

Supplementary Material - Beyond commodities: valuing sociobiodiversity through stewardship and traditional knowledge in Brazil's Bioeconomy

1. Methodological process

Global case studies' literature review

We conducted a systematic review to identify and evaluate how IP&LC knowledge and stewardship practices are valued across the globe. This method involves a rigorous and comprehensive search strategy to capture the full range of available research literature. Through our systematic approach, we assess each article's relevance and quality to determine inclusion and exclusion criteria, ensuring that only the most pertinent studies contribute to our synthesis. This process provides clear evidence of the effectiveness of integrating IP&LC practices within sustainable development frameworks, guiding future research and policy-making initiatives (Grant & Booth, 2009). In conducting our literature review, we utilized keywords such as "people", "nature", "people-nature interactions", and "bioeconomy", along with related terms (Table 1).

Table S1. Description of keywords and search string adopted in this study.

Variable/term	Description	Search string
People	Users affecting and being affected by nature, including, but not restricted to, stakeholders, traditional and Indigenous communities' members, policymakers, citizens, etc.	("Indig*" OR "Native people*" OR "IPLC" OR "First Nation*" OR "IP&LC" OR "Aboriginal*" OR "Original inhabitant*" OR "Tribal community*" OR "Native community*" OR "Traditional community*" OR "Ethnic minority*" OR "Local commun*" OR "Customar*" OR "traditional people*" OR "riverine*" OR "settler*" OR "Small-scale" OR "local users" OR "small farmers" OR "family farmers" OR "small landowner")
Nature	Comprise all forms of nature's diversity of organisms, processes and ecosystems that co-evolved with cultural practices and diversity.	("Natur*" OR "biodivers*" OR "territory*" OR "land*" OR "environment*" OR "ecosystem*" OR "genetic heritage" OR "non-timber forest product*")
People-nature interactions	Comprised of all positive and negative contributions between nature and people, including NPC (Nature Contribution to People) and PCN (People Contribution to Nature), knowledges (traditional, Indigenous, and scientific) and stewardship practices	("stewardship practice*" OR "socio-ecological system*" OR "ecological knowledge*" OR "community-based management" OR "environmental knowledge*")
Bioeconomy	Composed of activities related to producing goods and services supported by people's and nature's interactions.	("Economic Value*" OR "Market Value" OR "Inherent Value" OR "Competitiveness" OR "Job Creation" OR "Utilitarian Benefits" OR "Instrumental Value") OR ("Environmental Value*" OR "Sustainability" OR "Ecosystem Service*" OR "Climate Mitigation" OR "Climate Adaptation" OR "Intrinsic Value" OR "Nature's Inherent Worth")

		OR ("Social Value*" OR "Equity" OR "Local Development" OR "Cultural Acceptability" OR "Relational Value*" OR "Human-Nature Relationship*" OR "Sense of Place") OR ("Technological Value*" OR "Innovation Value*" OR "Flexibility" OR "Adaptability" OR "Circular Economy" OR "Industrial Ecology" OR "Integrated Systems") OR ("Governance Value*" OR "Policy Support" OR "Stakeholder Collaboration" OR "Sustainability Metrics" OR "Justice" OR "Intergenerational Equity") ("Cultural Value*" OR "Cultural Heritage" OR "Cultural Intellectual Heritage")
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This comprehensive search spanned two databases, including Scopus (558 items) and EBSCOHost (396 items). Our search focused on studies published between 2014 and 2025. On Scopus, we narrowed our search to the following subject areas: “Environmental Science”, “Social Sciences”, “Agricultural and Biological Sciences”, “Earth and Planetary Sciences”, and “Multidisciplinary”. We included the “Environmental Complete” database on EBSCOHost without selecting any search filters. Search results were managed using @Covidence, leading to the initial identification of 954 entries. We removed 201 duplicates, ultimately considering 753 articles for further evaluation. Title and abstract screening followed by full-text reviews were performed by the entire team, using clearly defined criteria concerning the study’s core themes of type of natural resource, type of study, language and geographic region as outlined in Table 2.

During the title and abstract screening phase, each study was reviewed independently by at least two team members. A third evaluation was conducted in cases of disagreement regarding whether a study should be advanced to the next phase or deemed irrelevant. This additional review involved two team members who collaboratively determined the study's inclusion or exclusion.

Table S2. Inclusion and exclusion criteria for document selection.

Particulars	Inclusion	Exclusion
Type of natural resource	Cultivated, collected or wild, such as cultural keystone species	Synthetic
Type of study	Scientific papers, policy briefs, laws, regulations, agendas, book’s chapter	Books
Language	English	All other
Geographic region	All countries	

We screened 753 studies’ titles and abstracts, determining that 464 items did not align with our research objectives. Following a thorough review of the articles, we identified 38 studies that explicitly describe concrete cases of recognition of stewardship practice.

The findings presented in this study are based exclusively on the analysis of these included items.

To establish a rigorous data extraction process, we formulated a data extraction sheet designed to log publication details such as social group, stewardship practices, recognition and/or compensation, and nature contribution to people (benefits from nature), as well as the dimensions and scope of the studies related to bioeconomy. Throughout the data extraction phase, all studies were independently coded by the entire team. Table 3 outlines the variables examined to identify and evaluate how IP&LC knowledge and stewardship are valued for sustainable development.

Table S3. Categories used for coding the selected literature

Variable	Description
ID	Continuous numerical order of papers analyzed
Included? (Yes/No/Maybe)	Whether the paper is included (yes), excluded (no), or may be included (yes) in this analysis
Title	Full paper's title
Authors	Full name of first author (et al. if necessary) separated by commas
Year	Date of publication (in year format YYYY)
Link	URL or DOI to find the paper. Please prioritize DOI for papers that have it
Country	National political borders the study was held in stated in the paper (e.g. study areas)
Geographical area	Any mention to place/territory that is not country stated in the paper (e.g. province or city stated in the study areas)
Social group	Comprises the social groups targeted at the papers (e.g., Indigenous peoples, riverine communities, coastal traditional people, peasants, etc.). These groups can be defined by cultural, geographic, economic, or social characteristics.
Species/products/resources	Comprises the natural resource being used by the social groups described above
Stewardship practices	Stewardship practices are the “actions taken by individuals, groups or networks of actors, with various motivations and levels of capacity, to protect, care for or responsibly use the environment in pursuit of environmental and social outcomes in diverse social-ecological contexts”
Any kind of rewarding/valued/compensation?	Binary category if the study mentions a valuing initiative for the people's contributions to nature (yes) or not (no). Please note: If no value is provided, consider excluding the paper (does not fit our research question) and add it to the "excluded literature" tab.
Kind of recognition/compensation	Description of recognition of contributions of and compensations to people that might integrate economic, environmental, social, technological, and governance dimensions to promote sustainable development. Economic values highlight the balance between market profitability and intrinsic benefits, fostering competitiveness, job creation, and

	territorial development. Environmental values emphasize sustainability through resource preservation, ecosystem services, and climate resilience. Social values focus on equity, local development, and cultural acceptability, ensuring inclusive and participatory processes. Technological and innovation values prioritize adaptability, circularity, and systemic optimization for efficiency and waste reduction. Governance and policy values underscore the critical role of public support, collaborative frameworks, and robust metrics to harmonize diverse interests and evaluate progress.
Recommendation of recognition/compensation	Refers to the recommendations or claims made by the authors or within the papers regarding any form of recompensation or rewarding towards stewardship practices.
Nature Contribution to People (benefits from nature)	IPBES (2019) definition: "All the contributions, both positive and negative, of living nature (diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to people's quality of life." IPBES (2023) definition: "The ways nature contributes to the realization of a good quality of life, emphasizing the dynamic interlinkages between nature and societies."
Note	Any information you think is important for analysis that was not included in previous variables.

Within each paper, we looked for ways of recognition of stewardship practices. Stewardship practices were identified and classified following Mattalia et al. forthcoming. Nature's contributions to people were identified and classified according to Diaz et al. 2018. IP&LC were identified according to their language following the ISO639 code reported in Glottolog. Later, we used an inductive qualitative approach grounded in the systematic analysis of global case studies in which environmental stewardship practices were explicitly recognized or rewarded. The aim was to identify and classify the diverse forms of recognition that link local practices of environmental care to broader policy, market, and institutional frameworks. Rather than starting from a predefined typology, the categories emerged progressively from the empirical material through an iterative process of coding, comparison, and conceptual consolidation, typical of qualitative content analysis and grounded theory procedures (Charmaz, 2014; Glaser & Strauss, 1967). This approach was selected because it allows theoretical categories to arise from patterns observed in real-world cases, minimizing normative bias and capturing the multidimensional nature of recognition.

Brazilian projects portfolio - Database construction

We first systematized a comprehensive database of projects and programs supporting sociobiodiversity value chains in Brazil. The dataset was built from publicly available information extracted from the Amazon Fund and the PPP-ECOS (Programa de Pequenos

Projetos Eossociais) – two major funding mechanisms operating in the field of sociobiodiversity.

The Amazon Fund, created in 2008 and managed by the Brazilian Development Bank (BNDES), is one of the largest results-based climate finance mechanisms in the world. It provides non-reimbursable funding to support efforts in preventing deforestation and promoting sustainable development in the Legal Amazon region, including initiatives led by Indigenous Peoples, Traditional Communities, and other forest-dependent populations. The Fund is financed through international donations tied to verified emissions reductions, with its main contributors being the governments of Norway, Germany, and more recently, the Green Climate Fund (GCF). The PPP-ECOS, in turn, is a long-standing small grants program implemented by the Instituto Sociedade, População e Natureza (ISPN) since 1994, with support from international partners such as the Global Environment Facility (GEF)/UNDP, the European Union, and other philanthropic foundations. It focuses on strengthening sociobiodiversity value chains and ecosystem-based livelihoods, particularly in the Cerrado and Caatinga biomes, through bottom-up project selection and direct support to grassroots organizations.

A total of 384 projects implemented between 2000 and 2024 were identified supporting 279 distinct community-based organizations across 22 Brazilian states. The majority of initiatives (351 projects) were financed through the Small Grants Program (PPP-ECOS), complemented by 30 projects under the Chamada Pública de Projetos Produtivos Sustentáveis and two projects from the Amazon Fund. Together, these programs represent the most significant long-term effort to operationalize Brazil's sociobiodiversity agenda through direct community support. Figure 1

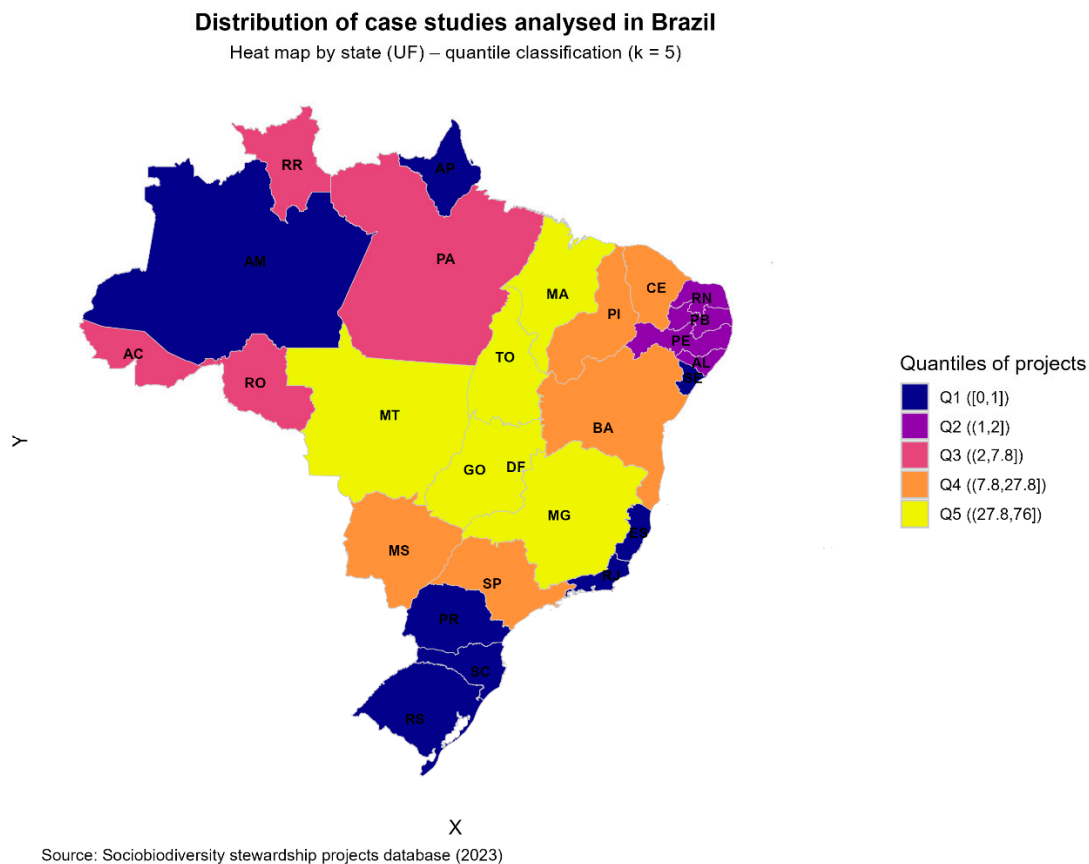


Figure S1: Geographical distribution of case studies analysed in the Brazilian project database

They provide an extensive empirical basis for examining how project-based interventions have recognized or rewarded stewardship practices among (IP&LC) in Brazil. For each project, the following information was compiled: (i) the community-based organization benefiting from the initiative; (ii) the implementing institution; and (iii) type of interventions carried out by the project. Because projects have the objective of structuring sociobiodiversity value chains and improve the quality of life of traditional peoples and communities and have been the main, we use the type of intervention as a proxy for kind of recognition to stewardship practices.

Coding and analytical procedure for types of recognition

To classify the forms of recognition embedded in project interventions, we conducted an iterative inductive coding process combining two complementary data sources:

- (1) excerpts from 38 international case studies that describe concrete examples of stewardship recognition. For a detailed description of this see citation of the previous reviewand
- (2) the Brazilian project database (citing the work).

The analytical procedure followed three main stages:

Stage 1 – Open coding and initial clustering

All textual excerpts describing how local actors were rewarded, supported, or legitimized for their stewardship were coded using in vivo terms directly derived from the original descriptions. Codes such as cash transfers, subsidies, infrastructure support, legal recognition, council participation, cultural festivals, and use of local knowledge in governance were generated. This stage aimed to capture the full variety of recognition practices observed in both global and Brazilian contexts.

The emerging codes were then grouped into conceptual clusters that represented broader modes of recognition. Through iterative comparison across cases, four distinct yet complementary patterns emerged, encompassing both material and non-material dimensions. These categories were defined inductively, based on the nature of the benefits, the institutional actors involved, and the degree of formalization of recognition mechanisms.

The resulting typology included five categories, presented below (based on the document Coding Typology for Different Kinds of Recognition of Stewardship Practices):

Table S4: Typology for different kinds of recognition of stewardship practices

	Code	Type	Definition / When to Apply	Example (from the excerpts in the papers)
Material	Monetary and Non-Monetary Economic Distribution (Material recognition)	Inductive	Refers to tangible benefits that directly impact positively the income or improve the material well-being of individuals, families, or communities as a result of their stewardship practices. These include both monetary (cash transfers, wages, subsidies, PES schemes, price premiums, revenue-sharing) and non-monetary benefits (in-kind support such as equipment, infrastructure, food, or services).	“PES implementation has provided economic income to all community members, and income generated at the family level has been able to mitigate the current crisis of coffee production. Similarly, external stakeholders note that PES has supported San Antonio’s income. It facilitates community management, contributes to cushioning low coffee production, generates jobs (activities financed by the common fund) and promotes productive activities.” (Mexico).
Non material recognition	Legal and Institutional Recognition	Inductive	Formal acknowledgment of stewardship practices by legal frameworks, government policies, or institutional arrangements. This category includes rights to land and resources, official recognition of stewardship practices, legal instruments that guarantee benefit-sharing, and institutional mechanisms that integrate stewardship into policy.	“Formal state recognition: The Kibber community is officially recognized as a Scheduled Tribe under Article 342 of the Indian Constitution... The Panchayats (Extension to Scheduled Areas) Act – PESA (1996) formally acknowledges the traditional rights of indigenous communities over land, water, and forests.” (India).

	Symbolic and Cultural Recognition	Inductive	Acknowledgment of stewardship practices through symbolic, cultural, or reputational means that elevate their social value. These forms of recognition reinforce cultural identity, prestige, and legitimacy, but do not necessarily involve direct material or legal benefits.	“The community’s traditional canoe regatta was supported by researchers and public institutions, and later became a symbolic event reinforcing caiçara cultural identity and stewardship practices. A documentary film ‘Pulsating: a film about Araçá Bay’ was produced to highlight caiçara stewardship...” (Brazil).
	Participatory and Governance Recognition	Inductive	Recognition expressed through the inclusion of communities and their knowledge in decision-making, governance structures, and co-management arrangements. This includes both practical involvement (training, formal seats in councils) and epistemic recognition (valuing local knowledge as expert input).	“Restoration projects by the Thai government and by NGOs... applying Community-Based Ecological Mangrove Restoration (CBEMR) methods, explicitly involving local communities in conservation and restoration activities.” (Thailand).
Question: if participation/governance is institutionalized, as in the case of "institutional support for Indigenous leadership in environmental restoration", in which type should we include it?	Legal and Institutional Recognition: Refers to the formal, legal, or organizational acknowledgment of stewardship practices. The core criterion is: rights, status, or official frameworks granted through laws, policies, or external institutions. Participation and Governance Recognition: Refers to the practical acknowledgment of communities as active decision-makers. The core criterion is: inclusion as participants or co-managers in governance arrangements (e.g., seats in councils, co-production of knowledge, community assemblies). So, in this case, we have both.			

These categories were refined through continuous iteration and cross-validation between the global corpus and the Brazilian project dataset. Rather than a predefined classification, the typology emerged empirically from patterns repeatedly observed across multiple contexts. Each project could exhibit more than one form of recognition, reflecting the multidimensional nature of sociobiodiversity governance.

All data processing and analyses were conducted using Python (Python Software Foundation, Wilmington, DE, USA), version 3.11.7 in a Jupyter Notebook environment, with the Pandas library for data manipulation, the re module for text mining, Matplotlib and Seaborn for data visualization, Folium and Plotly for spatial analysis, UpSetPlot for intersection analysis, and NetworkX and PyVis for network modeling and visualization.

Qualitative analytical procedure for classifying types of recognition according to Arnstein’s Ladder of Citizen Participation

The analysis followed a qualitative content analysis approach combining inductive and deductive coding (Glaser & Strauss, 1967; Charmaz, 2014). First, all textual descriptions of interventions and outcomes were extracted from the Brazilian project database — specifically the fields “Resumo do Projeto” and “Resultados/Avaliação” — because these two fields were the only ones that systematically described what communities actually did (stewardship practices) and what kinds of support or recognition they received. In parallel, the 38 global case studies were processed in the same way, extracting only the passages that explicitly mentioned (i) practices of environmental care, use, or management carried out by IP&LC and (ii) some form of valuation, support, or institutional recognition of these practices.

In the first cycle of coding (open coding), we used *in vivo* codes — i.e. terms taken verbatim from the original descriptions, such as “construction of processing unit”, “participation in state law on pequi”, “community fire management”, “agroforestry recovery”, “inclusion in PAA/PNAE”, “creation of local association”, “participation in territorial council”, “indigenous environmental agents trained”, “legalization of the cooperative”, “public act to regulate seed banks”. This step was intentionally expansive to capture the diversity of recognition forms typical of sociobiodiversity projects, which often combine productive, environmental, and political components in the same intervention.

In the second cycle (axial / clustering), these *in vivo* codes were grouped into higher-order semantic clusters that represented the main modes of recognition already identified in the literature and in your previous coding scheme (economic/monetary; legal/institutional; participatory/governance; cultural/symbolic). This clustering was done by constant comparison across Brazilian and international cases to check whether a code referred only to transfer of resources (e.g. equipment, processing unit, working capital, credit access) or whether it also implied power sharing (e.g. sitting in a council, co-designing a management plan, influencing a state law, managing a collective brand). At this stage we also removed duplicates, merged semantically equivalent codes (e.g. “infra-estrutura” and “equipment provision”), and kept ambiguous cases tagged for a second review.

In the third cycle (directed / deductive coding), we mapped each cluster against the eight rungs of Arnstein’s Ladder of Citizen Participation (manipulation, therapy, informing, consultation, placation, partnership, delegated power, citizen control). Because most Brazilian sociobiodiversity projects are project-based and externally funded, we adopted a four-level operational version of Arnstein (non-participation; tokenism; partnership; delegated power/citizen control), previously discussed in the manuscript, to reduce classification noise. The rule was:

- if the project only informed, trained, equipped, or legalized the group, with decisions remaining in the funding or implementing organization → Tokenism;
- if the project created or strengthened arenas where the community co-decided (councils, territorial forums, co-management of RESEX, participatory fire management with Naturatins, elaboration of PGTA with indigenous associations) → Partnership;

- if the community achieved binding decisions or long-term control (approval of a municipal law on pequi; consolidation of “associações-mães” in the Bolsa Floresta; indigenous environmental agents managing 285,000 ha; networks like Rede Jalapão renegotiating fire rules with the state) → Delegated power / Citizen control;
- if the action was essentially awareness-raising or visibility with no room for community voice → Non-participation.

To increase analytical rigor, ambiguous or border cases — for example, projects that both built an agroindustry (typically tokenism) and, at the same time, ensured the group’s seat in a territorial council (partnership) — were double-coded and resolved by consensual adjudication: two researchers independently proposed a ladder level based on the strongest participatory element present in the description, and discrepancies were resolved in a joint session by applying the following priority rule: when in doubt, classify according to the highest level of actual decision-making power evidenced in the text. This procedure is equivalent to a light form of intercoder reliability for qualitative data when the source texts are heterogeneous and short.

The final list is:

Table S5: Final classification of types of recognition according to Arnstein’s Ladder of Citizen Participation

Type of Recognition	Typical mechanisms (examples)	Expected level of participation (Arnstein’s Ladder)	Interpretation
Monetary recognition	Cash transfers, wages, subsidies, price premiums, PES schemes, revenue-sharing	Tokenism (informing, consultation, placation) — occasionally partnership when co-managed funds	Monetary transfers tend to improve material conditions but usually preserve centralized decision-making power, as allocation criteria and monitoring remain externally defined. In rare cases (e.g., community-managed PES funds), they can reach partnership level.
Non-monetary material recognition	Provision of equipment, infrastructure, processing units, food, or technical services	Tokenism (most frequent) → Partnership (when accompanied by co-management or long-term governance arrangements)	In-kind support generally strengthens production capacity but remains externally controlled. When linked to participatory governance or cooperative management, it can evolve toward shared power (partnership).
Non-material: legal and institutional recognition	Inclusion in policies, benefit-sharing frameworks, land or use rights	Partnership → Delegated Power	When communities gain legal status or access rights, they move beyond consultation toward shared or delegated authority, especially when

Type of Recognition	Typical mechanisms (examples)	Expected level of participation (Arnstein's Ladder)	Interpretation
			laws formalize their role in decision-making.
Non-material: participatory and governance recognition	Participation in councils, management committees, participatory planning	Partnership Delegated Power Citizen Control	→ Direct involvement in governance spaces represents a transfer of decision power and institutional voice, especially when communities influence agendas, manage funds, or define local rules.
Non-material: cultural and symbolic recognition	Collective brands, storytelling, awards, visibility campaigns	Non-participation Tokenism	→ Symbolic and visibility-based recognitions often increase social legitimacy and external visibility but rarely alter power relations or decision structures. They may, however, reinforce other types of recognition indirectly.

Non-participation (*citizens are informed or manipulated, with little real power*)
Manipulation / Therapy

- Awareness campaigns
- Visibility or dissemination actions
- Awards or symbolic prizes

Tokenism (*citizens are consulted or informed but decision power remains centralized*)
Informing / Consultation / Placation

- Training and capacity building
- Technical assistance
- Public policy inclusion (without shared decision power)
- Consultation or participation in isolated events
- Knowledge exchange activities
- Education programs
- Restoration or environmental rehabilitation led externally
- Legalization or registration support (e.g., CNPJ, licenses)
- Incentives or credit access mechanisms
- Funding or project-based support

- Certification (ISO, organic, fair trade)
- Infrastructure or equipment provision
- Processing units or agroindustry installation
- Fairs and exhibitions to promote products
- Branding and marketing visibility (collective brand, labels)
- Institutional strengthening guided by external agents

Partnership (*citizens share power and responsibilities with external institutions*)

- Governance strengthening
- Formation of networks and partnerships
- Participation in policy councils or committees
- Co-management arrangements
- Market access initiatives with shared management
- Inclusion in territorial or public procurement programs
- Support for women's and youth leaderships (as recognized actors)
- Collective income generation with participatory management

Delegated Power & Citizen Control (*citizens or communities hold decision-making authority and control resources*)

- Policy influence or legal recognition achieved through advocacy
- Law or regulation creation influenced by community organizations
- Community-led governance structures (councils, associations)
- Institutionalized representation and decision power
- Community networks managing resources or brands autonomously
- Full economic autonomy (income increase, employment, market inclusion led by the group)

Forms of recognition - global	Arnstein Level
Economic (Economic outcomes In the community, only men give tequio, so when the benef	Informing
Economic (incl fair trade) Since 2007, Shiga has been promoting low environmental impact a	Informing
In this policy shift toward a sustainable society, the term satoyama was increasingly integral	Partnership
Karen communities have established village funds for sustainable CFM following the PES pa	Delegated Power
Economic Values: Maharashtra: Revenue generation through bamboo sales in Menda-Lekh	Delegated Power
Continuous financial resources from U.S. public utilities to mitigate salmon losses caused by	Informing
sustainable harvest quotas for arapaima, a high-value fish species, as part of community-ba	Informing
Legal Framework: The Indian Biological Diversity Act (2002) ensures equitable sharing of be	Delegated Power
Economic Values: Amazon (Tapajós-Arapiuns): Income generation from açai and Brazil nut	Informing
The Government of India (GoI) has taken various legislative and administrative initiatives to	Informing
Official designations: The Isobe area, with wild cherry trees, was designated as a National P	Informing
Formal state recognition: The Kibber community is officially recognized as a Scheduled Trib	Citizen Control
Restoration projects by the Thai government and by NGOs (notably the Mangrove Action Pr	Informing
Benefit-sharing: direct monetary compensation for land use by extractive industries; legal r	Delegated Power
policymakers and scientists recognize the importance of TK for environmental management	Informing
Families participating in the participatory research project were able to access resources fr	Manipulation
Seed collection, preparation and storage techniques were adapted or developed considerin	Delegated Power
The caçara people are officially safeguarded under the National Policy for Traditional Peop	Informing
Residents who assist in the scientific process by contributing their LEK compensated for thei	Informing
Support from environmental NGOs and local government agencies. Public funding via an of	Informing
Traditional knowledge recognized as valuable as scientific knowledge. At the request of Heil	Informing
A mechanism for co-management that exists within U.S. law is the Indian Self-Determinatio	Delegated Power
Joint international fisheries management for the river Minho by Portuguese and Spanish na	Informing
Monthly wages for fieldwork. Free technical training on invasive alien plant identification ar	Delegated Power
Formal incorporation of TEK into government-supported fire management programs. Creat	Informing
Multi-partnered tribal intern program (initiated 2015), offering Paiute youth practical fieldw	Informing
In the Ko Te Pukākī Program (Māori-led) case): Paid employment for 14 community membe	Partnership
Symbolic recognition: Municipal Law 033/2018 prohibits fishing gear that could cause dolph	Delegated Power
Transhumant pastoralism contributes significantly to the economy of the Kinnaura commur	Informing
Costa Rica is already considering how to respect Indigenous Peoples' right to autonomous i	Citizen Control
Access and rights to use resources formalized:Throughout the 20th century, especially in the	Partnership
These traditions and their revival in the 21st Century has made the Pacific Island region a w	Informing
the government policy of devolving environmental stewardship to local control (Dale et al.,	Partnership
POLICY that includes, in general, but see figure 1: The basic principles included, five large gr	Partnership
Monetary incentives: Fishers in San Felipe and Golfo de Santa Clara received financial comp	Manipulation
The government of Ghana in the year 2000 introduced a policy for Collaborative Communit	Partnership
Formal legal recognition: VEAs were formally recognized by Normative Instruction IBAMA N	Delegated Power
Ecological jobs as direct financial compensation: Local Tibetan households were offered pos	Informing