncovered and contextualized through qualitative inquiry. The quantitative phase establishes the baseline evaluation of the 4Ps variables: People, Planet, Profit, and Partnerships. Following this, the qualitative phase investigates the specific problems encountered within these four dimensions and explores existing institutional policies—or the distinct lack thereof. Through this integration, the qualitative findings complete the 5Ps framework, serving as the empirical basis for recommending formal Policy Integration.

The quantitative phase utilized a multi-stage sampling technique combined with simple random sampling with proportional allocation to select the target households. A sample of 200 beneficiaries from various livelihood projects was selected to ensure adequate statistical power, using Cochran's formula to determine the appropriate degree of measurement accuracy. Quantitative data were collected using a survey questionnaire. To ensure content and face validity, the instrument's initial draft was assessed, reviewed, and revised by a panel of experts prior to field deployment. The robustness of the survey instrument was rigorously evaluated. Internal consistency and reliability were confirmed, as all constructs exhibited Cronbach's alpha coefficients above 0.70 and composite reliability (CR) exceeding 0.60. Furthermore, construct validity was established by ensuring the Average Variance Extracted (AVE) for all latent variables was greater than 0.50. Discriminant validity was strictly confirmed by verifying that the square root of the AVE for each research construct consistently exceeded its correlations with any other constructs in the model (Amghani et al., 2025). Descriptive statistics summarized the central tendencies of the 4Ps variables (People, Planet, Profit, and Partnerships). Inferential analysis was used to test whether there is a significant difference among profile variables. IBM SPSS Statistics v26 for Windows was used to process quantitative data.

For the qualitative phase, 10 beneficiaries were purposely selected from different association officers and members to participate in in-depth semi-structured interviews and focus group discussions to gather rich, narrative data that illuminates the contextual factors shaping program effectiveness and beneficiaries' adaptive capacities

(Kuipers and de Jong, 2023). Data from these in-depth interviews and FGDs were subjected to thematic analysis to identify the challenges beneficiaries face across the quantitative 4Ps metrics, while actively mapping out the policy landscapes or governance gaps affecting their associations.

By utilizing the qualitative phase to extract the underlying structural, systemic, and regulatory realities of the beneficiaries, the study transitions from a 4Ps baseline to a comprehensive 5Ps model. This perspective acknowledges that absolute truth in social sciences is unattainable, instead focusing on practical knowledge gained through human interpretation and experience. The study's comprehensive methodological framework, combining quantitative and qualitative approaches, is designed to yield robust findings that capture the intricate complexities of localized contexts.

The synthesis of these diverse data streams enables the assessment of the factors contributing to the long-term viability of livelihood programs, highlighting both successes and areas requiring further strategic intervention.

3. Results and discussion

3.1. Sustainability of livelihood program when respondents are grouped into profile variables

Quantitative data results from the study focus on factors affecting sustainability, which are people, planet, profit, and partners. People, or Project Beneficiaries, are crucial to the success of any given project. Their active engagement, from initial program design through implementation and evaluation, significantly influences the adaptability and long-term viability of livelihood initiatives. This involvement fosters a sense of ownership and ensures that interventions are culturally appropriate and responsive to local needs, thereby enhancing the community's overall resilience (Rashidfarokhi and Danivska, 2023).

Table 1 presents the demographic profile of the respondents and their views on livelihood sustainability. The descriptive results demonstrate that when looking at specific segments, both male ($M = 2.38$) and female ($M = 2.47$) respondents initially perceived the livelihood program as only slightly sustainable. It is, however, notable that the majority of the livelihood program beneficiaries are females (76%) compared to males (24%). A generational divide is evident between beneficiaries aged 51 and above; 51–60 ($M = 3.75$) and those above 61 ($M = 3.53$) evaluated the program as sustainable, compared to those aged 50 and below; 41–50 ($M = 2.35$), 31–40 ($M = 2.19$), and 21–30 ($M = 2.24$) evaluated the program as slightly sustainable. Notably, across nearly all educational attainments, the initiatives were viewed as Slightly Sustainable, except for those at the elementary level who evaluated them as Moderately Sustainable ($M = 2.67$).

Table 1: Sustainability of livelihood program when respondents are grouped into profile variables (N = 200)

Categories	n	SD	Mean
Sex			2.43
Female	153	0.819	2.47
Male	47	0.707	2.38
Age (years)			2.81
21-30	18	0.910	2.24
31-40	42	0.866	2.19
41-50	65	0.754	2.35
51-60	50	0.727	3.75
Above 61	25	0.600	3.53
Educational attainment			2.4
Elementary level	15	0.656	2.67
Elementary graduate	30	0.699	2.33
High school level	50	0.593	2.49
High school graduate	53	0.837	2.38
College level	31	1.070	2.28
College graduate	21	0.837	2.25
Civil status			2.28
Single	36	0.755	2.16
Married	139	0.806	2.43
Separated	20	0.661	2.91
Widow/widower	2	0.672	2.49
Cohabiting	3	0.589	1.4
Monthly income			2.54
10,000 and below	168	0.801	2.38
10,001-20,000	28	0.735	2.59
20,001-30,000	2	0.353	2.66
30,001-40,000	2	1.700	2.37
Operation period of livelihood (months)			2.60
Below 12	99	0.799	2.14
13-24	44	0.487	2.56
25-36	17	0.510	2.97
Above 36	40	0.870	2.74
Overall sustainability			2.51

4.20-5.00: Very sustainable; 3.40-4.19: Sustainable; 2.60-3.39: Moderately sustainable; 1.80-2.59: Slightly sustainable; 1.00-1.79: Not sustainable

3.2. Level of sustainability of livelihood projects

The level of sustainability of the livelihood programs reveals a stark contrast between their

economic aspirations and their actual sustainability outcomes across the 4Ps pillars. The overall mean rating of 2.51, verbally interpreted as slightly sustainable, highlights significant weaknesses in environmental stewardship and collaborative management.

The livelihood project is moderately sustainable in its impact on people or beneficiaries' sustainability, with a mix of moderate and slightly sustainable outcomes. While the project has made meaningful strides in promoting equal opportunities and social cohesion, further efforts are needed to enhance members' well-being, increase member participation in decision-making, and empower marginalized groups to a greater extent. The relatively low ratings in areas like member participation and marginalized group empowerment suggest that these aspects should be prioritized in future project planning to increase overall sustainability and impact. These findings align with broader literature that emphasizes the crucial role of community involvement and equitable access in the enduring success of development initiatives (Rasowo et al., 2024).

This highlights the importance of fostering genuine participatory mechanisms in which beneficiaries are not merely consulted but actively engaged in co-creating solutions and defining their own developmental priorities (Sidi et al., 2020). Table 2 shows the level of sustainability of livelihood projects in terms of people, planet, profit, and partnerships.

Table 2: Sustainability of livelihood projects

Items	Score	Interpretation
Dimension 1: People (social sustainability)		
The livelihood project provides equal opportunities for all members of the association, regardless of gender, age, or social status.	3.15	Moderately sustainable
The project has improved the overall well-being of the association members, including access to health, education, and social services.	1.89	Slightly sustainable
The association's members actively participate in the planning and decision-making of the project.	2.45	Slightly sustainable
The project has helped marginalized groups (such as women, youth, or persons with disabilities) become more active and empowered in the community.	2.37	Slightly sustainable
The livelihood project strengthens social cohesion and cooperation within the association and the broader community.	3.0	Moderately sustainable
Dimension 2: Profit (economic sustainability)		
The livelihood project has generated enough income for association members to improve their financial stability.	3.63	Sustainable
Association members are able to reinvest their earnings into improving their own livelihoods or the community's well-being.	3.19	Moderately sustainable
The project has created opportunities for the association to expand its income sources and increase profits over time.	3.12	Moderately sustainable
The financial model of the project ensures that profits are equitably distributed among the association members.	2.51	Slightly sustainable
The project has provided stable, long-term income-generating opportunities for the association members.	2.30	Slightly sustainable
Dimension 3: Planet (environmental sustainability)		
The livelihood project uses environmentally friendly practices, such as waste reduction or sustainable resource use, that are easy to adopt in our community.	1.65	Not sustainable
The project minimizes environmental harm, including pollution and deforestation, in its activities.	1.78	Not sustainable
The association members are taught how to adopt sustainable environmental practices in their daily lives as part of the livelihood project.	1.71	Not sustainable
The project has a clear plan to ensure that its environmental impact is minimized over the long term.	1.75	Not sustainable
The project helps the association reduce its dependence on non-renewable resources by encouraging the use of sustainable alternatives.	1.73	Not sustainable
Dimension 4: Partnership (collaborative sustainability)		
The project has established strong partnerships with local organizations, government agencies, or other stakeholders who support the association.	2.46	Slightly sustainable
These partnerships provide essential resources (financial, technical, or educational) that support the success and sustainability of the project.	2.39	Slightly sustainable
The association has regular and effective communication with its partners to ensure the project's success.	2.37	Slightly sustainable
The partners help the association build its capacity to engage in economic, social, and environmental sustainability practices.	3.38	Moderately sustainable
The association is open to forming new partnerships with other organizations to improve the sustainability and impact of the project.	3.35	Moderately sustainable
Overall mean score	2.51	Slightly sustainable

4.20-5.00: Very sustainable; 3.40-4.19: Sustainable; 2.60-3.39: Moderately sustainable; 1.80-2.59: Slightly sustainable; 1.00-1.79: Not sustainable

3.2.1. Level of sustainability of livelihood projects in terms of people

People as primary factor of livelihood program needs genuine empowerment. The assessment of people as a pillar suggests a state of moderate sustainability, with an overall trend toward social cohesion that is hindered by limited beneficiary involvement in high-level decision-making. While the projects are perceived as providing equal opportunities (Mean = 3.15), the empowerment of marginalized groups (Mean = 2.37) and active participation in project planning (Mean = 2.45) are both rated as slightly sustainable. This result suggests a paradox in program administration: while associations are effective at bringing people together (Mean = 3.0) for social cohesion, they often fail to transform this collective presence into genuine agency. The "Slightly Sustainable" rating for well-being (Mean = 1.89) indicates that the immediate benefits of these programs do not consistently translate into improved access to essential services, such as health and education. The results suggest that without fostering genuine participatory mechanisms in which beneficiaries co-create solutions, projects remain vulnerable to bureaucratic hurdles and top-down inertia. Furthermore, while technological trends like automation can increase overall productivity, they can also be a double-edged sword; they frequently displace low-skilled agricultural and manual workers, thereby widening income inequality unless matched with robust, localized re-skilling initiatives (Almusharraf, 2025).

3.2.2. Level of sustainability of livelihood projects in terms of profit

Another factor considered in sustainability is profitability. For a livelihood program to be truly sustainable, its activities must generate sufficient economic returns to cover operational costs, provide a surplus for reinvestment, and ultimately enhance participants' financial stability (Orien et al., 2024). This study evaluates the economic sustainability of a livelihood project by examining its income generation capabilities, the reinvestment potential of earnings, the creation of new income opportunities, and the equitable distribution of profits among association members. Economic sustainability outcomes reflect a "resilience gap" where participants can cope with immediate needs but struggle to achieve long-term financial transformation.

A significant divergence exists between the initial capacity for income generation (M = 3.63), which is verbally interpreted as Sustainable, and the actual provision of long-term stable income (M = 2.30), which is evaluated only as Slightly Sustainable. This macro-level disconnect suggests that while program beneficiaries demonstrate strong micro-entrepreneurial aptitude during the start-up phase, largely catalyzed by the provision of localized Seed Capital Funds, they eventually encounter severe

"market mismatches" and high rates of premature micro-enterprise closure over time. When examining the broader economic dimension, the evaluated livelihood initiatives have undeniably made notable strides toward baseline economic sustainability. This progress is explicitly evidenced by the moderate sustainability recorded for the reinvestment of earnings back into individual livelihoods and community well-being (M = 3.19), as well as the latent potential of these associations to expand their income avenues and increase cumulative profit margins (M = 3.12).

However, these positive gains are structurally undermined by systemic vulnerabilities in financial longevity and equity. Key operational dimensions, such as sustained long-term income generation (M = 2.30) and the equitable distribution of generated profits among all association members (M = 2.51), remain trapped at a Slightly Sustainable level. This imbalance exposes a clear "resilience gap," indicating that while the economic model successfully generates short-term cash flow, it consistently struggles to establish the institutional scaffolding, namely robust local policies and collaborative governance needed to translate peak financial gains into enduring economic security and equitable asset accumulation for marginalized stakeholders.

This indicates that while some positive economic outcomes have been achieved, there are still challenges that need to be addressed to ensure sustained financial success and equity. This necessitates a comprehensive re-evaluation of current financial models to integrate robust mechanisms for long-term viability and ensure that economic benefits are broadly accessible across all beneficiaries. Moreover, strategic methodologies and stakeholder collaboration in program management enable the crafting and execution of adaptive, high-impact livelihood initiatives. To ensure these programs remain successful and sustainable, several critical hurdles must be addressed, including gaps in accessibility, issues of equity, and persistent financial limitations (Adekugbe and Ibeh, 2024; Mazón et al., 2021). These aspects are crucial for fostering self-reliance and reducing dependency on external aid, ultimately contributing to the holistic empowerment of marginalized communities (Wokadala et al., 2020).

3.2.3. Level of sustainability of livelihood projects in terms of planet

The livelihood projects have not succeeded in helping the association reduce its dependence on non-renewable resources by encouraging the use of sustainable alternatives. This was rated not sustainable (Mean = 1.65), suggesting that the project still relies on non-renewable resources for its operations or has not made sufficient efforts to transition to more sustainable alternatives. The environmental assessment evaluates practices such as waste management, sustainable resource utilization, and the adoption of eco-friendly

technologies, which are critical for minimizing ecological footprints and ensuring the long-term viability of livelihood interventions (Parappurathu et al., 2023). This pervasive lack of environmental integration threatens the very foundations of rural livelihoods. In the Philippines, where a significant portion of the population relies on agriculture and fishing, the neglect of ecological integrity directly undermines future productivity. The absence of waste-reduction practices and sustainable resource-use protocols indicates that these programs operate as "extractive systems" rather than "regenerative" ones.

The assessment reveals a crucial state where immediate economic gains are prioritized at the total expense of the ecological foundation. A uniform rating of not sustainable across all indicators, from waste management to resource utilization, signals that these livelihood projects are operating in an environmental vacuum. By ignoring the local ecological realities of the Philippines, the program is essentially "liquidating" its natural assets to fund short-term operations. This isn't just a lack of "green" initiatives; it is a structural flaw that creates a hollowed-out economic model. To move the framework forward, the association must treat the environment not as a "background setting," but as natural capital that requires active reinvestment.

3.2.4. Level of sustainability of livelihood projects in terms of partnership

Building inclusive actor networks and ensuring participatory policy-making are essential to integrating the voices of the poor and preventing local elites from capturing the benefits of livelihood programs. Another factor considered to affect livelihood sustainability is the linkages or partnerships formed by the associations. This study evaluates the collaborative sustainability of the livelihood project by assessing the strength of its partnerships, the resources provided through these collaborations, communication effectiveness, capacity-building efforts, and openness to forming new partnerships. The rating of slightly sustainable (Mean = 2.37) for communication points to a significant gap in partnership management. Ineffective communication leads to coordination challenges, missed opportunities for technical support, and a lack of social legitimacy in project stewardship. While linkages with government agencies like the Department of Social Welfare and Development (DSWD) and Local Government Units (LGUs) represent a foundational asset, they are currently underperforming and rated only as slightly sustainable (Mean = 2.46). The slightly sustainable rating for resource provision (Mean = 2.39) suggests that partner support is inconsistent or insufficient to sustain project growth. However, the association's considered that partners help them to build its capacity towards sustainable practices (Mean = 3.38) and associations' receptiveness to new collaborators (Mean = 3.35) both rated as moderately sustainable

provides a strategic opening for academic institutions to intervene with targeted training and mentorship. Addressing these deficiencies through targeted interventions, such as formalized communication protocols and enhanced capacity-building workshops, is crucial for transforming these nascent collaborations into robust support systems for long-term livelihood viability (Dragomir and Foris, 2022). These findings simply show that partnerships formed by associations is integral to their sustainability.

3.3. Demographic determinants: Analysis of significant differences

The statistical analysis of respondent profiles reveals that demographic factors play a critical role in the perceived sustainability of livelihood programs. Table 3 shows a significant difference in the sustainability of the livelihood program when respondents are grouped by Sex ($p = 0.008$). Female beneficiaries reported a significantly higher mean sustainability score (Mean = 2.47) compared to males (Mean = 2.38). This "female advantage" in sustainability perceptions aligns with literature suggesting that women exhibit higher "eco-efficiency" and are more likely to prioritize resource conservation and communal well-being (Fertő et al., 2025). While 10% of women globally remain in extreme poverty, those in livelihood programs often use gained skills to boost household income more effectively than men; for example, in the Philippines, "rag weaving" initiatives with 80% female participation led to enhanced economic opportunities for entire families. This is because male-headed households tend to pursue livelihood activities with higher revenue, whereas female-headed households tend to favor livelihood activities with steady income, indicating that the former are more risk-averse (Baffoe and Matsuda, 2017).

Table 3: Difference in perceived sustainability of the livelihood program by sex

Profile variable	Group	n	Mean	SD	t	p
Sex	Female	153	2.47	0.819	-2.678	0.008*
	Male	47	2.38	0.707		

*: $p < 0.05$

Table 4 results also indicate significant differences in program sustainability based on Age ($p = 0.003$). Research notes that age significantly influences quality of life perceptions and the adoption of adaptation strategies. Younger entrepreneurs (ages 18-50) often view digital technology as critical, while older groups (over 50) show stronger eagerness to learn technology despite facing physical and digital barriers in informal micro-entrepreneurship, this result is also supported by the generational divide noted in Table 1 between beneficiaries' perception on overall sustainability of the livelihood, that those aged 51 above rated it as sustainable while those aged 50 and below rated it as slightly sustainable. Monthly Income: Income levels are proven to be a proxy for livelihood

security ($p = 0.026$). Studies show that 80% of beneficiaries with increased income also reached higher food security and psychological well-being.

On the contrary, no significant differences were found for Civil Status ($p = 0.430$), Educational Attainment ($p = 0.447$), and Operation Period ($p = 0.231$). This suggests that the program's sustainability is broadly accessible regardless of marital status or educational level. However, studies note that higher education still correlates with more "structured" inventory management practices in micro-businesses (Adu-Boahen et al., 2025). The significant differences found in Sex ($p = 0.008$), age

($p = 0.003$), and monthly income ($p = 0.026$) confirmed that a "one-size-fits-all" strategy fails to address the unique vulnerabilities of marginalized contexts. Evidence indicates that moving beyond "one-off" grants to a holistic "Graduation Approach" with sustained monitoring and mentoring is essential for long-term transformation. Prioritizing women-led micro-enterprises and fostering multi-stakeholder collaboration will ensure that marginalized communities transition from merely surviving to becoming self-reliant architects of a resilient and sustainable future.

Table 4: Differences in perceived sustainability of the livelihood program by profile variable

Profile variable	Source of variation	Sum of squares	p	Decision at $\alpha = 0.05$
Age	Between groups	10.385	0.003	Significant
	Within groups	119.340		
	Total	129.725		
Civil status	Between groups	1.501	0.430	Not significant
	Within groups	100.080		
	Total	101.581		
Monthly income	Between groups	7.180	0.026	Significant
	Within groups	149.330		
	Total	156.510		
Educational attainment	Between groups	4.045	0.447	Not significant
	Within groups	164.380		
	Total	168.425		
Operation period	Between groups	2.974	0.231	Not significant
	Within groups	134.450		
	Total	137.424		

3.4. Common problems encountered and policy analysis

Table 5 presents the common problems encountered by the associations that affect their sustainability. The data were gathered using checkboxes in a quantitative survey of 200 respondents. The identified problems were ranked by their perceived impact on sustainability. Respondents were asked to rank the top 3 major problems encountered that affect their livelihood projects' sustainability.

Table 5: Common problems encountered by the associations

Common problems encountered by the associations	f	Rank
Conflict among association members and leaders	128	1
Geographical location of members	83	2
Cultural or sector biases	80	3
Time-consuming business	75	4
Financial literacy	71	5
Entrepreneurial skills of managing officers	69	6
High cost of packaging materials	62	7

To understand the low quantitative baseline values ($M = 2.51$), the qualitative phase used focus group discussions and semi-structured interviews with selected association beneficiaries. This phase focused on identifying localized problems and mapping the existing policy landscapes or lack thereof within the 4Ps constructs, thus providing deeper insights into why associations struggle despite programmatic support.

The identification of Conflict Among Association Members and Leaders (Rank 1) as the primary challenge resonates with the findings on low partnership communication. Leadership disputes and interpersonal issues erode the social capital

necessary for group-managed ventures to succeed. Systemic problem roots were unmasked through the 10 key informant focus groups. One respondent pointed out that the association's president is inactive, obliging other officers to do the president's duties. Other conflicts pointed out by the respondents include undefined tasks, conflicts of interest, and rampant member absenteeism that leads to misunderstandings in the penalties or deductions of dividends. Furthermore, the geographical spread of members (Rank 2) introduces transportation costs, reducing beneficiaries' net income. Interestingly, Entrepreneurial Skills was ranked as the least pressing of the top seven challenges, suggesting that beneficiaries value interpersonal harmony and logistical support more than technical business training alone. The identified barriers to livelihood program sustainability resonate with broader challenges observed in development initiatives targeting marginal societies. This alignment underscores the need for comprehensive strategies that go beyond mere programmatic interventions to address the underlying systemic and structural impediments to sustainable development. Effective monitoring and evaluation frameworks are critical for tracking progress, identifying deviations, and ensuring that projects remain aligned with their objectives and stakeholder expectations. Moreover, the success of such programs hinges on cultivating robust entrepreneurial leadership and financial acumen among beneficiaries, as deficiencies in these areas have repeatedly been identified as significant impediments to sustained growth and market integration.

Furthermore, a persistent lack of technical capabilities and market knowledge among beneficiaries, along with limited basic education, exacerbates the challenges of achieving economic viability. Tapping into functional collaborative partners among institutions and local government to support the implementation of the Sustainable Development Goals will ensure the sustainability of the program (Dragomir and Foris, 2022). These multifaceted issues are further compounded by scarce financial resources and an incompatibility of governmental policies with community programs, which collectively undermine efforts to secure long-term viability for these initiatives (Adekugbe and Ibeh, 2024). Addressing these systemic challenges necessitates a holistic approach that integrates capacity building, improved governance, and tailored policy frameworks to foster self-reliance and resilience within marginal societies. This requires not only sustained financial investment but also the cultivation of robust cross-sectoral partnerships to pool resources and expertise, thereby enhancing program feasibility (Tugyetwena, 2023).

Fostering partnerships with various stakeholders and promoting private-public partnerships can facilitate knowledge transfer, resource mobilization, and market access, thereby enhancing the overall resilience and self-sufficiency of livelihood programs. These partners will help the beneficiaries evaluate the program and strategically integrate community needs assessments, which are crucial for identifying emerging issues and adapting interventions to ensure their ongoing relevance and effectiveness. The emphasis on adaptive management and stakeholder engagement ensures that programs can pivot in response to dynamic socio-economic landscapes, fostering an environment in which marginalized societies can genuinely thrive (Eikelenboom and Long, 2023). Ultimately, a well-defined policy governing livelihood programs that promotes good governance and inculcates the values of transparency and accountability can shape a sustainable future for associations that are beneficiaries of these programs.

The qualitative diagnostics successfully unmasked the framework's overarching structural parameter: while Policy was not operationalized as a baseline quantitative variable, it subsequently emerged from the qualitative narratives as the foundational institutional mechanism required to secure and sustain the other four dimensions. The complete absence of green guidelines explains the not sustainable Planet rating (Mean = 1.65), just as the lack of clear institutional governance policies explains the breakdown in Partnership communication (Mean = 2.37) and the rise of internal Conflict (Rank 1).

4. Conclusion

The pursuit of sustainable livelihoods for marginalized communities demands a paradigm shift from short-term, top-down economic interventions

to holistic, systems-level strategies. The program Policy must address the fragmented governance landscape where multiple frameworks exist but fail to translate into coordinated outcomes. This means aligning the program deliverables with local government units' initiatives to ensure that community engagement becomes a standard practice rather than a project-based exception. Supportive policy also involves legal empowerment for associations. By granting formal legal status to associations, governments can empower local associations to enter into contracts, resolve disputes formally, and access credit more effectively. This institutionalization helps mitigate the Conflict (Rank 1) and Bias (Rank 3) identified in the qualitative findings by creating standardized rules of engagement.

Partnerships function as a causal mechanism of environmental and economic change. The study shows that isolated initiatives are insufficient; instead, multi-stakeholder collaborations are required to pool resources and expertise. For marginalized communities, partnerships with academic institutions are particularly valuable. Universities can serve as third-party facilitators, providing post-training mentorship and independent monitoring. In the interview, beneficiaries with sustained support from partner agencies have significantly higher success rates. The financial literacy training, digital marketing, and business registration seminars conducted by a local academe partner have improved the record-keeping and business operations of the associations that attended the training. This initiative addresses the Financial Literacy (Rank 5) and Entrepreneurial Skills (Rank 6) gaps by providing continuous reinforcement and market-linked mentoring.

Finally, the sustainability of livelihood programs in marginalized communities requires a transformative shift from short-term programmatic interventions to a holistic, 5Ps-aligned governance model. The following recommendations are formulated based on the synthesis of empirical data and theoretical insights:

- Operational Recommendations for Program Administrators
 - Embed the 5Ps Sustainability Index: Program evaluation should move beyond simple financial metrics to include a weighted 5Ps Sustainability Index. This index should account for People (social equity), Planet (ecological footprint), Profit (long-term stability), Partnership (stakeholders), and Policy (legal alignment).
 - Institutionalize Conflict Resolution Handbook: Given that internal conflict is the top-ranked challenge, programs should integrate mandatory training on leadership and dispute mediation for association officers. These workshops should use role-playing simulations and be delivered in partnership with LGUs.
 - Mandate Ecological Stewardship (The 3Rs): To address the catastrophic failure of the planet,

every livelihood project must have a clear environmental impact plan. This includes promoting the 3Rs (Reduce, Reuse, Recycle) and using local raw materials to minimize packaging costs and environmental harm.

- Adopt a “Graduation Approach with Mentorship” as popularized by [Tambe \(2022\)](#). Programs should move away from one-off grants toward a long-term graduation model that includes sustained post-training monitoring and mentorship. This will continually capacitate beneficiaries and address problems, particularly the financial literacy gap, thereby reducing microenterprise closure rates.
- Leverage Digitalization for Market Integration: Equip beneficiaries with Enhanced Customer Experience Skills and training in digital marketing to help beneficiaries bridge the gap between traditional and online selling.
- Strategic Policy Recommendations for Stakeholders
- Forge Multi-Institutional Alliances: Government agencies should form formal alliances with universities and private firms to pool resources for shared funding and expertise. These alliances should be governed by MOUs and tracked via joint monitoring dashboards for real-time impact assessment.
- Enact Community-Led Governance Policies: Local governments should enact ordinances mandating community representation on program governance boards. This ensures that Policy is not just top-down but is informed by the lived realities of marginalized groups.
- Promote Sector-Based Grouping: Implement beneficiary classification and sector-based grouping (e.g., PWDs, women’s groups) to ensure that interventions are tailored to the specific needs and capacities of each demographic.
- Incentivize “Regenerative” Business Models: Policies should provide additional support or lower regulatory barriers for associations that adopt circular economy principles or biodiversity-friendly livelihood strategies.

In conclusion, the 5Ps analysis exposes a critical fallacy in traditional livelihood modeling: the assumption that profit accumulation is synonymous with resilience. This research strongly demonstrates that sustainability is not an incidental by-product of financial success, but rather the systemic outcome of structural synergy among the framework’s core dimensions. The transition from a profit-centric model to a multi-dimensional one marks a necessary evolution in rural development. As illustrated in [Fig. 1](#), the proposed paradigm establishes Policy and Partnership as the essential scaffolding that maintains the delicate equilibrium between People, Planet, and Profit. By shifting the focus from mere extraction to integrated stewardship, we move beyond short-term survival toward a regenerative framework capable of withstanding the complexities of the modern ecological and economic landscape.

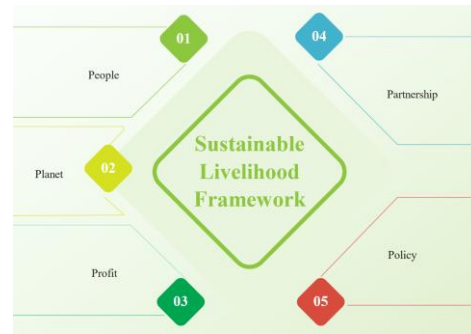


Fig. 1: The framework of 5Ps of sustainable livelihood

Ultimately, the strength of a livelihood program is not measured by its peak earnings, but by the integrity of the systems that sustain it.

List of abbreviations

3Rs	Reduce, reuse, recycle
4Ps	People, planet, profit, and partnership
5Ps	People, planet, profit, partnership, and policy
α	Alpha
AVE	Average variance extracted
CR	Composite reliability
DSWD	Department of social welfare and development
FGDs	Focus group discussions
LGU	Local government unit
M	Mean
MOUs	Memoranda of understanding
N	Total sample size
PWDs	Persons with disabilities
SD	Standard deviation
SDG	Sustainable development goal
SLF	Sustainable livelihood framework
SPSS	Statistical package for the social sciences

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Compliance with ethical standards

Ethical considerations

The study was conducted in accordance with the ethical standards of the Declaration of Helsinki and relevant institutional guidelines. All participants provided informed consent before participation and were informed that participation was voluntary and that they could withdraw at any time without consequence. Participant confidentiality and anonymity were maintained throughout data collection, analysis, and reporting, and the data were securely stored and accessible only to the research team.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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