

STRENGTHENING COMMUNITY-BASED AGRIBUSINESS AND SUSTAINABLE VALUE CHAINS FOR RURAL ECONOMIC RESILIENCE IN LOMBOK

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Abstract

Rural communities in Lombok, Nusa Tenggara Barat (NTB), depend heavily on smallholder agriculture and tourism-linked agribusiness, yet fragmented value chains and weak institutional linkages continue to limit farmers' bargaining power and income stability. This community service program was designed to strengthen community-based agribusiness institutions and sustainable value chains as a pathway toward rural economic resilience. Using a participatory community-development approach, the program combined situational assessment, capacity-building training, institutional strengthening of farmer and women-farmer groups, and facilitation of market linkages with downstream buyers, including the hotel, restaurant, and catering (HORECA) sector that anchors Lombok's tourism economy. Results indicate measurable gains in production and post-harvest capacity and in group-level bargaining position, while access to formal finance, structured contracts with downstream buyers, and perceived regulatory support remain persistent constraints, consistent with recent regional evidence. The program demonstrates that resilience-building in Lombok's rural economy requires simultaneous attention to farm-level capacity, institutional coordination, and inclusive downstream partnerships.

Keywords: community-based agribusiness; sustainable value chain; rural economic resilience; Lombok; community empowerment

INTRODUCTION

The transformation of agri-food systems is widely regarded as central to addressing poverty, food insecurity, and rural vulnerability, particularly in middle-income countries where smallholder agriculture remains a dominant source of livelihood. International frameworks increasingly emphasize the need for sustainable, inclusive, and resilient value chains that connect smallholder producers to higher-value markets while safeguarding ecological and social outcomes (Wollni et al., 2025). In Indonesia, this agenda is especially relevant in provinces where agriculture and tourism are structurally intertwined, since demand from tourism-linked buyers can either become a driver of inclusive rural growth or reinforce existing inequities if upstream producers remain disconnected from downstream markets (Utama et al., 2025).

Lombok, part of Nusa Tenggara Barat (NTB) Province, exemplifies this dual dependency. Agriculture continues to be one of the province's largest employers alongside trade and construction, with rice, maize, tobacco, and cattle as leading commodities traded both locally and across provinces, while tourism activity and export performance have shown strong recovery in recent periods. Provincial statistics report that the farmer terms-of-trade index (Nilai Tukar Petani) for NTB reached 128.37 in November 2025 and climbed further to 130.95 by June 2026, alongside continued growth in tourist arrivals, regional GDP, and export value, particularly in agricultural and processed goods (BPS Provinsi NTB, 2025, 2026). These aggregate indicators, however, mask considerable unevenness at the household level: value captured from rising farm-gate prices and tourism-linked demand does not automatically translate into stable incomes for smallholders who continue to bear production risk while occupying a weak bargaining position in the chain (Lombok Research Center, 2026).

Recent multi-province research that explicitly covers Lombok–West Nusa Tenggara reinforces this picture. Surveys of farmers, midstream (in-chain) actors, and HORECA operators across Bali, Lombok-WNT, and North Sulawesi found that a large majority of farmers finance their operations from personal savings rather than formal credit, that technology adoption among midstream actors remains below one-fifth, and that perceptions of regulatory benefit are especially low in Lombok-WNT compared with the other two provinces (Utama et al., 2025). The same study found that formal collaboration between HORECA businesses and smallholder farmers in Lombok-WNT was markedly weaker than in Bali or North Sulawesi, despite widespread agreement among value-chain actors that inclusive sourcing supports regional development. This combination of high aggregate potential and persistent structural fragmentation is precisely the condition that community-based agribusiness development is intended to address (Bolwig et al., 2010; Gereffi, 2018).

Community-based interventions elsewhere in Lombok illustrate both the promise and the limits of localized empowerment. Programs that trained women farmer groups in coffee wet-processing in Central Lombok (Arzani, Nalurita, & Zulfikri, 2025) and in agribusiness-based life skills using local commodities such as watermelon in Central Lombok (Fajri et al., 2024), as well as farmer groups that adopted low-cost, locally sourced inputs such as tobacco-stalk biopesticide in East Lombok (Yusuf et al., 2024), consistently improved technical knowledge and product quality at the group level. What these initiatives generally lack, and what broader value-chain evidence confirms as the binding constraint, is a structured and durable linkage between improved production capacity and stable downstream demand, whether through cooperatives, contracts, or formal partnerships with tourism-linked buyers (Christiaensen & Todo, 2014).

Building on this evidence, the present community service program was designed with two integrated objectives: first, to strengthen the technical and institutional capacity of community-based agribusiness groups in Lombok so that they can consistently meet market quality and volume requirements; and second, to facilitate more structured, sustainable value chain linkages—particularly with the tourism-driven HORECA segment and regional buyers—so that gains in production capacity are converted into more resilient and equitable household incomes. The program is framed as a contribution to rural economic resilience, understood not merely as the ability of farm households to withstand shocks, but as the capacity of the wider community-based agribusiness system to adapt, coordinate, and retain value locally.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

Rural economic resilience is a necessary condition for every region, especially rural areas. This is because rural areas must face various challenges such as climate change, changing economic conditions, and various other challenges that will impact the well-being of rural communities. Rural economic resilience is a concept that describes the ability of the economic system in rural areas, encompassing households, businesses, communities, local institutions, and village governments, to anticipate, absorb, adapt, recover, and transform when faced with various shocks and stresses, while maintaining or even improving community well-being in the long term.

Rural economic resilience has various definitions according to various organizations and literature. The OECD (Organization for Economic Co-operation and Development) defines rural resilience as the ability of rural areas to face global transformations such as climate change, digitalization, demographic change, and economic turmoil through people-centered and place-based policies. This resilience relates not only to the ability to withstand crises but also to the ability to capitalize on new opportunities for inclusive and sustainable economic growth. Another definition, according to the OECD Rural Studies (2025), emphasizes that resilient rural areas are those capable of: maintaining economic competitiveness; providing quality basic services; improving community welfare; maintaining environmental sustainability; and strengthening community capacity to cope with long-term change. The FAO (Food and Agriculture Organization) defines rural economic resilience as the ability of rural communities, particularly smallholder

farmers, to reduce vulnerability to various risks through increased production capacity, livelihood diversification, institutional strengthening, and sustainable natural resource management.

According to the OECD, using a resilience approach, resilience consists of three main capacities: absorptive capacity, the ability to absorb the impact of shocks without experiencing major damage; adaptive capacity, the ability to adjust economic and social strategies to change; and transformative capacity, the ability to implement structural changes to make the economic system stronger and more sustainable.

Conceptually, rural economic resilience can be understood as the ability of villages to maintain economic activity despite facing various risks, such as: climate change; natural disasters; pandemics; commodity price fluctuations; inflation; changes in market demand; technological developments; and changes in government policy. Villages with high economic resilience are not only able to survive crises but also recover more quickly and even thrive after them.

Developing rural economic resilience can be done using various approaches, one of which is Community-Based. This approach is a development strategy or model that places the community as the primary actor (a key player) throughout the planning, implementation, monitoring, and evaluation of a program or activity.

This approach is based on the principle of "from, by, and for the community," assuming that local communities best understand the problems, needs, and potential resources they possess. The main characteristic of community-based development is participatory: the community is actively involved, not merely passive recipients. Empowerment focuses on increasing the capacity, skills, and independence of local communities. Sustainability is another characteristic. Because programs are designed and managed by local residents, their sustainability is far more assured than top-down approaches. Local Resource-Based: utilizing local knowledge (local wisdom), physical assets, and existing social structures.

This activity focuses on the rural economy, so one of the concepts offered is agribusiness and Sustainable Value Chains. This concept is an integrative concept that combines all business activities in the agricultural sector (farm to fork) with the principles of sustainability.

This approach ensures that the production, processing, and distribution of agricultural products not only generate economic profits but are also socially just and environmentally friendly. The term "agribusiness" was first introduced by John Davis and Ray Goldberg (1957). Agribusiness encompasses the entire chain of agricultural-based business operations, which is divided into three main levels: upstream (upstream) and downstream (downstream).

METHODS

The program was implemented with community-based agribusiness groups across several districts in Lombok, including Central Lombok (Lombok Tengah), West Lombok (Lombok Barat), and East Lombok (Lombok Timur), in partnership with village governments, farmer groups, women farmer groups (Kelompok Wanita Tani), local cooperatives, and micro and small agribusiness enterprises. Commodities addressed reflected the existing productive base of each partner community, including rice, horticultural products, coffee, and locally processed agro-based products, in line with commodity patterns documented for the province (Kementerian Pertanian, 2023, as cited in regional value chain literature).

The program adopted a participatory community-development approach combined with value chain analysis, drawing on the inclusive value chain framework that emphasizes both horizontal coordination among producers and vertical coordination with downstream buyers (Bolwig et al., 2010; Reardon et al., 2025, as cited in Utama et al., 2025). This approach positions community members as active co-designers of interventions rather than passive recipients of

technical assistance, consistent with practices documented in comparable community-based agribusiness programs in rural Indonesia.

The program was carried out in five sequential stages. First, a situational assessment and participatory needs analysis were conducted through focus group discussions (FGD), field observation, and informal interviews with farmer groups, women farmer groups, village officials, and local traders to identify existing production practices, institutional capacity, and value chain bottlenecks. Second, capacity-building training was delivered on good agricultural and post-harvest practices, simple product processing, quality standardization, packaging, basic bookkeeping, and digital marketing, tailored to each partner group's commodity. Third, institutional strengthening activities supported the consolidation or formalization of farmer groups and women farmer groups into more structured cooperative-like units capable of aggregating produce, negotiating collectively, and maintaining shared quality standards. Fourth, market and value chain linkage facilitation connected participating groups with potential buyers, including local markets, cooperatives, and, where feasible, tourism-linked outlets such as hotels, restaurants, and catering (HORECA) businesses, alongside guidance on simple partnership or supply agreements. Fifth, monitoring and evaluation were conducted through pre- and post-activity assessment of participants' knowledge and practices, direct observation of group activities, and follow-up discussions with partner groups and village stakeholders.

Data were collected through participatory FGDs, semi-structured interviews with group leaders and village officials, field observation checklists, and simple pre-post knowledge assessments administered to training participants. Qualitative information from FGDs and interviews was analyzed thematically to identify recurring constraints and opportunities, while descriptive comparison of pre- and post-training indicators was used to assess changes in participants' technical and institutional capacity. Findings were triangulated with secondary data from BPS Provinsi NTB (2025, 2026) on regional agricultural terms of trade, tourism activity, and export performance, and were interpreted against recent value chain research covering Lombok–West Nusa Tenggara (Utama et al., 2025) to situate local outcomes within the broader regional context

RESULTS AND DISCUSSION

Across partner groups, participatory training produced clear improvements in participants' technical knowledge, particularly in post-harvest handling, basic quality sorting, and simple processing techniques—patterns consistent with earlier community-based agribusiness training in Lombok, such as coffee wet-processing training for women farmer groups in Batukliang Utara, Central Lombok (Arzani, Nalurita, & Zulfikri, 2025) and agribusiness-based life-skills training in Gapura village, Central Lombok (Fajri et al., 2024). Similar to those cases, gains were most visible in product quality and group cohesion rather than in immediate income change, suggesting that technical training alone is a necessary but insufficient condition for economic resilience.

Consistent with regional evidence, access to formal financing remained a binding constraint for most participating farmers, who continued to rely primarily on personal savings and informal arrangements to finance inputs and processing equipment. Regional survey data covering Lombok–WNT show that roughly two-thirds of farmers report difficulty accessing credit, a level comparable to, and in some indicators higher than, neighboring provinces (Utama et al., 2025). This financial exclusion limits the extent to which farm-level training can be converted into scaled production,

reinforcing the case for pairing technical assistance with financial inclusion instruments such as group savings schemes or cooperative-based micro-credit.

Facilitated institutional strengthening helped several partner groups move toward more structured collective action, including shared input procurement, joint quality standards, and coordinated selling arrangements. This aligns with broader findings that farmer cooperative participation, where present, is associated with improved market orientation and creditworthiness (Utama et al., 2025). However, consistent with patterns observed for midstream and downstream actors in Lombok-WNT, formal partnership arrangements linking community groups directly to larger buyers remained rare, and most transactions continued to rely on informal, trust-based relationships rather than written agreements. Regional evidence indicates that only a minority of HORECA businesses in Lombok-WNT report sourcing meaningfully from smallholder farmers compared with Bali and North Sulawesi (Utama et al., 2025), underscoring that the missing link is not producer willingness but the absence of formal mechanisms—contracts, aggregation platforms, or certification—that make such linkages bankable and repeatable.

Provincial data indicate that NTB's tourism sector and export performance have continued to strengthen, with regional GDP growth and rising farmer terms of trade reported through 2025 and into 2026 (BPS Provinsi NTB, 2025, 2026). This creates a genuine, growing demand base that community-based agribusiness groups in Lombok could serve, particularly for horticultural products, coffee, and processed agro-products favored by hotels, restaurants, and catering establishments. Facilitation efforts during the program succeeded in establishing initial, informal supply contacts between several partner groups and local buyers, but replicating the more formalized, contract-based linkages seen in provinces with stronger institutional capacity will likely require sustained support beyond the timeframe of a single community service cycle.

Taken together, these results suggest that rural economic resilience in Lombok cannot be achieved through farm-level capacity building alone. Sustainability standards and value chain research emphasize that durable outcomes for smallholders depend on the interaction of several dimensions simultaneously—food security, economic viability, and ecosystem health—rather than any single intervention (Wollni et al., 2025). Likewise, global value chain theory highlights that inclusion depends on addressing power asymmetries and institutional voids between smallholders and downstream actors, not merely on upgrading production quality (Gereffi, 2018). The structural character of rural poverty in NTB, where the largest share of value added is often captured outside the village by distribution and market intermediaries rather than by farming households themselves (Lombok Research Center, 2026), reinforces the argument that community-based agribusiness programs must treat institutional strengthening and market-linkage facilitation as core components, not optional extensions, of any capacity-building effort. This is consistent with the broader development literature on rural-urban transformation, which cautions that agricultural growth without a strong intermediary or missing middle of aggregation and marketing institutions tends to leave rural poverty largely untouched (Christiaensen & Todo, 2014).

CONCLUSION

This community service program shows that strengthening community-based agribusiness and sustainable value chains offers a viable pathway toward rural economic resilience in Lombok,

but one that depends on addressing farm-level, institutional, and market-linkage constraints together. Participatory training measurably improved technical capacity and group cohesion among farmer and women farmer groups, echoing similar community-based initiatives elsewhere in Lombok. At the same time, persistent gaps in formal financial access, contract-based market linkages, and perceived regulatory support—patterns also documented in recent regional value chain research on Lombok-West Nusa Tenggara—indicate that these structural barriers require continued, coordinated attention from universities, local government, cooperatives, and the tourism-linked private sector. Future community engagement should prioritize formalizing partnerships between community agribusiness groups and downstream buyers, expanding access to group-based financial instruments, and embedding digital tools for traceability and marketing, so that the growth already visible in Lombok's tourism and agricultural indicators translates into durable, equitably distributed benefits for rural households.

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