



PARTICIPATORY EMPOWERMENT AND GENDER EQUALITY IN DRYLAND AND COASTAL COMMUNITIES OF PLAMPANG, SUMBAWA

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ABSTRACT: Dryland farming and coastal-island communities in eastern Indonesia have long been positioned at the periphery of national development, despite hosting substantial natural and human-capital assets. Plampang Subdistrict in Sumbawa Regency contains both typologies within a single administrative boundary, with the transmigration settlement units SP1, SP2, and SP3 representing maize-and-cattle dryland systems, and the hamlets of Labuhan Ujung and Labuhan Jontal representing small-scale fisheries economies. This narrative literature review synthesises sixty published works dated 2014-2026 to map the conceptual landscape of community empowerment, citizen participation, and gender equality, and to draw out a context-sensitive empowerment model. The review applies content, comparative, and critical analysis to peer-reviewed journal articles, foundational monographs, and government documents. Findings indicate that observed levels of participation cluster in the tokenism band of Arnstein's ladder, while women shoulder a disproportionate share of post-harvest and processing labour without commensurate decision-making authority. A five-stage Input-Process-Output-Outcome-Impact framework is proposed, underpinned by participation, gender equality, sustainability, local wisdom, and equity as cross-cutting principles. The model offers a practical scaffold for sub-national governments, higher-education institutions, and community organisations seeking to design integrated, inclusive, and ecologically grounded interventions for similar rural-coastal landscapes across the Indonesian archipelago.

Keywords: Coastal Fisheries, Community Empowerment, Dryland Farming, Gender Equality, Participation.

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INTRODUCTION

Rural communities in Indonesia's eastern archipelago occupy a complex development position. They sit at the intersection of rich ecological endowments and persistent socio-economic vulnerability, of strong local traditions and limited integration into national development streams. Sumbawa Island, located in West Nusa Tenggara Province, is one such landscape: nearly eighty-six per cent of the province's tropical dry forest is found here, alongside extensive mangrove and coral



ecosystems, while almost two million inhabitants depend on this fragile resource base for daily livelihoods (Center for International Forestry Research and World Agroforestry, 2022). Maize and beef cattle dominate the dryland production system in this region, with intensification through the leucaena-based feeding model projected to lift smallholder farm profitability significantly when supported by enabling institutions (Dizyee et al., 2017).

Plampang Subdistrict offers a particularly instructive case because it carries, within a single administrative boundary, two contrasting rural typologies. The interior is shaped by three transmigration settlement units, locally known as SP1, SP2, and SP3, where households practise maize cultivation on dryland plots and rear Bali cattle as a household savings instrument. Domestic Resource Cost analysis of Bali cattle production in the same subdistrict has shown that three farm typologies operate side by side, each with distinct cost structures and resource use efficiencies (Anggraeny et al., 2018). The coastal fringe, anchored by the hamlets of Labuhan Ujung and Labuhan Jontal, is inhabited largely by Bugis-descended households whose economic life revolves around small-scale capture fisheries in Saleh Bay and seasonal voyages toward the Flores Sea (Pemerintah Desa Teluk Santong, 2025). The Ministry of Marine Affairs and Fisheries has recently designated Teluk Santong, including Labuhan Jontal, as a candidate site for the third phase of the Kampung Nelayan Merah Putih programme, signalling renewed national attention to this coastal periphery (Dinas Kelautan dan Perikanan Kabupaten Sumbawa, 2026).

Despite these endowments, the development trajectory of both typologies has been constrained by recurrent problems: limited household income, restricted access to capital and technology, ecological pressure from corn-plantation expansion that has already begun to encroach on protected forest areas (Septi et al., 2022), and a stubborn gender gap that mutes the contribution of women to production and decision making. Empirical work in eastern Indonesia indicates that women carry out the bulk of post-harvest, processing, and marketing tasks in both farming and fisheries value chains, yet remain underrepresented in cooperative membership and formal decision-making forums (Akter et al., 2017; Bonis-Profumo et al., 2026). The Food and Agriculture Organization's 2023 Status of Women in Agrifood Systems report estimates that closing the gender productivity gap could reduce the global number of food-insecure people by forty-five million (FAO, 2023), a figure that translates into very concrete welfare gains in subsistence-oriented landscapes such as Plampang.

The conceptual literature on community empowerment offers several useful entry points for this discussion. The work of Ife (2013) frames community development as a holistic practice that integrates ecological, social, cultural, and spiritual dimensions, and explicitly grounds it in social justice and human rights. Freire (2000) supplies the pedagogical foundation, arguing that critical consciousness, or *conscientização*, is the engine through which marginalised groups come to read their reality as historically constructed rather than naturally given. Chambers (1994) translated these insights into practical methods for rural fieldwork, popularising Participatory Rural Appraisal as a way of reversing the conventional flow of expertise from outsider to villager. Arnstein's (1969) eight-



rung ladder remains the most cited heuristic for distinguishing tokenism from genuine power redistribution in citizen participation, and its diagnostic value persists nearly six decades after publication (Granicus, 2023). Together, these works form a coherent theoretical scaffold for analysing how empowerment can be designed and assessed in rural and coastal Indonesia.

Yet, despite a sizeable body of work on community development, participation, gender, and rural livelihoods in Indonesia, three gaps persist. First, the dryland and coastal literatures tend to evolve in parallel silos, even when the two typologies occupy a shared administrative space. Second, gender analysis in rural Indonesia has often focused on either wet-rice or fisheries contexts, with comparatively little integrated treatment of maize-and-livestock dryland systems. Third, normative frameworks rarely translate into operationally specific empowerment models calibrated for sub-national governments and higher-education partners working at the village scale. This article addresses these gaps by drawing together the dryland and coastal empowerment literatures into a single conceptual model, applying the Arnstein heuristic and an adapted Women's Empowerment in Agriculture lens to the Plampang context, and proposing a five-stage Input-Process-Output-Outcome-Impact framework grounded in cross-cutting principles of participation, gender equality, sustainability, local wisdom, and equity.

The objectives of this review are therefore fourfold: to examine prevailing theories of community empowerment and their relevance to dryland and coastal contexts; to interrogate the quality of citizen participation in development planning at the village scale in Plampang; to analyse gender roles and barriers in both maize-cattle and small-scale fisheries value chains; and to propose a context-sensitive empowerment model that integrates participation and gender equality as foundational design principles.

METHOD

This study takes the form of a narrative literature review, an approach well suited to mapping the conceptual landscape of broad and interdisciplinary fields where systematic meta-analysis is neither feasible nor appropriate. The review followed three iterative stages: source identification, screening, and synthesis. Source identification drew on Scopus-indexed journals, journals indexed in the Indonesian Science and Technology Index (SINTA), authoritative monographs, and grey literature from multilateral agencies such as the Food and Agriculture Organization of the United Nations, the United Nations Development Programme, the World Bank, and the Indonesian Ministry of Marine Affairs and Fisheries. The temporal window prioritised material published between 2014 and 2026, although seminal works predating this window were retained where they form the theoretical scaffold of the field, for example Arnstein (1969) and Freire (2000).

Search terms combined English and Indonesian keywords including community empowerment, *pemberdayaan masyarakat*, citizen participation, *partisipasi*, gender mainstreaming, *kesetaraan gender*, dryland farming, *lahan kering*, coastal communities, *pesisir*, small-scale fisheries, blue economy, Sumbawa, and West Nusa Tenggara. Searches were conducted via Google Scholar,



the SINTA portal, journal aggregators such as ScienceDirect and SpringerLink, and institutional repositories. Screening removed duplicate items, predatory-journal content, and works that lacked methodological transparency. Three analytical techniques were then applied in combination. Content analysis extracted recurring constructs and operational definitions from each source. Comparative analysis examined how dryland and coastal contexts differ in their empowerment trajectories. Critical review interrogated the silences and biases of the literature, including its tendency to treat women as a homogeneous category or to romanticise local wisdom without scrutinising its internal power asymmetries.

Table 1. Distribution of Reviewed Sources by Type and Publication Window.

Source Type	2014-2018	2019-2026	Total
Peer-Reviewed Journal Articles	11	22	33
Books and Book Chapters	3	5	8
Multilateral and Government Reports	2	9	11
Conference Proceedings and Theses	1	3	4
Government Regulations and Policy Documents	1	3	4
Total	18	42	60

As Table 1 shows, the corpus is dominated by peer-reviewed journal articles published in the last seven years, which reflects both the maturation of empowerment and gender scholarship in agrifood systems and the active publishing culture in Indonesian rural-development journals. Multilateral reports were used selectively, primarily to triangulate statistical claims and to anchor normative arguments in international standards such as the Sustainable Development Goals.

RESULTS AND DISCUSSION

Geographical and Socio-Economic Profile of Plampang

Plampang Subdistrict sits on the southern shore of Saleh Bay and stretches inland across a gently rolling dryland plateau dominated by savannah and dry deciduous forest. Settlement patterns reflect this bifurcated geography. Three transmigration settlement units, SP1, SP2, and SP3, were established in the interior during the New Order resettlement programmes and remain the demographic and agricultural backbone of the area. Two coastal hamlets, Labuhan Ujung and Labuhan Jontal, sit along the bay's southern arc. Labuhan Jontal is roughly ten kilometres from the Plampang subdistrict centre and only about one hundred and fifty metres from the parent village of Teluk Santong, with a population that is predominantly of Bugis descent and a household economy oriented almost entirely toward marine capture fisheries (Fahrurizki, 2014).

Recent reporting from the subdistrict has flagged both ecological and infrastructural fragility: floods in early 2026 placed twelve and a half hectares of maize at risk of crop failure in Plampang and the neighbouring Empang subdistrict (Suara NTB, 2026), while field inspections of Labuhan Jontal's landing site documented severely degraded jetty infrastructure and persistent sanitation problems despite high fishing activity (Dinas Kelautan dan Perikanan Kabupaten Sumbawa, 2026). Figure 1 visualises the spatial arrangement of these dryland and coastal zones within the subdistrict.

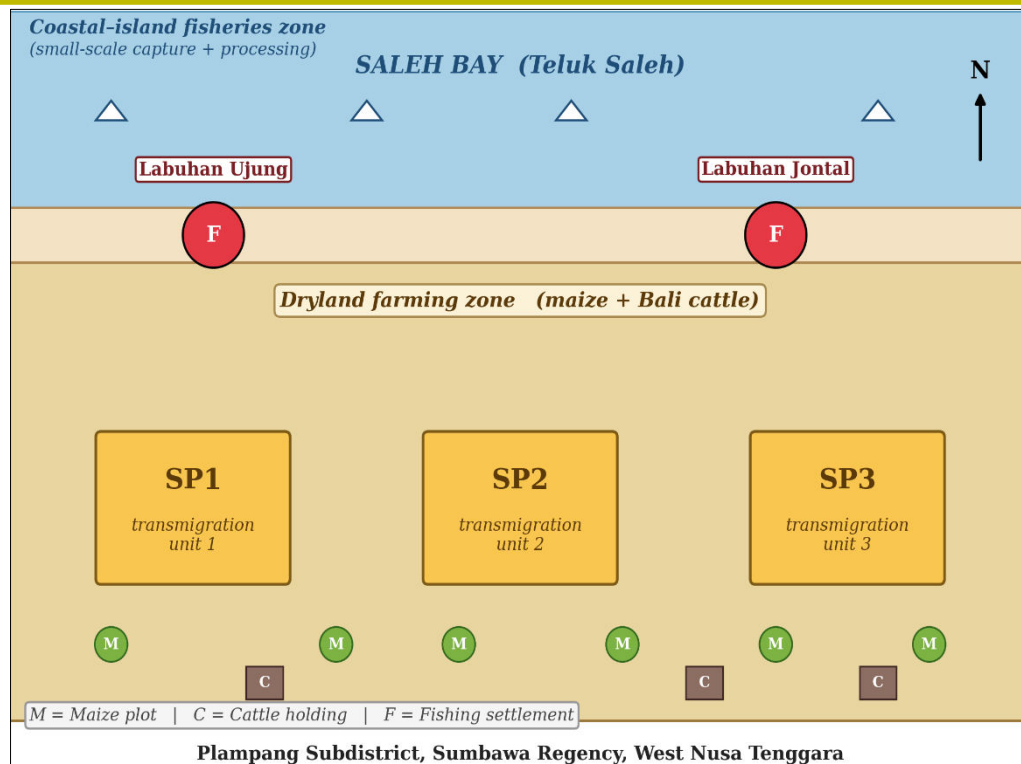


Figure 1. Schematic Spatial Typology of Plampang Subdistrict, Showing the Interior Dryland Farming Zone with Its Three Transmigration Settlement Units (SP1, SP2, SP3) and the Coastal Fisheries Zone Anchored by Labuhan Ujung and Labuhan Jontal Along Saleh Bay.

The juxtaposition shown in Figure 1 is more than a cartographic convenience. It produces a single administrative unit that must serve two distinct livelihood logics, two seasonal calendars, and two cultural-linguistic communities. Dryland households orient their year around the wet-season maize cycle and the dry-season cattle fattening period, whereas coastal households orient theirs around the monsoon-driven fishing seasons and the seasonal squid (cumi) runs that pull men away from Labuhan Jontal for several days at a time (Fahrurizki, 2014). Any empowerment model that ignores this duality risks producing programmes that work for one community while failing the other.

Characteristics of the Dryland Farming Community

Maize cultivation has expanded rapidly across Sumbawa in the last decade, propelled by national price guarantees, subsidised inputs, and easy access to working capital channelled through farmer groups. Septi et al. (2022) found that the same combination of regulatory tailwinds, profit incentives, and credit availability has driven corn-plantation encroachment into the Ampang Plampang protection forest area, with corresponding implications for biodiversity loss and watershed degradation. At the same time, the Bali cattle component of the local farm portfolio provides households with a non-perishable savings instrument that can be liquidated during school fee periods, religious festivals, or medical emergencies. Anggraeny et al. (2018) identified three prevalent cattle-farming typologies in Plampang, each with distinct cost structures and economic efficiency profiles,



indicating that there is no single dryland farmer to whom interventions can be uniformly addressed. Diversification into legumes and fodder trees, particularly leucaena, has been shown to lift profitability substantially when supported by stable price premia and adequate extension (Dizyee et al., 2017), but uptake remains uneven across SP1, SP2, and SP3.

Characteristics of the Coastal-Island Fisheries Community

Small-scale fisheries account for roughly eighty-five per cent of the labour force in Indonesia's fisheries sector and an estimated two and a half million households nationally (Stacey et al., 2021). These households are concentrated in coastal areas that consistently exhibit higher poverty rates than non-coastal villages, and average fisher earnings remain below the national minimum wage (World Bank, 2023). The Plampang coastal communities sit firmly within this profile. Capture activity is structured around the seasonality of Saleh Bay, with occasional voyages to the Flores Sea during lean periods. Studies of small-scale fisheries vulnerability in other Indonesian coastal districts have shown that lower-strata fishers rely heavily on social capital, mutual trust, and patron-client networks to absorb income shocks, while upper-strata fishers can mobilise physical and financial capital for spatial diversification strategies (Pranadji et al., 2024). The same dynamic is plausibly at work in Labuhan Ujung and Labuhan Jontal, where the temporary absence of male fishers during multi-day squid expeditions leaves women effectively running the hamlet economy and household for stretches of three to four days at a time.

A Comparative View of the Two Typologies

Synthesising the two preceding sections, Table 2 distils the key structural contrasts between the dryland and coastal communities of Plampang. The table draws on the subdistrict-specific work cited above, supplemented by broader Indonesian rural and coastal studies. The contrasts are not absolute, and several intermediate cases exist along the coast where households combine fishing with smallholder cropping, but the typology serves as a useful diagnostic for designing differentiated interventions.

Table 2. Comparative Structural Profile of Dryland and Coastal-Island Communities in Plampang.

Dimension	Dryland (SP1, SP2, SP3)	Coastal (Labuhan Ujung & Labuhan Jontal)
Primary Livelihood	Maize cultivation and Bali cattle rearing	Small-scale capture fisheries and post-catch processing
Seasonal Calendar	Wet-season cropping (Nov-Apr); dry-season fattening	Monsoon-driven fishing seasons; seasonal squid runs
Dominant Cultural-Linguistic Group	Sumbawa and transmigrant Javanese/Balinese	Bugis-descended households
Key Collective Institutions	Farmer groups (<i>Kelompok Tani</i>), women's farmer groups (KWT), <i>Gapoktan</i>	Joint fisher business groups (KUB), women's fish-processor groups, mosque committees
Capital Base	Land, livestock, farm machinery, KUR credit	Boats and gear, processing equipment, patron-client credit
Main Vulnerabilities	Drought, flooding, price volatility, forest encroachment risk	Marine pollution, climate variability, gear and infrastructure degradation



Dimension	Dryland (SP1, SP2, SP3)	Coastal (Labuhan Ujung & Labuhan Jontal)
Women's Primary Roles	Planting, weeding, post-harvest, marketing	Sorting, processing, packaging, marketing, household finance
Policy Entry Point	Village Fund, food security programmes, livestock intensification schemes	Village Fund, <i>Kampung Nelayan Merah Putih</i> (KNMP), Blue Economy programmes

Analysis of Citizen Participation

Citizen participation in village development planning in Indonesia is institutionally anchored in the village deliberation forum (*Musrenbangdes*), strengthened by Law Number 6 of 2014 on Villages, which granted villages a substantial measure of fiscal autonomy and recognised their right to manage their own affairs (Lindawaty & Halawa, 2023). Implementation, however, has been uneven. Amandaria et al. (2026) note that although Indonesian villages have been granted authority to manage development for two decades, gender inclusion in local organisations and self-help groups remains a vital but under-realised condition for community-led empowerment. Survey work in transmigration villages elsewhere in Indonesia has documented modest gains in human-resource-oriented programming, the establishment of village-owned enterprises (*BUMDesa*), and women's empowerment, even as significant gaps persist in actual decision-making power at the kelompok level (Suaib et al., 2024).

When the Plampang situation is read against Arnstein's (1969) ladder, two observations emerge. Dryland communities, which have a longer institutional history through transmigration governance, farmer groups, and *BUMDesa*, sit slightly higher on the ladder, occupying the consultation rung where attendance at planning meetings is regular and aspirations are surveyed, but decisions are still largely shaped from above. Coastal communities sit one rung lower, at the informing band, where information about programmes such as the KNMP candidacy flows downward but residents have limited capacity to negotiate the terms of intervention. Both communities are some distance from the partnership rung that would constitute genuine power redistribution. Figure 2 presents this diagnosis graphically, distinguishing the observed and aspirational positions for each typology.

This disparity also reflects broader structural constraints that extend beyond the formal availability of participatory institutions. Although *Musrenbangdes* provides an official channel for community involvement, participation often remains procedural rather than transformative because villagers possess unequal access to information, technical knowledge, and political influence. In Plampang, these limitations are more pronounced in coastal communities, where livelihoods dependent on fisheries, seasonal income fluctuations, and weaker organisational networks reduce opportunities for sustained engagement in development planning. By contrast, dryland communities benefit from relatively stronger institutional arrangements, including farmer associations, *BUMDesa*, and longer experience with collective decision-making inherited from transmigration programmes, enabling them to articulate development priorities more effectively. Nevertheless, even these communities rarely exercise meaningful influence over budget

allocation or project prioritisation, indicating that participation continues to be mediated by village elites and administrative authorities. This pattern corresponds to observations in Indonesian rural governance that decentralisation has expanded opportunities for participation without necessarily redistributing decision-making authority, resulting in participatory processes that are frequently consultative rather than collaborative.

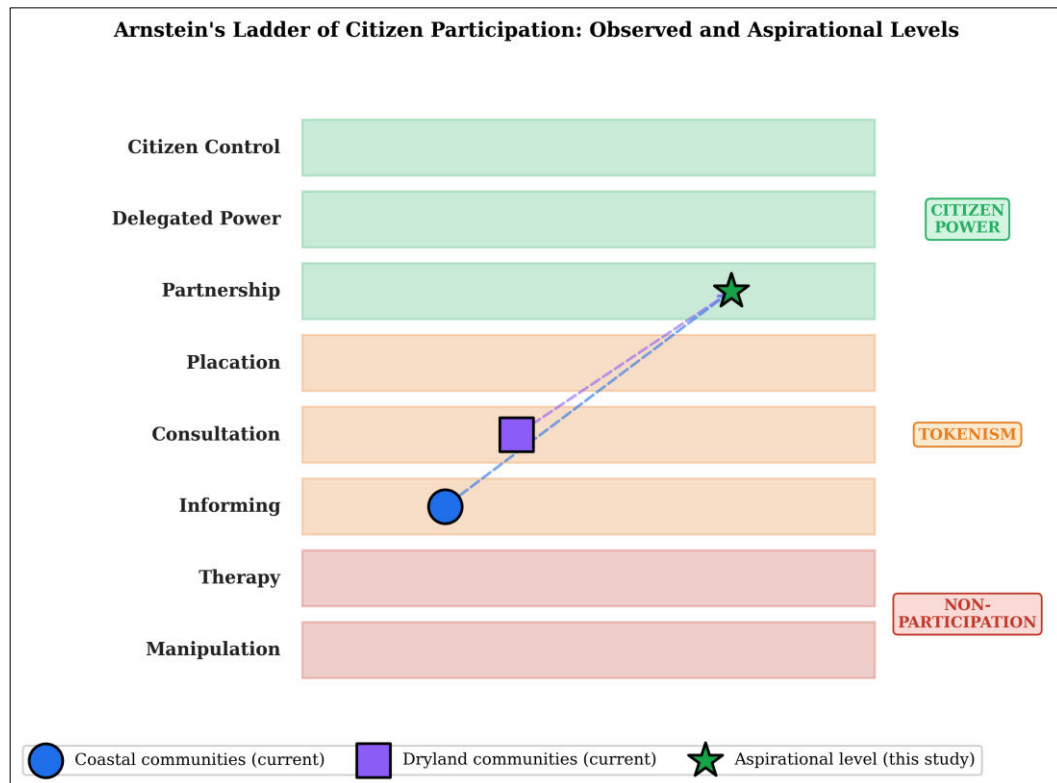


Figure 2. Adapted Application of Arnstein's Ladder of Citizen Participation to Plampang Subdistrict. Current Participation in Dryland Communities Sits Near the Consultation Rung, and Coastal Communities Near the Informing Rung; The Aspirational Level for Both is Partnership, Which Marks the Entry Point Into Genuine Citizen Power.

The diagnosis matters because the rungs are not interchangeable. Movement from tokenism to partnership involves a qualitative shift in the locus of authority, not simply an increase in the frequency of meetings. The participation literature is unanimous that informing and consultation, while necessary, do not constitute citizen power, and that the absence of negotiation mechanisms allows powerholders to retain unilateral judgment over the legitimacy of community input (Citizen's Handbook, n.d.; Granicus, 2023). In Plampang, the practical implication is that empowerment programming must invest deliberately in the institutional plumbing of partnership, including joint planning committees with binding terms of reference, transparent budget allocation rules, and dispute-resolution mechanisms that protect community influence over time. Only through such institutional arrangements can participation evolve from a procedural requirement into a sustained mechanism for shared governance and accountable local development.

Analysis of Gender Equality

Gender analysis of the Plampang livelihood systems must begin with the observation that women's labour is heavily concentrated in stages of the value chain that are economically essential but socially undervalued. In dryland farming, women undertake the bulk of planting, weeding, and post-harvest tasks, in addition to substantial roles in livestock care and in marketing surplus produce. In coastal fisheries, women are responsible for sorting and cleaning the catch, processing it through salting and drying, packaging the finished product, and managing the household budget that absorbs the daily income flow. Figure 3 visualises these patterns using indicative shares derived from triangulated evidence in the regional gender literature (Akter et al., 2017; Bonis-Profumo et al., 2026; FAO, 2023; UNDP Indonesia, 2025).

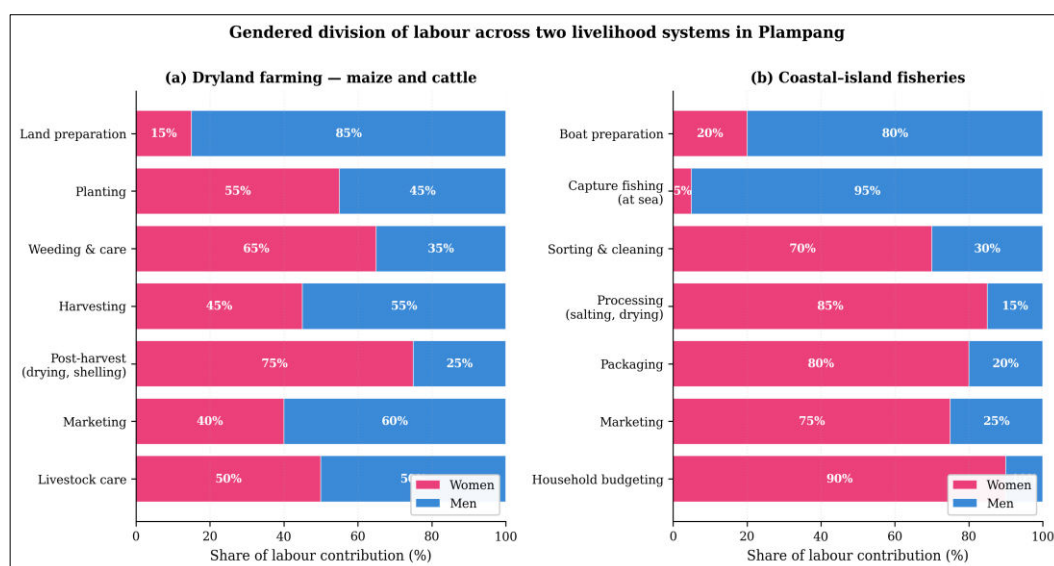


Figure 3. Indicative Gendered Division of Labour In (a) The Dryland Maize and Cattle Value Chain and (b) The Coastal-Island Fisheries Value Chain in Plampang. Women Carry the Heaviest Share of Post-Harvest, Processing, and Household Financial-Management Tasks in Both Systems, Despite Limited Representation in Formal Decision-Making Bodies.

Several findings warrant comment. First, the women's labour share rises sharply in the value-adding segments of each chain, which is also where margins per unit are typically highest. Yet, control over the proceeds of those segments tends to be diluted by social norms that position men as primary household decision-makers, an asymmetry that has been documented across multiple Indonesian agricultural contexts (Qanti et al., 2022; SDGs Center UNPAD, 2023). Second, women's near-monopoly on household budgeting, particularly in coastal households where men are absent on multi-day fishing trips, does not automatically translate into authority over productive assets such as boats, gear, or land. Third, the visibility of women's contribution is suppressed by membership patterns in formal organisations: studies of Indonesian dairy and crop systems consistently find that women belong to community or religious groups rather than to the cooperatives or producer organisations that hold actual market power (Akter et al., 2017; Bonis-



Profumo et al., 2026). The implication is that gender-responsive empowerment must operate on two fronts at once, expanding women's formal representation in productive organisations while protecting the household-level decision-making space they already occupy.

Empowerment Strategies Differentiated by Context

The combined participation and gender analysis points to the need for a strategy matrix that differentiates entry points between the dryland and coastal contexts while preserving a unified normative core. Table 3 sets out a strategic matrix that maps recommended interventions to each typology, drawing on the rural development literature reviewed above and adapting it to the specifics of the Plampang context.

Table 3. Strategic Intervention Matrix for Participatory and Gender-Responsive Empowerment in Plampang.

Strategic Theme	Dryland (SP1, SP2, SP3)	Coastal (Labuhan Ujung & Labuhan Jontal)
Group Strengthening	Reactivate <i>Gapoktan</i> ; reorient KWT toward income-generating ventures	Formalise women's fish-processor groups; align KUB with KNMP standards
Capacity Development	Farmer Field Schools on integrated maize-cattle-leucaena systems	Fisher Field Schools on hygienic processing, cold chain, and food safety
Value-Added Enterprise	Maize-based snack production, organic compost, beef product diversification	Fish floss, smoked fish, salted fish, seaweed-based products
Women's Leadership	Quota-based representation in farmer group leadership; financial literacy training	Mentoring for women-led KUB; female participation in catch auctions
Ecological Safeguarding	Buffer zone management at the Ampang Plampang forest boundary	Mangrove rehabilitation, marine debris management, sustainable gear
Cross-Sector Linkages	Tri-partite agreements among LPTKs, district government, and <i>BUMDesa</i>	Partnerships with KKP, NGOs, and university service-learning programmes

Two principles cut across the entire matrix. First, every intervention must include an explicit gender-responsive design feature, whether that is a participation quota, a gender-disaggregated indicator, or a deliberate redirection of training resources toward women. Second, every intervention must be locally accountable through a participatory monitoring mechanism that gives community members standing to challenge implementation drift. Without these two safeguards, even well-designed programmes tend to revert to elite capture, a pattern repeatedly documented in studies of village fund implementation in Indonesia (Karangpatihan Study, 2026).

A Conceptual Model for the Plampang Context

Drawing the preceding strands together, Figure 4 proposes a five-stage Input-Process-Output-Outcome-Impact model calibrated for Plampang. The model is intentionally linear in its forward arrows to signal the causal logic that participatory and gender-responsive processes are required if natural and social capital inputs are to be converted into welfare outcomes. A dashed feedback arrow

above the boxes acknowledges that adaptive learning must continually loop information from impact and outcome stages back into the input stage, particularly as climate variability, market shocks, and policy shifts alter the operating environment.

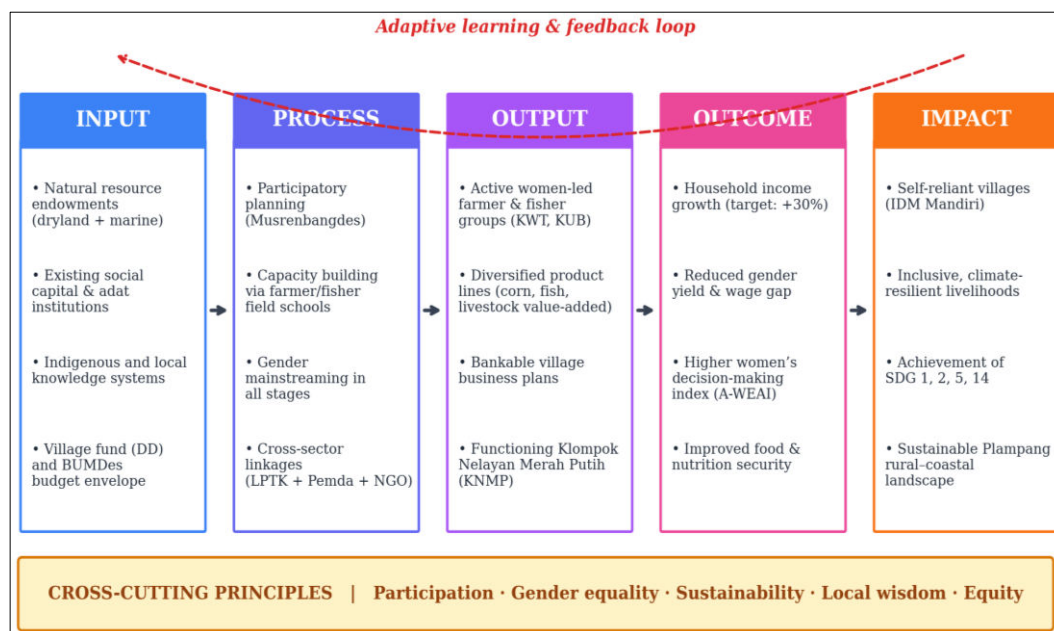


Figure 4. Proposed Conceptual Model of Participatory and Gender-Responsive Empowerment for Plampang Subdistrict, Structured Along Five Stages (Input, Process, Output, Outcome, Impact) and Anchored by Five Cross-Cutting Principles.

Inputs combine the natural endowments of dryland and marine ecosystems with the social capital embedded in *adat* institutions, indigenous knowledge, and the financial envelope of Village Funds and *BUMDesa* balance sheets. The process stage operationalises participation and gender mainstreaming through *Musrenbangdes*, field schools, and cross-sector linkages among local higher-education institutions (*LPTK*), district government (*Pemda*), and non-governmental organisations. Outputs include active women-led farmer and fisher groups, diversified product lines, bankable village business plans, and a functional KNMP. Outcomes are measured at the household and group level through income growth, narrowing of the gender yield and wage gap, the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI), and food and nutrition security gains. Impacts are landscape-level shifts toward self-reliant villages classified as IDM *Mandiri*, inclusive and climate-resilient livelihoods, and tangible contributions to Sustainable Development Goals 1, 2, 5, and 14. The five cross-cutting principles at the base, namely participation, gender equality, sustainability, local wisdom, and equity, function as the design language for every stage.

A critical reading of the model itself is warranted. Its main strength lies in its diagnostic clarity: by separating inputs, processes, outputs, outcomes, and impacts, it forces practitioners to articulate the causal chain that links activity to welfare. Its main weakness is shared with most logical-framework approaches,



namely a tendency to underweight the political and contested nature of empowerment. Power redistribution is never frictionless, and the model should therefore be deployed alongside an explicit political economy analysis at the village scale, to surface the local elites whose interests may be challenged by a serious move up the participation ladder.

CONCLUSION

This narrative review has examined the empowerment, participation, and gender literatures relevant to dryland and coastal communities in Plampang Subdistrict of Sumbawa Regency. Four conclusions emerge. First, community empowerment in this landscape must be designed in a context-sensitive manner, recognising that the dryland transmigration units of SP1, SP2, and SP3 follow a different livelihood logic from the Bugis-descended coastal hamlets of Labuhan Ujung and Labuhan Jontal, even though they share an administrative boundary and a fiscal envelope. Second, observed levels of citizen participation in both typologies remain trapped in the tokenism band of Arnstein's ladder, with dryland communities marginally ahead at the consultation rung and coastal communities one step behind at the informing rung. Movement to the partnership rung is the single most important threshold to cross if empowerment programming is to produce durable welfare gains. Third, gender analysis reveals a heavy concentration of women's labour in the value-adding segments of both value chains, but a persistent gap between that labour contribution and women's formal authority in productive organisations and decision-making forums. Fourth, an integrated five-stage Input-Process-Output-Outcome-Impact model, anchored by cross-cutting principles of participation, gender equality, sustainability, local wisdom, and equity, provides a practical scaffold for sub-national governments, higher-education institutions, and community organisations seeking to design integrated empowerment programmes in similar rural-coastal landscapes elsewhere in eastern Indonesia.

RECOMMENDATION

Three lines of follow-up work would strengthen the practical value of this review. First, an empirical baseline study should be commissioned in Plampang to quantify the dimensions captured in Figures 2, 3, and 4, ideally using the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) for the gender dimensions and a participation-quality scoring tool such as that proposed by Lane (2005) and subsequent IAP2 frameworks. Second, an action-research partnership between Mandalika University of Education and the relevant sub-district government, together with the *BUMDesa* of Teluk Santong and the farmer groups of SP1-SP3, would allow the proposed model to be tested under live conditions, with iterative refinements based on field feedback. Third, comparative work with at least two other dryland-coastal subdistricts in eastern Indonesia, for example in Sumba or Flores, would test the external validity of the proposed framework and clarify which design features are universal and which are Plampang-specific. Several constraints should also be acknowledged: the review draws on secondary literature rather than fresh primary data, the gender labour shares



presented in Figure 3 are indicative rather than measured locally, and the proposed model has not yet undergone the kind of field validation that would establish its operational robustness.

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