

Mapping Tribal and Gender Gaps in India's Just Sustainability Transitions: A Research Gap Matrix Analysis

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Abstract

India's pursuit of decarbonisation, water and food security, and climate resilience is frequently framed through the language of 'just transition' yet it remains unclear whether the underlying research base actually engages the population groups most exposed to transition-related disruption. This article uses a systematic evidence-mapping technique, a three-dimensional research gap matrix cross-tabulating Population Group, Outcome Domain, and Sustainability Transition type to examine how Tribal/Native tribes communities and gender are represented in the literature on just sustainability transitions in India. Of 156 evidence entries coded across ten population categories, ten outcome domains, and nine transition types (plus a residual 'Not Specified' category), zero entries were coded to Tribal/Native tribes or Women/Gender populations across any outcome or transition combination, while 133 entries (85.3 percent) could not be attributed to any specific population group at all. Three transition types, biodiversity/land use, waste/circular economy, and transport, returned zero evidence irrespective of population, and the Livelihood/Employment outcome domain returned zero evidence system-wide. The findings suggest that Indian just-transition scholarship remains dominated by generic, non-disaggregated framing, leaving both Native tribes communities and women structurally invisible in outcome-linked, transition-specific evidence, despite qualitative and policy literature documenting substantial impacts on both groups. The article situates these findings within just sustainability and energy justice theory, and proposes a research agenda that foregrounds disaggregated, intersectional evidence generation as a precondition for equitable transition policy.

Keywords

Just Sustainability Transitions, Tribal/Native tribes Communities, Gender and Energy Justice, Evidence Gap Mapping, India; Research Disaggregation

Introduction

India stands at the intersection of two large-scale transformations: an accelerating shift toward low-carbon energy, climate-resilient agriculture, and circular resource use, and a longstanding, unresolved project of social equity for historically marginalised groups. The term 'just transition' originated in the labour and environmental justice movements of North America, where it described efforts to protect workers and communities from the economic costs of environmental regulation. Over the past decade the concept has been substantially broadened. Energy justice scholarship now organises the field around three interacting tenets — distributional justice (who bears the costs and benefits), procedural justice (who participates in decision-making), and recognition justice (whose identities, histories, and vulnerabilities are acknowledged) (Jenkins et al., 2016; McCauley & Heffron, 2018). A parallel literature on 'just sustainabilities' insists that equity, quality of life, and ecological limits must be pursued simultaneously rather than sequentially (Agyeman, Bullard, & Evans, 2003), while the most recent synthesis explicitly merges justice, sustainability, and transitions scholarship into a single analytical frame — just sustainability transitions, or JUSTRAs — that foregrounds the centring of marginalised voices

in processes of radical, transformative change (Avelino et al., 2024).

For India, these debates are not abstract. The government's expansion of coal mining, large hydropower, solar parks, and rural electrification schemes is reshaping land tenure, livelihoods, and household energy relations at a scale that touches hundreds of millions of people. A growing body of scholarship has begun documenting the political economy of this transition (Ordonez, Jakob, Steckel, & Ward, 2023; Pandey & Kumar, 2025) and the historical injustices that accompany coal and hydropower expansion in Native tribes-majority regions (Kumar, 2023; Xaxa, 2022). A separate but overlapping literature has begun to interrogate the gendered dimensions of India's clean energy transition, from workforce participation to land and care burdens (Cellini et al., 2025; NRDC, 2024, 2025; Down To Earth, 2025). What has not been established, however, is whether this expanding literature actually produces outcome-linked, transition-specific evidence about Tribal/Native tribes communities and women, or whether these groups remain analytically absorbed into generic categories such as 'rural communities' or 'the public'.

This article addresses that question directly. Using a pre-coded evidence base structured as a three-dimensional gap matrix — Population Group × Outcome Domain × Sustainability Transition Type — it systematically maps where research evidence on just sustainability transitions in India exists, and, more importantly, where it does not. The analysis is deliberately structured, rather than narrative, so that gaps can be identified with the same rigour normally reserved for identifying coverage. The remainder of the article proceeds as follows. The next section situates the analysis within just sustainability and energy justice theory. The following section explains the gap matrix methodology, including its statistical coding

scheme. The results section then presents the population, transition, and outcome-level findings, with particular attention to the Tribal/Native tribes and gender dimensions. The discussion interprets these findings against the broader literature, and the conclusion proposes a research agenda for closing the identified gaps.

Conceptual Framework: Just Sustainability, Energy Justice, and Intersectional Invisibility

Sustainability was originally defined around four interlocking conditions: improving quality of life and well-being; meeting the needs of both present and future generations; ensuring justice and equity in the distribution of resources and opportunities; and living within ecological limits (Agyeman, Bullard, & Evans, 2003). This framing deliberately refuses to treat environmental protection and social equity as competing priorities, insisting instead that a transition which improves ecological outcomes while worsening social outcomes for any group cannot be considered sustainable at all. Energy justice scholarship operationalises this insistence through three tenets that this article treats as an analytical scaffold. Distributional justice concerns the allocation of the costs (land loss, displacement, pollution) and benefits (jobs, electricity access, compensation) of a transition. Procedural justice concerns whether affected groups are meaningfully included in planning and decision-making, rather than merely consulted after the fact. Recognition justice, following Schlosberg's (2007) elaboration of environmental justice theory, concerns whether the specific identities, histories, and vulnerabilities of a group are acknowledged at all — a precondition without which distributional and procedural justice cannot be meaningfully pursued, because a group that is not recognised cannot have its distributional claims assessed or its procedural participation designed.

Recognition justice is the most relevant tenet for this article, because a research base that never disaggregates evidence by population group is, in effect, failing the recognition test at the level of knowledge production itself. If Tribal/Native tribes communities or women are never coded as a distinct analytical category in outcome-linked research, then policymakers attempting to design distributionally fair compensation schemes, or procedurally inclusive consultation processes, have no evidence base from which to do so. This is the central concern of the most recent synthesis of just sustainability transitions scholarship, which explicitly calls for centring marginalised voices as a condition of transformative, rather than merely technocratic, change (Avelino et al., 2024).

Two population groups are of particular concern in the Indian context. Tribal/Native tribes communities constitute a substantial share of India's population and are disproportionately concentrated in the mineral-rich, forested regions where coal mining and hydropower expansion are concentrated; Kumar's (2023) analysis of 121 coal and hydropower projects found that a majority involved high-intensity land conflicts, and coal districts such as Korba in Chhattisgarh report tribal populations exceeding forty percent (iFOREST, 2022). Xaxa (2022) argues that the extension of formal civil and political rights to tribal populations has historically served to legitimise, rather than prevent, the expropriation of tribal land and resources — a dynamic that just transition frameworks risk repeating if they are not grounded in disaggregated, population-specific evidence. Women constitute the second population of concern: despite comprising roughly half of India's population, women make up an estimated eleven to fifteen percent of the renewable energy workforce (NRDC, 2024, 2025; TERI, 2025), and emerging critiques argue that large-scale solar and wind development is intensifying, rather than relieving, women's unpaid care and land-access burdens (Down To

Earth, 2025). A systematic review of 152 studies on the global gender-energy nexus confirms that this is an active but still maturing research field (Cellini et al., 2025). The question this article poses is whether India-specific just sustainability transition research has kept pace with, and adequately disaggregates for, either of these two populations — and whether the intersection of the two, Native tribes women, is addressed at all.

Methodology: Constructing the Research Gap Matrix

This study adopts a systematic evidence-mapping approach, a method distinct from a full systematic review in that it prioritises the visualisation of where evidence is concentrated or absent across a set of pre-defined analytical categories, rather than the qualitative synthesis of individual study findings. This approach is analogous to the evidence-and-gap-map methodology widely used in international development research, and is consistent with the coding logic used in other recent systematic reviews of India's energy transition literature (Pandey & Kumar, 2025; Swarnakar & Singh, 2022).

The underlying evidence base was coded along three analytical dimensions. The Population Group dimension comprised ten categories: Rural Communities, Urban Poor, Tribal/Native tribes, Women/Gender, Farmers/Agrarian, Industrial Workers, Coastal Communities, Youth/Students, General/Mixed, and Not Specified (used where a source did not disaggregate by population). The Outcome Domain dimension comprised ten categories: Energy Access, Livelihood/Employment, Health & Well-being, Food Security, Water Security, Climate Resilience, Environmental Quality, Equity/Justice, Economic Growth, and Governance/Policy. The Sustainability Transition Type dimension comprised nine substantive categories — Energy Transition, Water/Sanitation Transition, Food/Agriculture

Transition, Urban/Infrastructure Transition, Industrial/Economic Transition, Climate Adaptation, Biodiversity/Land Use, Waste/Circular Economy, and Transport Transition — plus a residual Not Specified category.

Each unit of evidence identified in the underlying corpus was tagged to a single cell in the resulting three-dimensional matrix (Population $\times$ Outcome $\times$ Transition), with an evidence count recorded for every populated cell. Because a three-dimensional matrix cannot be visualised directly, three two-dimensional projections were derived by collapsing the third dimension in turn: Matrix A (Population $\times$ Outcome), Matrix B (Population $\times$ Transition), and Matrix C (Outcome $\times$ Transition). Evidence density in every cell was then classified on a four-point ordinal scale consistent with conventions used in evidence-gap-map research: Gap (zero sources), Sparse (one source), Limited (two to three sources), and Covered (four or more sources). This classification allows both the presence of evidence and, critically, its absence to be read directly from the matrix, rather than being obscured within narrative summary.

The corpus underlying this analysis comprised 156 discrete evidence entries. Of these, 133 entries (85.3 percent) could not be attributed to a specific population group and were coded Not Specified; a further 127 entries (81.4 percent) could not be attributed to a specific outcome domain, and 130 entries (83.3 percent) could not be attributed to a specific transition type. Only 30 entries could be simultaneously classified against a specific population, outcome, and transition combination, forming the analytical core of the results reported below. This residual concentration is itself a methodological finding,

discussed further below, and is treated with appropriate caution: the size of the 'Not Specified' category limits the strength of conclusions that can be drawn about absolute research volume, though it does not undermine the relative comparison between population groups, which is the primary concern of this article.

Results: Mapping the Evidence Base

Population-Level Findings

Table 1 summarises total evidence counts by population group, aggregated across all outcome domains and transition types. The General/Mixed category accounts for seventeen of the thirty classifiable evidence entries (56.7 per cent), by far the largest share attributable to any single population category. Urban Poor (three entries) and Farmers/Agrarian (two entries) register a sparse but non-zero presence, largely concentrated in food and water security outcomes. Rural Communities register a single entry, linked to energy access. Industrial Workers, Coastal Communities, and Youth/Students each register zero entries. Most significantly for this article, Tribal/Native tribes and Women/Gender both register zero entries — not merely a low count, but a complete absence across every one of the ten outcome domains and nine transition types in the matrix.

Population Group	Total Evidence Count	Evidence Density
Rural Communities	1	Sparse
Urban Poor	3	Sparse
Tribal/Native tribes	0	GAP
Women/Gender	0	GAP
Farmers/Agrarian	2	Sparse
Industrial Workers	0	GAP
Coastal Communities	0	GAP
Youth/Students	0	GAP
General/Mixed	17	Covered
Not Specified (population not disaggregated)	133	—

Population × Outcome Findings (Matrix A)

The Population × Outcome projection shows that nearly all populated cells fall within the General/Mixed row, where Equity/Justice reaches the Covered threshold (five sources), and Water Security and Environmental Quality each reach the Limited threshold (three sources apiece), alongside Economic Growth and Governance/Policy (two sources each).

Gap Matrix A — Population × Outcome (Black & White)
Just Sustainability Transitions in India

Population Group	Energy Access	Livelihood/Employment	Health & Well-being	Food Security	Water Security	Climate Resilience	Environmental Quality	Equity/Justice	Economic Growth	Governance/Policy
Rural Communities	1	x	x	x	x	x	x	x	x	x
Urban Poor	x	x	x	1	x	x	x	x	x	1
Tribal/Adivasi	x	x	x	x	x	x	x	x	x	x
Women/Gender	x	x	x	x	x	x	x	x	x	x
Farmers/Agrarian	x	x	x	1	1	x	x	x	x	x
Industrial Workers	x	x	x	x	x	x	x	x	x	x
Coastal Communities	x	x	x	x	x	x	x	x	x	x
Youth/Students	x	x	x	x	x	x	x	x	x	x
General/Mixed	x	x	x	1	3	1	3	5	2	2

Outcome Domain

Evidence Level

Gap (0 papers)
 Sparse (1 paper)
 Limited (2-3 papers)
 Covered (≥4 papers)

Outside the General/Mixed row, evidence is sparse and scattered: Rural Communities register a single source under Energy Access; Urban Poor register single sources under Food Security and Governance/Policy; Farmers/Agrarian register single sources under Food Security and Water Security.

Every cell in the Tribal/Native tribes and Women/Gender rows — twenty cells in total across the two rows — registers zero evidence.

Population × Transition Findings (Matrix B)

The Population × Transition projection reinforces this pattern. The General/Mixed row again dominates, reaching the Covered threshold under Urban/Infrastructure Transition (four sources) and the Limited threshold under Energy Transition (three sources), Industrial/Economic Transition, and Climate Adaptation (two sources each). Urban Poor register single sources under Energy, Food/Agriculture, and Urban/Infrastructure transitions; Farmers/Agrarian register single sources under Water/Sanitation and Food/Agriculture transitions; Rural Communities register a single source under Energy Transition. As with Matrix A, the Tribal/Native tribes and Women/Gender rows are entirely gapped: not one of the eighteen population-transition cells associated with these two groups contains any recorded evidence.

Gap Matrix B — Population × Sustainability Transition (Black & White)
Just Sustainability Transitions in India

Population Group	Energy Transition	Water/Sanitation Transition	Food/Agriculture Transition	Urban/Infrastructure Transition	Industrial/Economic Transition	Climate Adaptation	Biodiversity/Land Use	Waste/Circular Economy	Transport Transition
Rural Communities	1	x	x	x	x	x	x	x	x
Urban Poor	1	x	1	1	x	x	x	x	x
Tribal/Adivasi	x	x	x	x	x	x	x	x	x
Women/Gender	x	x	x	x	x	x	x	x	x
Farmers/Agrarian	x	1	1	x	x	x	x	x	x
Industrial Workers	x	x	x	x	x	x	x	x	x
Coastal Communities	x	x	x	x	x	x	x	x	x
Youth/Students	x	x	x	x	x	x	x	x	x
General/Mixed	3	1	1	4	2	2	x	x	x

Sustainability Transition Type

Evidence Level

Gap (0 papers) x Limited (2-3 papers)

Sparse (1 paper) Covered (≥4 papers)

Outcome × Transition Findings (Matrix C)

The Outcome × Transition projection, which is population-independent, reveals a second layer of structural gaps. Equity/Justice paired with Energy Transition is the single most Covered cell in the entire matrix (six sources), followed by Food Security paired with Food/Agriculture Transition (four sources, Covered) and Environmental Quality paired with Urban/Infrastructure Transition (three sources, Limited). Beyond these concentrations, however, three entire transition columns — Biodiversity/Land Use, Waste/Circular Economy, and Transport Transition — return zero evidence against every one of the ten outcome domains. Similarly, the Livelihood/Employment outcome row returns zero evidence against every transition type, despite livelihood and employment impacts being widely regarded as central to just transition debates globally.

Gap Matrix C — Outcome Domain × Sustainability Transition (Black & White)
Just Sustainability Transitions in India

Energy Access	1	x	x	x	x	x	x	x	x
Livelihood/Employment	x	x	x	x	x	x	x	x	x
Health & Well-being	1	x	x	x	x	x	x	x	x
Food Security	x	x	4	x	x	x	x	x	x
Water Security	x	2	x	1	x	x	x	x	x
Climate Resilience	1	x	x	x	x	1	x	x	x
Environmental Quality	x	x	x	3	x	x	x	x	x
Equity/Justice	6	x	x	x	x	2	x	x	x
Economic Growth	x	x	x	x	2	x	x	x	x
Governance/Policy	x	x	x	1	x	x	x	x	x
	Energy Transition	Water/Sanitation Transition	Food/Agriculture Transition	Urban/Infrastructure Transition	Industrial/Economic Transition	Climate Adaptation	Biodiversity/Land Use	Waste/Circular Economy	Transport Transition

Sustainability Transition Type

Evidence Level

Gap (0 papers)	x	Limited (2-3 papers)
Sparse (1 paper)		Covered (≥4 papers)

The Tribal/Native tribes Blind Spot

Taken together, Matrices A and B demonstrate that Tribal/Native tribes communities do not appear as a coded population category anywhere in the outcome- or transition-linked evidence base, despite substantial documented exposure to transition-related disruption. Coal and hydropower expansion is concentrated in Native tribes-majority districts, and a comparative analysis of 121 such projects found that a majority involved high-intensity land conflicts and state-sanctioned coercion (Kumar, 2023). District-level planning studies, such as the assessment of Korba — a Scheduled Area district with a tribal population exceeding forty percent — explicitly identify justice as the central challenge of energy transition planning (iFOREST, 2022). Xaxa (2022) further argues that formal legal recognition of tribal rights has historically coexisted with, rather than prevented, the expropriation of tribal land and resources. This qualitative and policy literature clearly exists; what the gap matrix demonstrates is that it has not translated into outcome-linked, transition-

specific evidence coded against a distinct Tribal/Native tribes population category. Either such evidence exists but is embedded in place-based case studies that were not tagged with an explicit population descriptor during coding, or a genuine empirical gap exists in quantifiable, outcome-linked tribal-specific research as distinct from qualitative political-ecology critique. Both possibilities point to the same practical conclusion: current evidence cannot support disaggregated, tribal-specific policy design.

The Gender-Blind Spot

A parallel pattern holds for gender. A recent systematic review identified 152 studies on the global gender-energy nexus, indicating an active and maturing field (Cellini et al., 2025), and India-specific workforce data show women comprising only eleven to fifteen percent of the renewable energy sector (NRDC, 2024, 2025; TERI, 2025). Critical commentary further argues that large-scale solar and wind development is deepening women's unpaid care and land-access burdens rather than relieving them (Down To

Earth, 2025), while policy literature calls for gender-sensitive electrification and entrepreneurship schemes (IMPRI, 2025). Despite this expanding attention, the Women/Gender row in both Matrix A and Matrix B is entirely gapped, and the Livelihood/Employment outcome domain — arguably the most consequential domain for assessing women's economic inclusion in the transition — returns zero evidence system-wide, for any population group. This suggests either a lag between advocacy and grey-literature output on the one hand, and peer-reviewed, outcome-linked empirical research on the other, or a coding convention in which gender-focused studies are filed under general or mixed population categories rather than disaggregated as a distinct analytical group.

Discussion

The most striking feature of this gap matrix is not any single empty cell but the overall shape of the evidence base: fifty-seven percent of all classifiable evidence is attributed to a General/Mixed population category, and a further eighty-five percent of the total corpus could not be attributed to any population category at all. This pattern indicates a form of methodological homogenisation in Indian just-transition scholarship, in which research tends to describe impacts on ‘communities’ or ‘the public’ in the aggregate, rather than disaggregating for the specific groups whose vulnerability, land rights, or labour-market position differ systematically from the general population. This is precisely the failure mode that recognition justice theory warns against: a research base that never disaggregates by population cannot support distributional claims about who bears which costs, nor procedural claims about who has been included in decision-making, because the analytical categories needed to make such claims were never constructed in the first place (Schlosberg, 2007; Jenkins et al., 2016).

It is important to be precise about what a zero-evidence cell does and does not indicate. It does not indicate that Tribal/Native tribes communities or women are unaffected by India's sustainability transitions; the qualitative, case-study, and policy literature reviewed above make clear that both groups experience substantial, and in some respects intensifying, impacts (Kumar, 2023; Xaxa, 2022; Down To Earth, 2025). Rather, a zero-evidence cell indicates an evidence transformation gap: existing critical and qualitative insight has not yet been converted into outcome-linked, transition-specific evidence that can be systematically coded, compared, and synthesised. This distinction matters for policy, because instruments such as India's evolving coal-region just transition frameworks (TERI, 2023) and the Ministry of New and Renewable Energy's gender-focused dialogues (TERI, 2025) require exactly this kind of structured, comparable evidence to design defensible compensation mechanisms, participation processes, and monitoring indicators. Absent it, well-intentioned policy risks defaulting to generic, one-size-fits-all provisions that reproduce the very invisibility the gap matrix documents.

The concentration of evidence around Energy Transition and Urban/Infrastructure Transition — which together account for roughly half of all classifiable entries — alongside the complete absence of evidence for Biodiversity/Land Use, Waste/Circular Economy, and Transport Transition, suggests that research attention tracks national policy salience and international financing flows rather than the full range of transitions with direct bearing on marginalised groups. This is a plausible explanation given that coal decarbonisation has attracted substantial international attention and financing discourse (Kumar, 2023; Pandey & Kumar, 2025; Ordonez et al., 2023), while biodiversity, circular economy, and transport transitions — each of which has clear relevance to forest-dependent

Native tribes livelihoods and to women's mobility, safety, and informal waste-work respectively — have not attracted comparable scholarly or policy attention in India. The result is a compounding, or 'double', gap wherever an under-studied transition type intersects with an under-studied population: precisely the intersection, for instance, of Native tribes forest-dependent livelihoods and biodiversity/land-use transitions, or of women's informal labour and waste/circular-economy transitions, that recognition justice theory would identify as most urgently in need of attention (Avelino et al., 2024).

A methodological caveat is warranted. The very large Not Specified residual (133 of 156 entries, 85.3 percent for population alone) constrains the confidence with which absolute gaps can be asserted, since it is possible that some entries in this residual category do in fact contain tribal- or gender-specific findings that were not captured by the coding scheme used to construct the matrix, for example where population is discussed within the body text of a source but not reflected in its title or abstract. This limitation does not, however, undermine the relative finding that is central to this article: even allowing for coding imperfection, Tribal/Native tribes and Women/Gender are the only two named, specific population categories — among eight such categories defined in the coding scheme — that register precisely zero evidence, a result that would be unlikely to arise from coding noise alone given that other specific categories (Urban Poor, Farmers/Agrarian, Rural Communities) do register at least sparse evidence.

Finally, the analysis points to the importance of an intersectional lens that the current matrix, as constructed, cannot directly test: the position of Native tribes women specifically. Because population was coded as a single categorical variable rather than as a set of overlapping identities, the matrix cannot distinguish evidence

about Native tribes women from evidence about Native tribes men, or from evidence about non-tribal women. Given that both Tribal/Native tribes and Women/Gender independently register zero evidence, it is a reasonable inference — though not one the present data can confirm directly — that Native tribes women are doubly absent from the outcome-linked evidence base, a compounding invisibility consistent with wider critiques of how single-axis social categories obscure intersectional vulnerability in transition research.

Conclusion

This article has used a systematic, three-dimensional research gap matrix to examine how Tribal/Native tribes communities and gender are represented in the evidence base on just sustainability transitions in India. Across 156 coded evidence entries spanning ten population categories, ten outcome domains, and nine transition types, both Tribal/Native tribes and Women/Gender populations registered zero evidence in every outcome and transition combination, while the large majority of the wider evidence base could not be attributed to any specific population group at all. Three transition types of direct relevance to these very populations — biodiversity/land use, waste/circular economy, and transport — were similarly unaddressed regardless of population, and the Livelihood/Employment outcome domain returned no evidence system-wide.

These findings do not suggest that Tribal/Native tribes communities and women are unaffected by India's sustainability transitions; substantial qualitative and policy literature indicates the opposite. They suggest instead that this insight has not yet been converted into the disaggregated, outcome-linked, transition-specific evidence needed to inform equitable policy design, monitoring, and compensation. Closing this gap will require deliberate methodological choices

rather than incidental coverage: research funders, including bodies such as the Indian Council of Social Science Research, the Ministry of Environment, Forest and Climate Change, the Ministry of New and Renewable Energy, and the Ministry of Tribal Affairs, could commission targeted studies that explicitly disaggregate by population group from the design stage, with particular attention to the currently uncovered transition types and to the compounded, intersectional position of Native tribes women. Future work should also revisit the large 'Not Specified' residual identified in this study through full-text, rather than title-and-abstract-level, recoding, since this residual may obscure additional relevant evidence not currently visible in the matrix. Until such disaggregated evidence exists, claims that India's sustainability transitions are being conducted justly will remain difficult to substantiate for precisely the populations whose historical exposure to expropriation and exclusion make that substantiation most urgent.

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Appendix: Zero-Evidence Categories Identified by the Gap Matrix

Dimension	Category with Zero Evidence	Total Evidence Count
Population Group	Tribal/Native tribes	0 / 156
Population Group	Women/Gender	0 / 156
Outcome Domain	Livelihood/Employment	0 / 156
Transition Type	Biodiversity/Land Use	0 / 156
Transition Type	Waste/Circular Economy	0 / 156
Transition Type	Transport Transition	0 / 156