



NATIONAL GREEN TRANSITION *for* LAND

via holistic Integrated Landscape Management

gallop
initiative

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Important Note: This is suggestive document by the GALLOP-MEDIUS team and meant to get the stakeholders on a common platform to explore and evaluate the value of applying **Integrated Landscape Management** framework (regionally and nationally via a policy and financial convergence architecture), provide thoughts, suggestions towards coming up with the best way forward. Some details will be repeated across chapters, as they can be distributed individually. This document is a **GALLOP Policy Lab** think-piece and hence evolutionary in nature.

Foreword

Periods of profound disruption do more than expose systemic weaknesses—they create openings for renewal. Since the launch of the *Global Livelihoods and Landscape Recovery Platform* (GALLOP) Initiative in response to addressing the polycrisis and especially COVID-19 -the world has confronted cascading challenges. In addition to fallouts of the pandemic: climate instability, ecological degradation, widening inequality, and economic uncertainty. Together, these pressures demand not incremental adjustments, but a decisive shift in how development is conceived and delivered.

Prosperity and well-being cannot be reduced to economic growth alone. They are shaped by the vitality of our landscapes, the resilience of our communities, and the fairness of our institutions. Today, necessity calls not for invention in isolation, but for **collective** reimagining. In 2024 GALLOP stood at a defining moment—one where it can help catalyse a policy pathway and vision that aligns ecological integrity with social justice and long-term economic resilience. While we have excellent guidelines for adaption on all these, countries will not adapt to these for technical compliance alone, but for collective reasons of sustainable economic growth, development and **long-term wellness all around**.

This work is grounded in collaboration over past decades with a global community of institutions, government, researchers, practitioners, and policymakers—including EcoAgriculture Partners; Columbia and Cornell Universities; the 1000 Landscapes for 1 Billion People Initiative; UN agencies: in India IIT Bombay; IISc Bengaluru; GIPE, Medius Earth; ADATS; FCN; SEVA Mandir; BAIF, Common Ground and the global carbon markets. Across contexts and continents, a shared insight has emerged: meaningful change happens when systems are addressed where they intersect, not where they are administratively divided.

In a big way, at the centre of this insight could lie holistic Integrated Landscape Management ([ILM](#)) with whole of society involvement. ILM reframes landscapes as the primary arenas where economic growth can balance with natural resources, food systems, water security, livelihoods, climate action, and biodiversity must be advanced together. When communities, governments, and markets align around this shared geography, landscapes become engines of GDP growth, managing natural resources, regeneration—restoring ecosystems, strengthening local economies, and rebuilding trust between people and institutions.

Yet this transformation will not occur by default. It requires a **deliberate, just green transition of the land sector**, planned across regions and time horizons, and embedded within national policy and investment frameworks. Such a transition can unlock wider change—enabling energy, industry, and infrastructure systems to green themselves in ways that are socially grounded and politically durable.

This publication is therefore more than an invitation to reflect; it is a **call to act**. It calls on governments to adopt ILM as a national discipline, on institutions to break free from silos, on financiers to align capital with long-term landscape outcomes, for private capital and CSR to engage and on communities to lead the stewardship of the places they call home. The choices made now—about land, livelihoods, and governance will shape the credibility of our net-zero ambitions and the legacy we leave to future generations.

A sincere thank you to the [Niti Aayog's 2024 G.R.O.W. Report](#), for indicating an entry point to take this forward for a **Ujjwalit Bharat vision**. It highlights the top states with the highest area of wastelands suitable for Agri-Horti-Forestry-AHF are Rajasthan, Maharashtra, Madhya Pradesh, Andhra Pradesh, Gujarat, Uttar Pradesh, Telangana, Karnataka, Jharkhand, and Odisha, collectively accounting for 78% of the 35.95 Mha.

The path forward is clear. What remains to be seen is the collective will to walk it—together, to regenerate landscapes at a scale the moment demands for betterment of whole-of-society and for economy via ILM!

Executive Summary

Why should a country deploy ILM at national and regional scales?

Countries today face a convergence of challenges, a polycrisis—reduced economic growth, climate change, land degradation, water stress, rural distress, biodiversity loss, and fragmented development delivery. These challenges are **interconnected on the ground**, yet at most places public policy and investments continue to operate in silos. As a result, outcomes remain suboptimal despite significant expenditure.

Holistic **ILM** offers a proven, place-based discipline to address this gap. It provides a framework to **plan, finance, and deliver development and climate action at the scale where natural, social, and economic systems actually interact—the landscape**.

Why does ILM matter nationally?

Builds Resilient Local Economies - By integrating livelihoods, ecosystem restoration, and value chains, ILM mobilizes **natural, social, and financial capital together**, creating sustainable rural growth in a bottom-up manner and reducing long-term fiscal stress.

Landscapes Are the Real Unit of Delivery - Climate mitigation, adaptation, food security, water management, livelihoods, and biodiversity outcomes all materialize at the landscape level—not at sectoral or administrative boundaries. ILM aligns policy intent with on-ground reality.

Improves Efficiency of Public Spending - ILM enables convergence of existing schemes and investments in the same geography, reducing duplication and leakages while improving returns on public expenditure—without requiring new programs or budgets.

Accelerates Climate and Development Commitments - NDCs, [SDGs via better landscapes](#) (UNEP), and biodiversity targets depend heavily on land-use outcomes. ILM provides a coherent delivery architecture to translate international commitments into measurable domestic action.

Enables Whole-of-Society Action - ILM provides a neutral platform where governments, communities, private sector, civil society, and financiers can align around shared landscape outcomes—reducing conflict and improving coordination.

Strengthens Governance Without New Bureaucracy - When deployed as a discipline rather than a program, ILM works through existing institutions—national policy bodies, state planning departments, and district administrations—enhancing governance capacity instead of adding layers. Climate and land risks are rising faster than institutional adaptation; public finance constraints demand better outcomes per rupee spent; Private and impact capital is seeking credible, scalable platforms; Global experience shows ILM works—but only when adopted systemically.

ILM is not an environmental add-on—it is a national delivery discipline towards sustainable economic growth and development. Countries that adopt ILM at scale will be better positioned to meet climate goals, unlock rural prosperity, improve governance effectiveness, and future-proof development pathways.

➡ **Key Message** - Deploying ILM nationally is no longer optional once committed to Net Zero; it is **foundational to achieve sustainable, inclusive, resilient economy and growth!**

I. A preamble to a Green and Just Transition

A country's journey to **net-zero** (growth,economy) is not a single transition—it is a **portfolio of interlinked green transitions** that must move together. If anyone lags, the whole system underperforms. Below is a **policy-grade map of the major green transitions**, written for national planners and decision-makers.

The Core Green Transitions Toward Net Zero

1. Energy Transition (Foundation) - From Fossil fuels **to** renewable, low-carbon energy systems, energy is the largest emissions source and the backbone for all other transitions. It includes:

- Power generation (solar, wind, hydro, nuclear where relevant)
- Grid modernization, storage, flexibility
- Energy efficiency across sectors
- Clean cooking and heating

2. Mobility & Transport Transition - From ICE-based, oil-dependent transport **to** electrified, efficient, and modal-shift systems. This sector has rapidly growing emissions and oil import dependence. It includes:

- EVs and charging infrastructure
- Public transport, rail, non-motorized transport
- Clean fuels for aviation and shipping (SAF, green hydrogen)

3. Industrial Transition - From carbon-intensive production **to** low-carbon, circular, and efficient industry, the hard-to-abate sectors define whether net zero is achievable. It includes:

- Green steel, cement, chemicals
- Electrification and hydrogen
- Carbon capture where unavoidable
- Material efficiency and recycling

4. Built Environment Transition - From inefficient, high-emissions buildings **to** energy-efficient, climate-resilient built stock, long-lived assets lock in emissions for decades. It includes:

- Net-zero buildings
- Retrofitting existing stock
- Cooling efficiency and urban heat management

5. Land, Agriculture & Food Systems Transition (Often underestimated) - From degrading, emissions-intensive land use **to** regenerative, climate-positive landscapes, land is both a **major emissions source and, along with seascapes, the largest carbon sink**. Solar, wind, EV, energy storage, with all others above need advanced land use and tenure planning, making ILM a fundamental need! Primarily it includes:

- Sustainable (regenerative) agriculture
- Landscapes and ecosystem restoration for economic gain (via agri-horti-forestry)
- Soil carbon, water stewardship
- Climate-resilient livelihoods

➔ **Key Message:** This is where ILM becomes essential. It helps all the other downstream transitions as a direct consequence as a result of whole-of-society involvement and an accelerator to NetZero.

6. Nature & Biodiversity Transition - **From** extraction and fragmentation **to** conservation, restoration, and nature-based solutions. Nature underpins climate resilience, water security, and food systems. It includes:

- Protecting and restoring ecosystems
- Biodiversity-positive infrastructure
- Nature-based adaptation

7. Waste & Circular Economy Transition - **From** linear “take–make–waste” **to** circular material flows. It reduces emissions, resource use, and pollution simultaneously. It includes:

- Recycling and reuse
- Organic waste management
- Industrial symbiosis

8. Financial System Transition - **From** carbon-blind capital allocation **to** climate-aligned finance. Capital must flow toward net-zero outcomes at scale. It includes:

- Green finance taxonomies
- Blended finance and risk de-risking
- Carbon markets and outcome-based payments

9. Governance & Institutional Transition - **From** siloed policymaking **to** integrated, place-based delivery. Net zero fails without institutional reform. It includes:

- Whole-of-government coordination
- Sub-national and local empowerment
- Robust MRV and data systems

10. Social & Just Transition - **From** unequal transition impacts **to** inclusive, fair transformation. Political durability of net zero depends on social legitimacy. It includes: workforce reskilling, protecting vulnerable communities, and participatory decision-making.

How These Transitions Interlock -

- Energy enables industry, mobility, and buildings
- Landscapes connect climate, food, water, and livelihoods – sensitize and involve people for impact
- Finance and governance determine speed and scale
- Social inclusion determines political feasibility

No single ministry can deliver net-zero alone – hence the national (federal) planning commissions need to structure a just and green transition approach. Net-zero is not a sectoral target—it is a **National Transformation Mission!!**

Countries that succeed: Treat green transitions as **a coordinated system, use landscapes and regions as delivery platforms, and align policy, finance, and institutions around shared outcomes**. This is why countries ([Costa Rica](#), [United Kingdom](#)) are now embedding ILM and whole-of-society governance as central pillars of their net-zero strategies – thus making the transition of their land sector a key goal for reasons of **sustainable economic development**.

II. Background

What does a green transition entail for the Landscape Sector?

A **Landscape equates to land, water, food systems, forests, etc.** The **Green Transition of the Landscape Sector** refers to the **systemic shift in how land, water, agriculture, forests, and ecosystems are managed**—moving away from extractive, siloed, and short-term practices toward **integrated, regenerative, and climate-resilient landscape systems** that simultaneously deliver environmental, social, and economic outcomes.

In essence, it is the application of a **green transition lens**—already familiar in energy and industry—to **landscapes as productive economic assets (systems)**.

What it means in practice?

The green transition of the landscape sector involves:

- 1. From sectoral to integrated management** - Replacing fragmented approaches (agriculture, agri-horti-water, forestry, and biodiversity treated separately) with holistic **ILM** that aligns land use, livelihoods, conservation, and climate goals within a defined geography.
- 2. From degradation to regeneration** - Shifting from land degradation and resource depletion to **ecosystem restoration**, including soil health, water security, biodiversity recovery, and carbon sequestration.
- 3. From subsidy dependence to economic value creation** - Transforming landscapes into **viable green economic assets (systems)** that generate:
 - Sustainable livelihoods
 - Climate and nature finance flows
 - Long-term returns on natural, social, and financial capital
- 4. From top-down delivery to community ownership** - Empowering local communities as **co-owners and stewards** of landscapes, supported by enabling institutions, policy frameworks, and finance.

Key pillars of the transition

- **Economic value creation:** Regenerative landscapes are at the core of a bottom-up economic revival
- **Inclusive livelihoods:** Green jobs, rural resilience, and equitable value chains
- **Nature-positive outcomes:** Biodiversity protection and ecosystem services embedded into sustainable development
- **Climate alignment:** Landscapes as engines for NDC delivery, adaptation, and mitigation
- **Institutional reform:** New landscape-level governance, facilitation bodies, and coordination mechanisms
- **Finance at scale:** Blended finance, risk de-risking, and private capital aligned to landscape outcomes

Why does it matter?

To quote the [Dasgupta Review](#) – ‘*An economy is embedded in the biosphere and is not external to it*’! Hence landscapes (land, water, food systems, forests) are at the heart of ensuring an economy’s sustainable growth!



Further the review emphasizes- ‘*Technological advances are taken in contemporary conceptions of economic growth to serve as the engine of economic growth. But those advances require investment in research and development. The conceptions carry with them the belief that even when GDP growth propels economies to higher and higher standards of living, further technological advances will require vanishing quantities of Nature’s goods and services. The underlying assumption is that humanity will in the long run be able to break free of the biosphere. It is imagined that we are external to Nature. The Review develops the economics of biodiversity on an understanding that humanity is embedded in Nature. That viewpoint can be shown to imply that the human economy is bounded. The Review (Chapters 4 and 4*) appeals to ecological principles to argue that the efficiency with which the biosphere’s goods and services can be transformed into our final goods and services will prove to be bounded no matter how ingenious we happen to be. We have to acknowledge that, if we are to reverse the Impact Inequality.*

For full details on the Dasgupta Review please visit the UK Government’s treasury website at <https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review>.

Further, the *Stockholm Resilience Institute* illustrates this with their SDG ‘wedding cake’ (Figure 1).

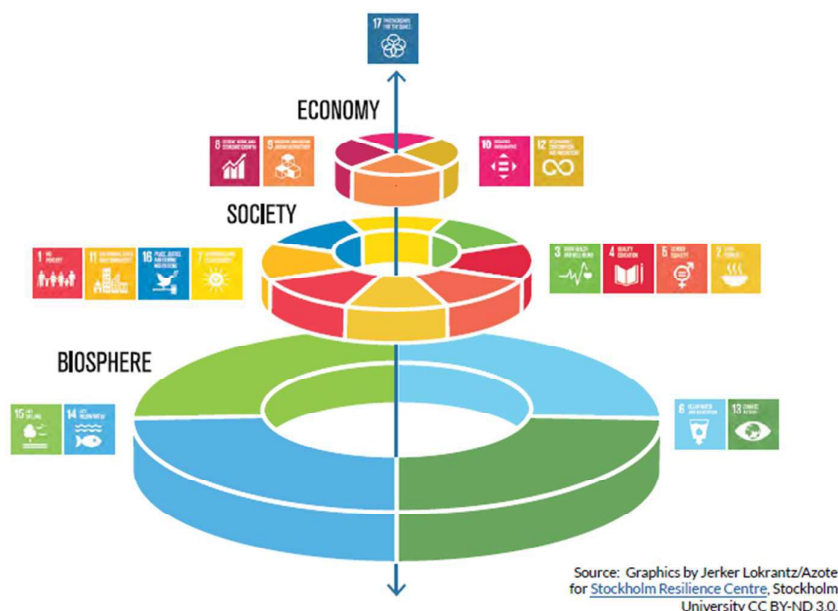


Figure 1. Integrating the Sustainable Development Goals: A healthy biosphere sustains a healthy society

The SDG ‘Wedding cake’ shows the **biosphere as the foundation of economies and societies** and as the basis for **all SDGs**. Such a conceptualization adopts an integrated view of social, economic, and ecological development. (Source: Azote Images for SRC, Stockholm University)

Since landscapes are the foundation for the biosphere and sit at the intersection of **climate, food, water, biodiversity, and livelihoods**. Without transitioning this sector:

- Rural economies will remain fragile
- Public finance alone will be insufficient
- Climate targets will not be met
- Biodiversity loss will accelerate

Key Message - The green transition of the landscape sector refers to the **shift toward managing landscapes as integrated, regenerative economic systems** that deliver climate action, nature recovery, and inclusive growth—enabled by coherent policy vision, strong institutions, innovative finance, and community ownership. **This transition** also catalyses progress across related systems, waste and circular economy, financial systems, governance and institutional frameworks, and protection of nature and biodiversity – thereby supporting a more equitable, socially just, and sustainable transition overall.

➔ **Recommended Reading:** Sethi, Bhushan H. and Sara J. Scherr 2025. *Thriving and Sustainable Economies through Integrated Landscape Strategies A Vision for Public Policymakers*.
- GALLOP Initiative and 1000 Landscapes for 1 Billion People.