URBAN-RURAL LINKAGES AND LAND

INTRODUCING THE FLOWS-TO-ACTION FRAMEWORK

United Nations
Convention to Combat Desertification

UN-HABITAT

Acknowledgements

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https://www.unccd.int/resources/publications/primer-urban-rural-linkages-and-land

Some readers of this note may wish to first consult the Primer as it offers an overview of the topic and its relevance to the convention as part of efforts to assist countries in achieving their LDN and land restoration targets. The Primer identifies the key functional characteristics of URL that pose unique challenges to the health and productivity of the land and describes the relevant actors, frameworks, and tools that can be used to support LDN initiatives by strengthening URL and making them more sustainable and resilient.

In decision 23/COP16, Parties requested support to strengthen URL through territorial governance systems and to use the Primer on Urban–Rural Linkages and Land as guidance. This note, introducing the Flows-to-Action Framework, responds to this request by elaborating a novel approach to governing and managing URL flows that connect territories and influence land, livelihood, migration, and resilience outcomes. It was made possible with the generous funding of the Peoples' Republic of China.

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Executive Summary

Strong, sustainable, and resilient urban-rural linkages are central to efforts to combat land degradation, reduce out-migration, and achieve other sustainable development priorities, such as improving rural livelihoods, ensuring food security and water availability, conserving biodiversity, and mitigating and adapting to climate change.

Urban-rural linkages (URL) are lifelines that connect and sustain urban and rural communities. As networks of interdependent flows of people, food, water, information, finance, and ecosystem services, URL are increasingly shaping land use and management decisions, livelihood opportunities, and demographic trends, including migration and urbanisation. They can significantly influence where economic and environmental pressures accumulate and how costs and benefits (risks and impacts) are distributed among and across urban and rural communities, whether proximate or distant.

Land and territorial governance frameworks are still largely focused on fixed boundaries and area-based measures. While these approaches are necessary, they are insufficient to effectively address flow interdependencies that generate pressures and impacts on land, water, and human resources. Current governance models often fail to recognise that decisions taken in one jurisdiction can have harmful social, economic, and environmental outcomes in nearby or distant ones. As a result, many URL that contribute to land degradation and rural out-migration are not adequately considered in the relevant political and administrative spheres of land governance and management.

The Flows-to-Action Framework offers a practical approach to designing and implementing flow-based governance strategies and response measures. The framework integrates an evidence-based governance logic into existing policy, planning, and decision-making processes to engage with cross-territorial networks, linked through URL flows, and manage their functional interdependencies. The framework can be used to supplement territorial and area-based governance, with particular attention to the indirect and distant drivers of land degradation and human migration.

Key Messages

Flow-based governance complements and strengthens existing territorial governance approaches by making URL flows more visible and actionable. Flow-based governance does not require new institutions or major reforms. Proactively and responsibly managing priority flows of goods and services (e.g., food, water, energy) can help support sustainable land management, diversify livelihood opportunities, and promote greater urban-rural equality, while avoiding or reducing forced migration and internal displacement.

Clearly defined roles and responsibilities are required to govern URL flows and supporting infrastructure and networks, enabling cooperation and coordination among actors and across territories. Collaboration around a shared goal to avoid, reduce, and manage URL impacts on land and livelihoods is an essential part of a unified, integrated governance framework – one that can leverage legal, regulatory, and budgetary procedures to foster a culture of responsibility and sustainability.

Ensuring transparency and accountability for the risks and responsibilities associated with URL flows can help prevent demand-driven risks, pressures, and impacts from being disproportionately transferred to rural areas. The evidence base for flow-based governance should be developed using robust data and information systems that align functional and spatial planning across different sectors and scales. Ultimately, URL interdependencies must be recognised as a legitimate governance responsibility and normalised within collaborative planning and management practices, with the shared objective of diversifying livelihood opportunities and avoiding harmful environmental impacts in rural areas.

1. Introduction

Urban-rural linkages (URL) refer to the **flows** of people and goods as well as information, financial, environmental, and other services between rural, peri-urban, and urban areas. Cities and towns depend on rural areas for food, water, energy, and labour, while rural areas rely on urban centres for jobs, markets, technology, financial and social services.[1] URL are supported by **infrastructure** (e.g., natural, transport, digital) and **networks** (e.g., markets, capital, labour) which often transcend socio-economic, biophysical, and jurisdictional boundaries.[2]

The **territorial effects** of URL flows, in terms of development and environmental outcomes, are largely determined by the behaviour of diverse actors (e.g., governments, private sector, local communities) and the flow **interdependencies** created by 'material exchanges' between urban and rural communities. These become evident when, for example, urban expansion encroaches on fertile agricultural land or the demand for rural commodities leads to increased deforestation and water stress.[3] For the most part, these effects are considered as **externalities** and are not addressed in the relevant political and administrative spheres of land governance and management.

Operating across multiple territories and scales, flow interdependencies can influence where **environmental risks** accumulate and **economic opportunities** arise.[4] Current trends in land health, rural livelihoods, and migration patterns are not only determined by local conditions within individual territories, but also by supply chains, upstream-downstream relations, and distant market connections. These relationships can be characterised by conditions of **reciprocity** or **asymmetry** (**extractive**), whereby decisions or investments in one territory can impact another's ability to support its population and protect the environment.[5]

Territorial governance frameworks typically employ **command-and-control** policies and tools, such as spatial planning, land use and zoning regulations, and environmental standards. These instruments are designed to regulate activities within jurisdictions rather than engage with cross-territorial flows. As a result, flow interdependencies lack visibility and tend to be poorly coordinated across relevant authorities, actors, and sectors. To address these **governance gaps**, some territorial frameworks have expanded their administrative scope to include contiguous areas, but remain spatially bounded. Many linkages span multiple territories or countries where the flows, infrastructure, and networks are under the control of private or commercial entities (e.g., domestic and transnational corporations), diffusing responsibility for cross-territorial impacts and weakening public accountability.[6]

The Rationale for Flow-based Governance

Flow-based governance is based on the premise that urban and rural areas governed as a single networked system can deliver more equitable development and environmental outcomes than if they were governed as separate jurisdictions. Addressing the growing pressures on and competition for land resources that are shaping rural livelihoods and migration patterns requires governance strategies that responsibly manage the interdependencies and impacts created by the flows of people, goods, and services.[7] [8]

Land, livelihood, and demographic outcomes depend not only on what happens inside a territory, but on how distant territories can influence one another through URL flows.[9] Flow-based governance responds to this challenge by shifting attention from managing territories in isolation to regulating the linkages between them.[10] It seeks to bridge the governance gaps between where and how decisions are made, and where and how the pressures and impacts of URL on land and communities manifest.[11]

Flow-based governance strives to (i) make flows more visible, whether they are proximate, peri-coupled, or telecoupled, (ii) align interventions and incentives along priority flow pathways, and (iii) clarify how roles and responsibilities intersect across actors and territories connected by these linkages. This enables decision-makers to anticipate how the increased demand for land resources, investments, or human mobility in one territory can create risks or opportunities in others. Building the evidence base for coordinated action along URL can support governance responses that deliver more sustainable and equitable outcomes.

One practical entry point for making URL flows more sustainable, resilient, and inclusive is engaging with the supply chains of land-based resources or commodities. This can involve responsible procurement practices, partnerships with local communities and smallholder producers, and environmental standards and certification schemes in the agricultural, forestry, and mining sectors.[12] The flow-based governance model demonstrates the potential of policy and regulatory instruments, partnerships and alliances to minimise impacts and promote greater equality among urban and rural communities.[13] [14]

FIGURE 1 URL Flows and their Interdependencies[15]

Global Recognition of Urban–Rural Linkages

Flow-based governance builds on global mandates and multilateral agreements that recognise URL as a critical policy domain for land, livelihood, and sustainability outcomes across territories, and provides the conceptual foundation and political legitimacy for the Flows-to-Action Framework described in this note.

United Nations Convention to Combat Desertification (UNCCD, 2024). In decision 23/COP16, Parties requested support to strengthen urban–rural linkages through territorial governance systems and to use the Primer on Urban–Rural Linkages and Land as guidance for achieving Land Degradation Neutrality (LDN). The Flows-to-Action Framework directly responds to this request by demonstrating a novel approach to governing and managing URL flows that connect territories and influence land, livelihoods, and resilience outcomes.[16]

Primer on Urban–Rural Linkages and Land (UNCCD & UN-Habitat, 2024). The Primer first introduced flow-based governance as a complement to territorial and multilevel governance approaches, emphasising the importance of addressing food, water, labour, information, finance, and ecosystem service flows, as these can be significant drivers of land use change and land degradation, leading to rural out-migration.[17]

Urban–Rural Linkages: Guiding Principles and Framework for Action to Advance Integrated Territorial Development (UN-Habitat, 2019). These principles remain the foundation and normative compass for integrated urban–rural governance. Flow-based governance builds on these principles by operationalising linkages as flows, thereby making interdependencies visible, aligning responsibilities, and strengthening fairness.[18]

2. Elements of Flow-Based Governance

Flow-based governance starts from a simple but often overlooked reality: urban and rural territories are sustained by shared infrastructure and networks that govern and administer flows of people, goods, and services. Employing response measures that address functional interdependencies and their territorial effects, flow-based governance offers significant potential to deliver more equitable development and environmental outcomes.[19]

Reducing Governance Gaps

Flow-based governance frameworks are a valuable addition to existing territorial approaches, as they correspond more closely to a 'networked reality' and can be more effective in reducing existing governance gaps.[20] These frameworks suggest possible governance responses and operational elements to guide decisions and investments within existing policy and planning processes, especially those concerned with reversing land degradation and out-migration from rural areas.[21]

TABLE 1 **Governance Gaps, Governance Functions, and Operational Elements**

Governance Gaps	Description
Visibility	Flows and their territorial effects are not transparent or only partially understood.
Fit-for-Purpose	Policies, incentives, and decision-making processes do not align with how flows actually move within and between territories.
Fairness	Benefits, risks, and responsibilities are unevenly distributed or inequitably shared across territories and actors.[22]
Governance Functions	**Description**
Recognition	Develop a shared understanding of how linkages operate, the extent of their territorial effects, and the populations affected.
Coordination	Align policies, incentives, and decision-making processes where responsibilities intersect across the linkage.
Accountability	Ensure that the distribution of benefits, risks, and responsibilities along the linkage is transparent and fair.
Operational Elements	**Description**
Relational Capacities	• **Relational visibility** (common perspective on flows and territorial effects) • **Relational bridging** (practical ways to coordinate across actors, sectors, and territories) • **Relational fairness** (mechanisms to balance benefits, risks, responsibilities, and expectations)
Cooperation Arrangements	Safe and predictable spaces where actors interact (e.g., coalitions of practice) along a flow to exchange evidence, negotiate responsibilities, and coordinate action. These are not new institutions but the relational mechanisms that facilitate governance functions in practice.

Flow-based strategies address existing governance gaps through three primary functions (e.g., recognition, coordination, accountability) that governments and relevant actors can assume when operating along a specific URL. The operational elements constitute the logic of flow-based governance – shifting from static, hierarchical control to dynamic, continuous oversight based on cooperation arrangements.

Benefits of Flow-Based Governance

Flow-based governance can transform URL from unregulated background dynamics into purposely managed responsibilities that strengthen land stewardship, reduce urban-rural inequalities, and enhance livelihood and ecosystem resilience. When coordination and cooperation are mainstreamed or become routine along these flows, actors, networks, and institutions can better anticipate risks, align decision-making, enforce responsibilities, and avoid undesirable externalities.

Greater visibility of the drivers of land degradation and migration. Flow-based governance highlights both the direct and indirect drivers of land degradation and migration within a given territory, in particular by focusing on the demand pressures generated elsewhere. Tracing URL flows and their interdependencies reveals how decisions made upstream can create or perpetuate harmful effects downstream. Greater visibility is a necessary first step in reducing environmental risks and socio-economic impacts associated with URL through informed governance responses.

Collaboration across actors and territories for land stewardship. Flow-based governance brings together actors, networks, and institutions that operate along the same flow. This can enable (i) coordinated land use planning across administrative boundaries, (ii) predictable and sustained finance for land restoration in priority areas, and (iii) greater coherence among sectoral policies and regulatory standards. Collaboration can also help to build political legitimacy and social credibility when interventions are demonstrably connected to improvements in livelihoods and the natural environment.

Equitable distribution of risks, responsibilities, and benefits. Flow interdependencies often produce asymmetric outcomes, whereby some territories bear disproportionate risks and pressures while others reap most of the benefits. Flow-based governance can employ diverse response measures to (i) rebalance and enforce responsibilities among upstream-downstream actors, (ii) equitably share costs and benefits along priority flows, and (iii) reduce risk exposure for vulnerable rural communities, promoting livelihood and ecosystem resilience.

Complementarity with Existing Governance Approaches

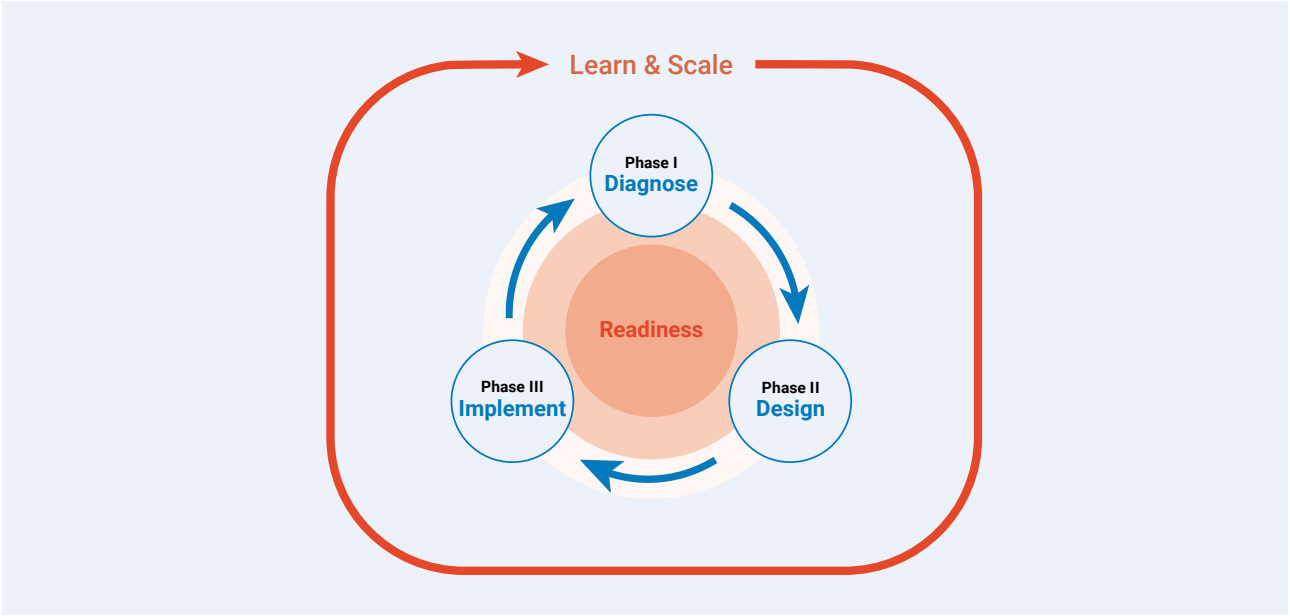
Flow-based governance responses and interventions can help to close critical gaps and leverage new opportunities to complement and strengthen existing URL governance approaches, such as:

- **Integrated Territorial Governance.** Effective in coordinating bounded areas and administrative territories but is primarily focused on proximity and continuity.[23] Flow-based governance enhances horizontal coordination and the ability to govern non-contiguous interdependencies, such as trade corridors, migration routes, and land use change.
- **Multilevel Governance.** Effective for vertical coordination across levels of government but is often constrained by silos and fixed hierarchies.[24] [25] Flow-based governance increases the ability to govern flows that transcend sectors and jurisdictions, such as those that depend on markets, infrastructure, and value chains.
- **Human Rights and Gender-Responsive Governance.** Effective in ensuring inclusivity, equity, and accountability, but is limited when risks or costs are displaced to other territories.[26] [27] Flow-based governance complements these approaches by tracing roles and responsibilities along priority flows to promote legitimate rights and protections across territories.

3. Flows-to-Action Framework

The Flows-to-Action Framework operationalises flow-based strategies and approaches as a practical and repeatable governance cycle.[28] Following a phased, iterative process, the framework provides guidance on how actors, networks, and institutions can move from identifying flow interdependencies to designing and implementing appropriate governance responses within existing policy and institutional settings. Worked examples are provided for each phase to illustrate potential ways to operationalise the framework.

FIGURE 2 **Operationalising the Flows-to-Action Framework**



Phase I

Diagnose: Build a shared evidence base to inform decision-makers on how flows connect territories, where territorial effects appear, who is involved or affected, and how governance performs along linkages.

WHAT IT DELIVERS

- Urban-rural connectivity maps
- URL flow profiles
- Governance performance assessments (Visibility, Fit-for-Purpose, Fairness)

Phase II

Design: Translate diagnostic insights into governance responses (what, between whom, for what purpose) and prepare the operational configuration: capacities, tools, and cooperation mechanisms.

WHAT IT DELIVERS

- Governance response measures
- Governance packages (including tools, platforms, and coordination mechanisms).

Phase III

Implement: Embed relational capacities and cooperation mechanisms in policy mandates, budgets, monitoring protocols, and participatory processes so that cooperation becomes routine.

WHAT IT DELIVERS

- Implementation pathways
- Aligned procedures and financing
- Shared monitoring and review
- Sustained cooperation and stakeholder participation

Learn & Scale: Evaluate implementation and results to refine future diagnosis and design, and scale effective cooperation across flows, sectors, and territories.

WHAT IT DELIVERS

- Continuous learning and adaptation
- Improved governance responses
- Replication and scaling across new linkages and territories

Phase I - Diagnose:
Make Flows and their Interdependencies Visible

Phase I focuses on building a shared evidence base for acting on specific URL flows. It suggests three steps to enhance the understanding of (i) how territories are connected and the distribution of roles and responsibilities, (ii) how flow interdependencies shape land use and condition and livelihood resilience, and (iii) how governance performs along select flows.

Step 1: Map priority flows, territorial effects, and actors involved.
Develop an urban-rural connectivity map that traces select flows (e.g., food, water, ecosystem services) that connect territories. This would highlight the infrastructure and networks that enable each flow, as well as their territorial effects (e.g., land use change, land degradation, rural decline, forced migration) along the linkage. Identify the key actors influencing the flow and the critical nexus points where decisions and interventions are made.

Step 2: Characterise flow interdependencies and governance context.
Describe how governance arrangements and actor relations shape select flows and how the risks, pressures, impacts, and benefits are distributed across connected territories. Develop URL profiles that reveal the type of flow interdependence (e.g. asymmetric, reciprocal) and its potential to generate trade-offs or synergies.

Step 3: Assess governance performance and relational conditions.
Use the diagnostic lenses of visibility, fit-for-purpose, and fairness to assess governance performance along select flows. Evaluate how governance recognises, coordinates, and balances flow interdependencies, and how cooperation is arranged and responsibilities are defined in order to identify key challenges and opportunities.

Worked Example for Phase I: Kenya - Horticultural Exports and Water Scarcity

Context: Mapping water flows in the Ewaso Ng'iro basin linked downstream irrigation shortages for smallholder farmers to upstream water abstraction by export-oriented horticultural producers. Many subsistence farmers were forced to change their land management practices, adapting crops and cultivation methods to water availability. Interdependency analysis showed how export demand and fragmented water governance created upstream pressures while shifting water scarcity and pollution risks downstream.[29]

Illustration: Mapping water extraction points, production clusters, and market pathways would reveal that reduced flows were due to river water abstraction by large-scale horticultural producers in the upper Ewaso Ng'iro basin, primarily vegetables and flowers for the export market. Further diagnosis would expose a telecoupled linkage in which benefits accrue to exporters and global consumers while costs are borne locally by subsistence farmers. A governance performance assessment would reveal weak visibility, misaligned basin rules, and unfair burden-sharing between export producers and local communities. This points to need for greater transparency, cross-territorial coordination, and the rebalancing of water responsibilities along the flow.

Phase II - Design:
Turn Evidence into Operational Governance

Phase II translates diagnosis into action by defining how governance can respond to priority linkages, clarifying what must be done, between whom, and for what purpose. This serves to inform the development of governance packages that combine legislation, regulation, fiscal incentives, and cooperation arrangements that enable collaborative interventions along select flows.

Step 1: Define governance responses.
These may include defining (i) the purpose, e.g., reducing harmful environmental impacts or urban-rural inequalities, (ii) the relational conditions, e.g., actor, network, institution, and territory, required to perform the function, and (iii) the enabling conditions for implementing operational functions, e.g., recognition, accountability, responsibility, cooperation.

Step 2: Translate responses into governance packages.
These may include a mix of policy and regulatory tools, incentive mechanisms, and technologies that strengthen the relational capacities (visibility, fit-for-purpose, fairness) needed to perform operational functions. These functions may include assessment, monitoring, and review systems, responsible procurement practices, and sustainability certification or traceability schemes. Cooperation arrangements (e.g., public-private partnerships, trade compacts, business roundtables, coordination platforms, coalitions of practice) can often be a catalyst that brings together actors and territories to coordinate planning, negotiate responsibilities, and implement governance responses to make flows more equitable, sustainable, and resilient.

Worked Example for Phase II: Brazil - Urban Fish Demand and Rural Decline

Context: Studies suggest a significant governance gap in the management of riparian resources, resulting in overexploitation and declining fish populations (e.g., tambaqui) in the Puras watershed near Manaus. This was attributed in part to reliable transport and easy access to urban markets. The territorial effects of urban fish demand are evident up to 1,000 kilometres upstream, where flows are become less accessible and harvesting pressures begin to dissipate.[30]

Illustration: Neither fisheries nor municipal authorities recognised how urban demand shaped incentives for overharvesting, environmental degradation, and rural decline in distant territories. Governance responses could be designed and implemented to align harvesting practices with seasonal stock conditions, guided by sustainability objectives rather than market incentives. Coordination and review mechanisms involving rural communities, fisheries/environmental agencies, traders/buyers, and municipal authorities could play a catalytic role in reversing fish stock declines and environmental degradation upstream.

Phase III - Implement:
Mainstream Flow-Based Governance

Phase III (implementation) anchors flow-based governance in policy and practice by embedding the results of the first two phases (diagnose and design) into existing land governance systems and territorial decision-making structures, including relevant legislative, regulatory, and administrative institutions.

Implementation unfolds through four generalised pathways, each of which begins with cooperation, followed by the creation of enabling conditions which are then consolidated through practice. Each pathway represents an institutional domain in which existing routines can be adapted to enable actors to collaborate more effectively and predictably along specific linkages.

Pathway 1 — **Procedural alignment** of regulatory mandates, planning cycles, and administrative functions so that responsibilities and decision points reflect how flows and their interdependencies operate across territories.

Pathway 2 — **Financial alignment** involves positioning budgets, incentives, and investments along specific flows (e.g., supply chains) to ensure predictable, sustained, and proportionate resourcing to implement the desired governance response measures.

Pathway 3 — **Monitoring and review** of urban-rural flows, their territorial effects, and governance performance are required for more informed decision-making and adaptative management practices.

Pathway 4 — **Social anchoring and communication** builds the economic trust, political legitimacy, and social credibility needed for cooperation arrangements to perform their functions and demonstrate results.

Worked Example for Phase III: China - Urban Expansion and Forest Degradation

Context: Studies suggest clear URL pressures and impacts on land use and condition due to the rapid expansion of urban areas in Zhejiang Province. This expansion triggered the displacement of agricultural land into distant forested counties, adversely impacting water regulation, soil health, carbon storage, and other ecosystem services.[31]

Illustration: The design phase could focus on territorial effects resulting from the distribution of housing construction quotas and capital investments rather than administrative boundaries. A governance response package could include: (i) assessments to increase the visibility of land displacement flows; (ii) enhanced coordination between urban planners, county land bureaus, and ecological authorities; and (iii) the establishment of collaborative platforms to review the evidence base, synchronise decision-making, and administer land restoration activities.

Learn & Scale

Flow-based governance evolves and improves through practice and continuous learning. Each phase of the framework – diagnosing flow interdependencies, designing response packages, and implementing measures – generates new evidence and experiences. Learning is the process by which actors recognise, coordinate, and distribute responsibilities along URL flows, with the aim of closing the gap between actual governance performance and desired outcomes. Scaling involves maximising the reach and effectiveness of response measures that demonstrate value in terms of reduced costs and equitable and sustained benefits. Learning and scaling creates a continuous cycle of reflection through actionable insights and documented results, allowing for the ongoing improvement, adaptation, and replication of flow-based governance practices.

4. Conclusion (Call to Action)

Flow-based governance must first show all relevant actors how they are connected through URL flows and their interdependencies. It strives to progressively increase visibility, helping to make governance fit-for-purpose and ensuring transparency and fairness. The Flows-to-Action Framework suggests that there are multiple entry points by which diverse actors can recognise their legitimate governance responsibilities, design appropriate response measures, and routinely collaborate to avoid, reduce, and manage URL impacts on land, livelihoods, and migration.

Build the Evidence Base

VISIBILITY

The most efficient way to begin implementing the framework is by identifying priority flows and their territorial effects, and building the evidence base to inform response measures and cooperation mechanisms. This can include:

- participatory mapping of priority flows for greater visibility;
- multi-actor interpretation of the evidence to build a shared understanding of how the flow operates and its territorial effects; and
- establishing protocols for monitoring risks, pressures, and impacts (e.g., land degradation, water stress, forest loss, market dependency, demographic trends).

Enhance Coordination

FIT-FOR-PURPOSE

Once a flow becomes visible, actors, networks, and institutions can improve coordination by designing governance responses around routine decision-making points where responsibilities intersect. This can include:

- synchronising policy and sectoral mandates, land use and regulatory planning, and budgetary allocations that are fit-for-purpose;
- establishing cooperation arrangements and coordination spaces (e.g., quarterly reviews, buyer-producer platforms, basin and corridor working groups); and
- developing operational procedures that facilitate adaptive management practices along priority flows, taking into account evolving regulatory mandates, production calendars, incentive structures, and land management practices.

Increase Transparency and Accountability

FAIRNESS

Greater transparency and accountability can provide the political and social legitimacy needed to build trust among relevant actors and institutions, and reduce risk exposure in vulnerable rural areas. This can include:

- clearly defining actor roles and responsibilities along priority flows; and
- striving to achieve a more equitable balance between those who bear the risks and those who reap the benefits.

Encourage Cooperation Arrangements

COALITIONS OF PRACTICE

Cooperation arrangements can operate at different scales, often assuming a catalytic role in translating the evidence base into more effective governance response measures. Coalitions of practice, such as public-private-community partnerships and network alliances, are flexible configurations of actors that include governments, businesses, producer cooperatives, community-based and research organisations. They come together around priority flows to recognise, coordinate, and manage their interdependencies, with the aim of achieving mutually beneficial socio-economic and environmental outcomes.[32]

Leverage Actor-Specific Entry Points

IMPLEMENTATION

URL actors have various entry points which can be leveraged for implementing flow-based governance to address the growing risks, pressures, and impacts of URL on land use and condition, rural livelihoods, and migration patterns.

TABLE 2 **Actor-Specific Entry Points**

Actor	Entry Points
National Authorities	• Signal that shared flows (e.g., food, water, labour, information, finance, ecosystem services) are national sustainable development and environmental priorities. • Request ministries and agencies to map how their decisions interact along priority flows. • Facilitate data and information exchange and promote coordination across sectors and territorial authorities.
Subnational Governments	• Convene neighbouring jurisdictions to identify and address shared concerns linked to priority flows. • Facilitate cooperation among local actors through existing committees, councils, or ad-hoc working groups.
Planning & Regulatory Agencies	• Review and adjust mandates, plans, and budgets to reflect interdependencies along priority flows. • Integrate flow-related evidence (e.g., territorial effects, upstream/downstream risks, cross-boundary pressures and impacts) into planning and regulatory decision-making processes.
Donors & Development Partners	• Support diagnostics, design considerations, and management practices around priority flows within projects and programmes. • Budget for tools, technologies, and cooperation arrangements that help actors manage flow interdependencies in a flexible and timely manner. • Align capacity building and technical assistance with priority flows identified by local authorities and actors.
Civil Society & Community-based Organisations	• Act as stewards and sentinels to make displaced costs and risks visible, especially for vulnerable territories and rural areas. • Participate in mapping, monitoring, and community-based evidence gathering to highlight territorial effects.
Private Sector	• Adjust standards, traceability systems, and investment practices to reflect the pressures and impacts created by flows. • Collaborate in mapping supply chain interdependencies to identifying how business can avoid and minimise territorial effects.

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