



Faculty of Design

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The Silent Crisis: Unravelling the complexities of biodiversity loss

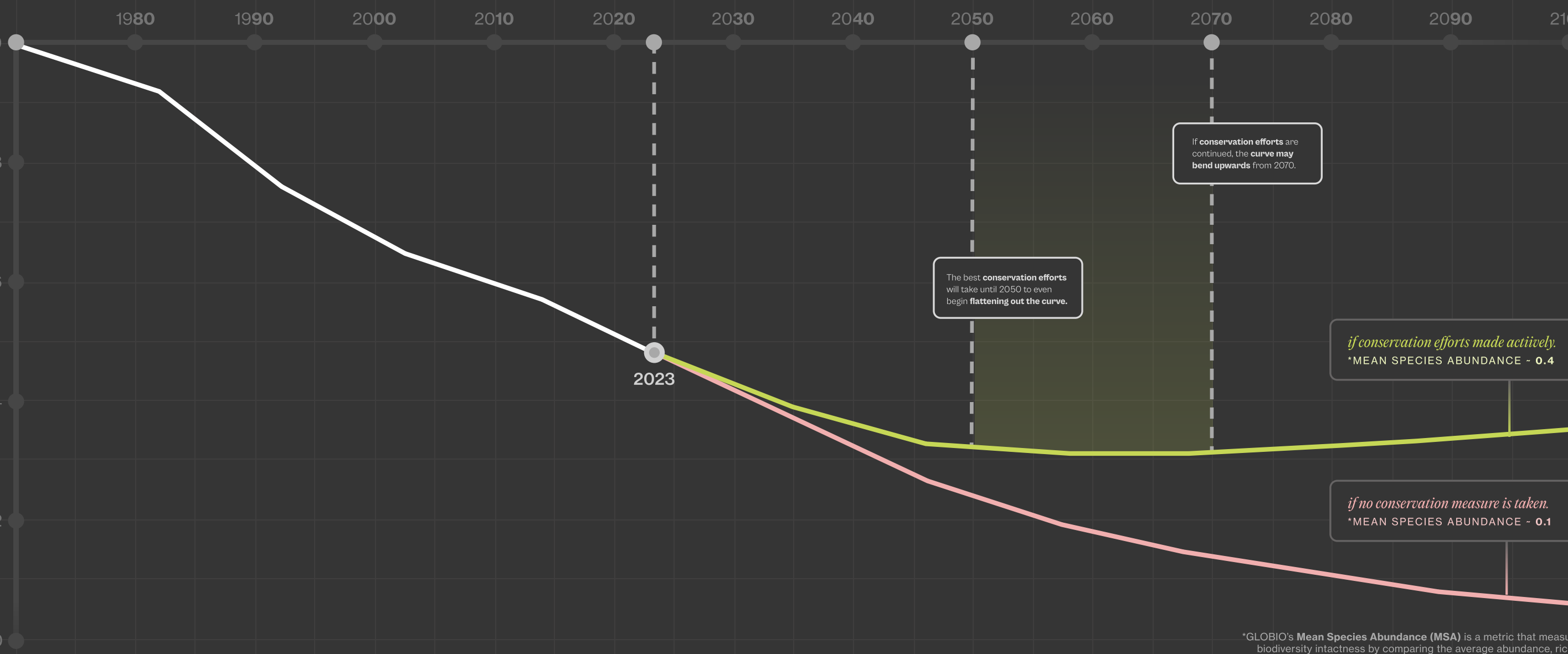
Singh, Ankita, Balachandran, Ajinkya, Khanna, Geetanjali, Kauntey, Harsh, Chandrikapure, Himanshu, Sipani, Preksha and Dave, Rucha

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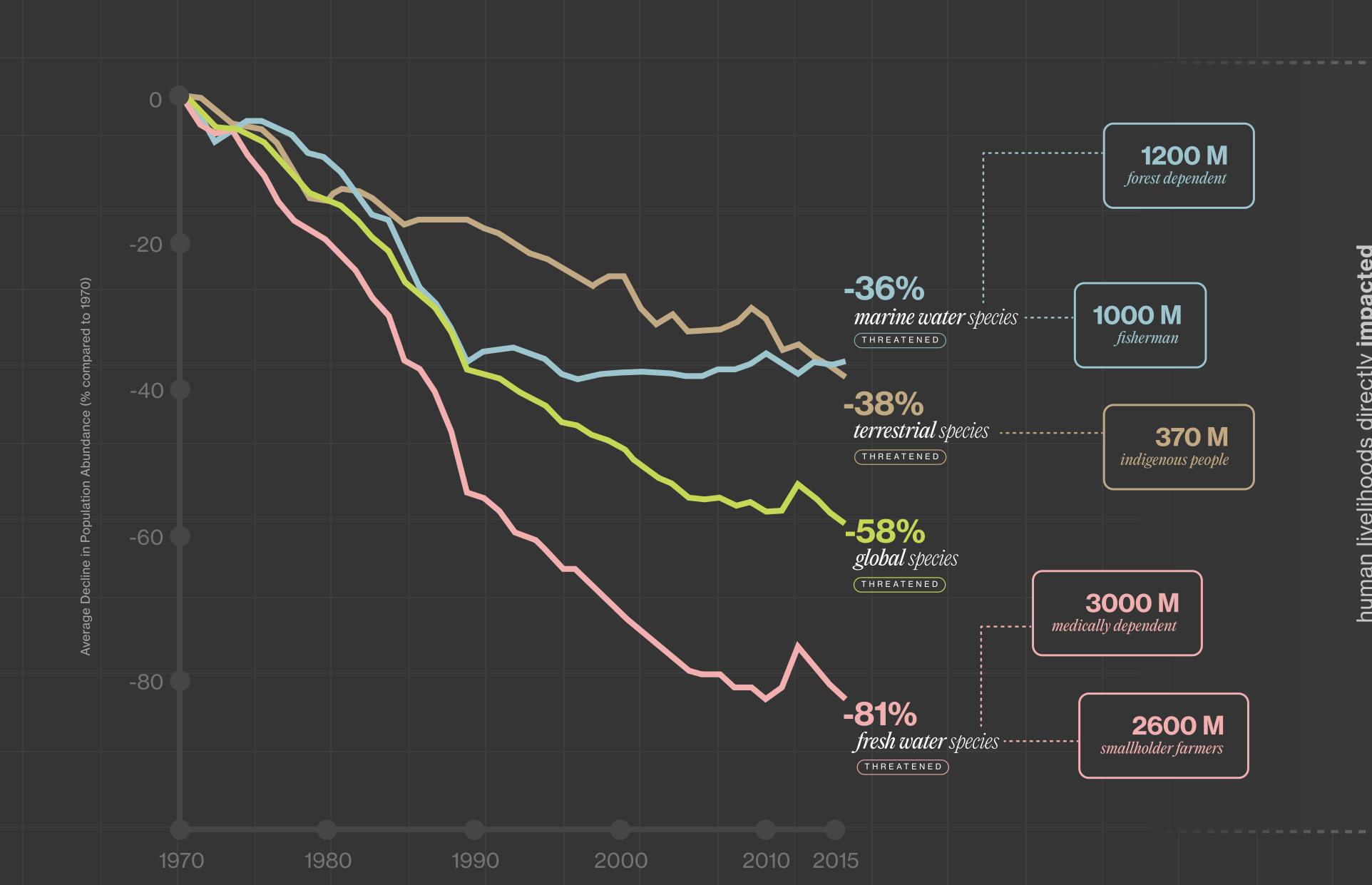
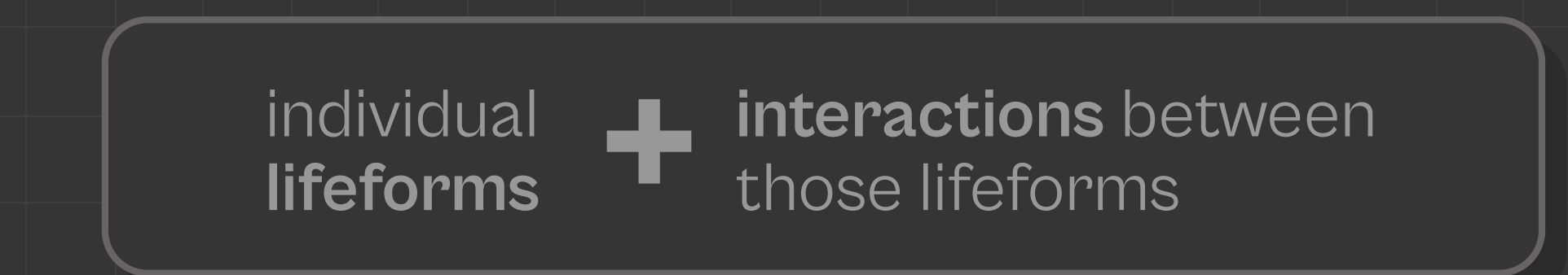
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what is *biodiversity*?

A variety of living organisms, their genetic makeup, and the intricate ecosystems they inhabit.

A web of interconnections, where every organism, plays a vital role in maintaining the delicate **balance of ecosystems**, fuelling the **resilience, adaptability, and stability** of our planet and **endowing us** with the precious ecosystem services upon which human societies and our very existence depend.

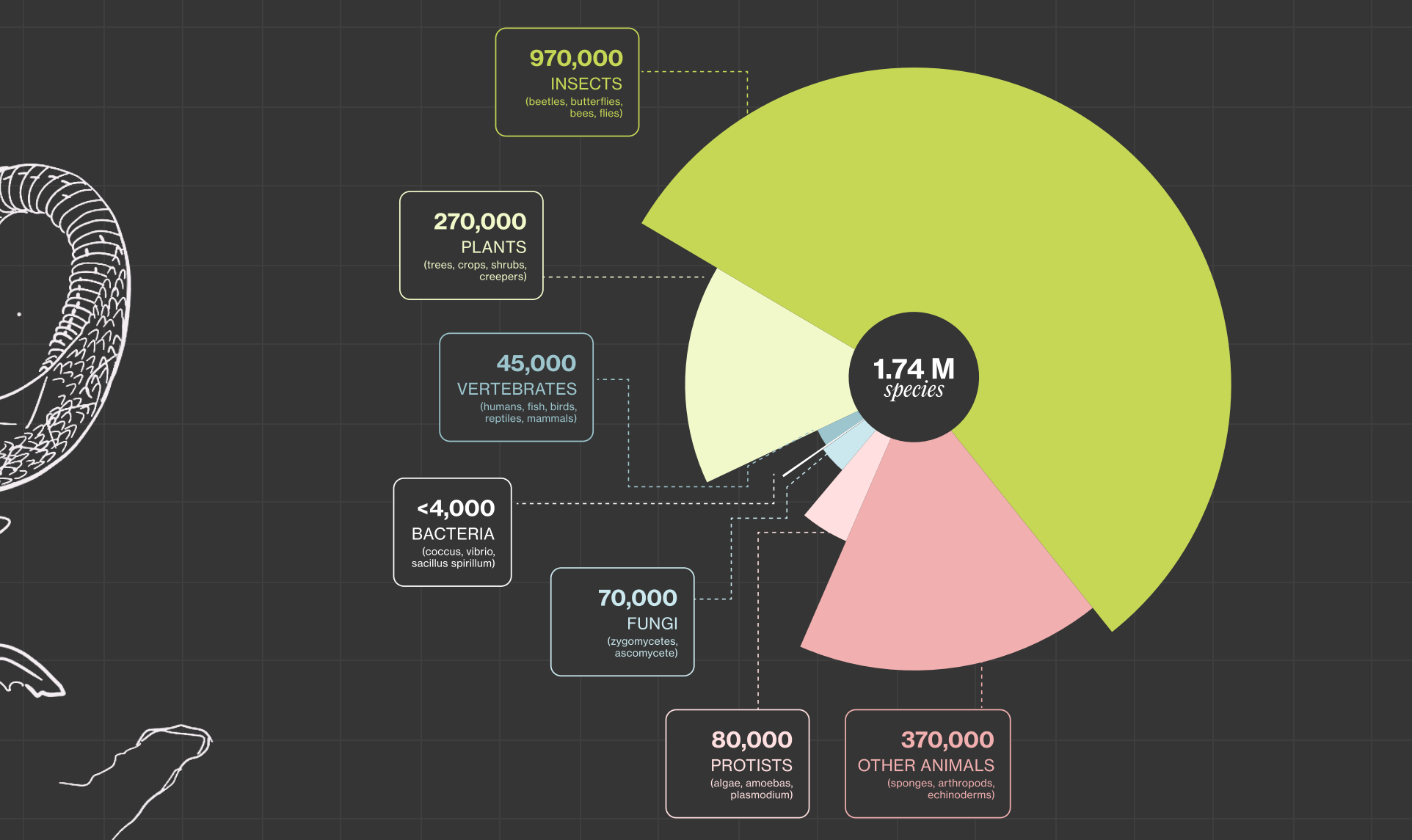
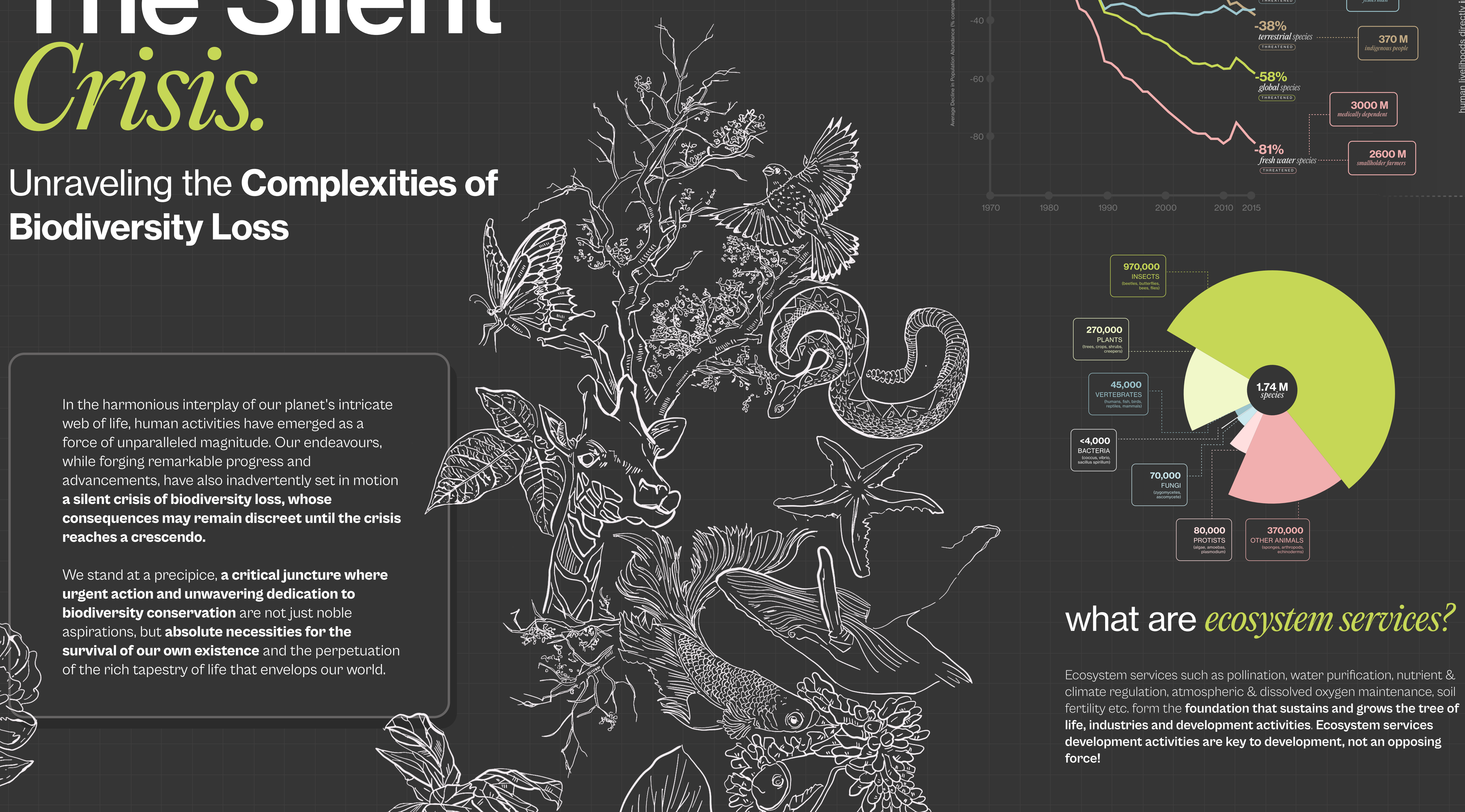


The Silent Crisis.

Unraveling the Complexities of Biodiversity Loss

In the harmonious interplay of our planet's intricate web of life, human activities have emerged as a force of unparalleled magnitude. Our endeavours, while forging remarkable progress and advancements, have also inadvertently set in motion a **silent crisis of biodiversity loss**, whose consequences may remain discreet until the crisis reaches a crescendo.

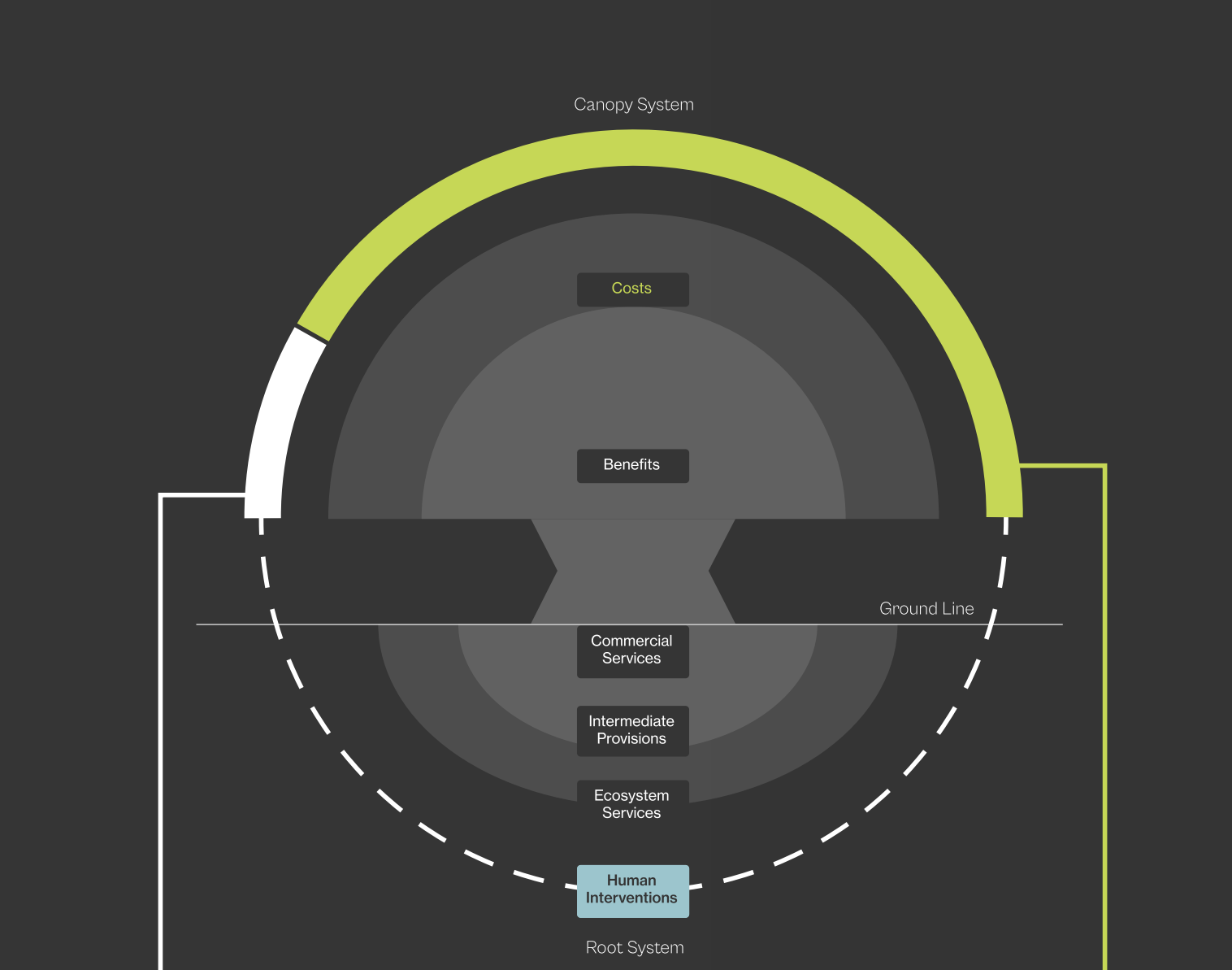
We stand at a precipice, a **critical juncture** where **urgent action and unwavering dedication to biodiversity conservation** are not just noble aspirations, but **absolute necessities** for the **survival of our own existence** and the perpetuation of the rich tapestry of life that envelops our world.



what are *ecosystem services*?

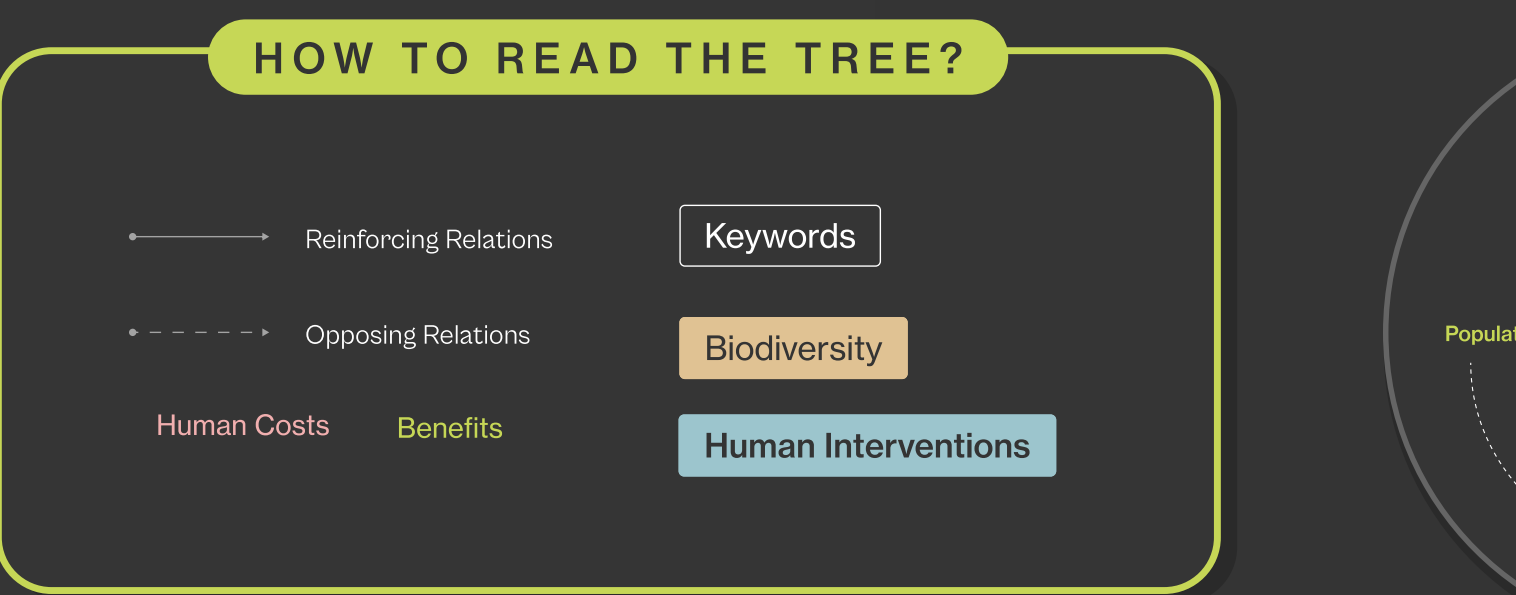
Ecosystem services such as pollination, water purification, nutrient & climate regulation, atmospheric & dissolved oxygen maintenance, soil fertility etc. form the **foundation** that sustains and grows the **tree of life, industries and development activities**. Ecosystem services development activities are key to development, not an opposing force!

COST OF NEGLECTING

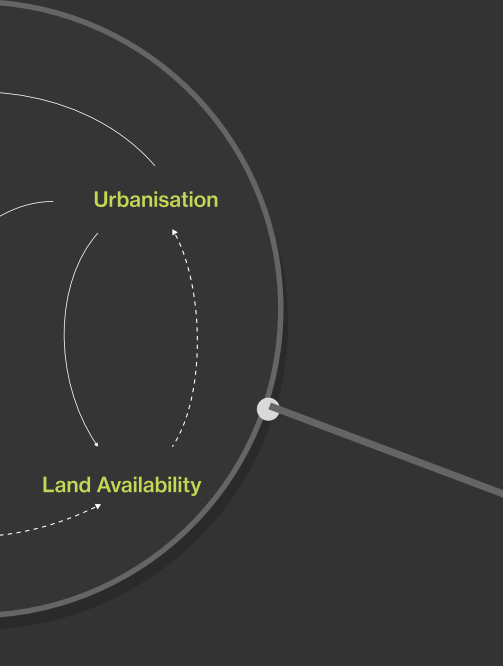


Obvious costs
Until recently arguments for biodiversity conservation focused on ecological costs like uniqueness, rarity, and extinction threats. However, it is crucial to emphasize how biodiversity sustains human existence and enhances quality of life. **The question of the societal costs of neglecting biodiversity and its loss has become increasingly important.**

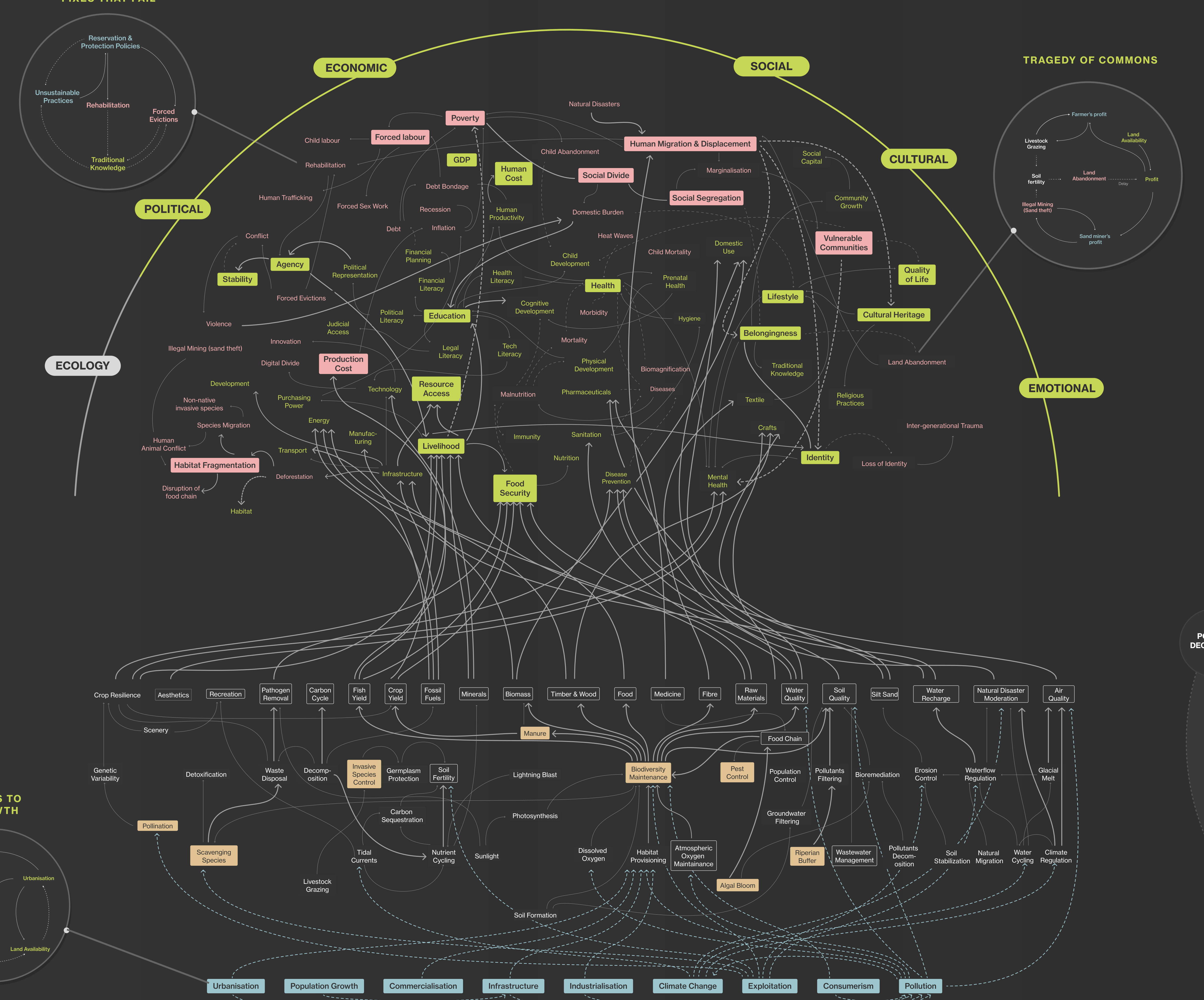
Unseen costs
The analysis reveals that the **true cost of biodiversity loss extends beyond the ecological realm, encompassing political, economic, social, cultural, and emotional dimensions**. Human activities regarding ecosystem services, impacting society and political stability by exacerbating social segregation, inequality, and poverty.



LIMITS TO GROWTH



The tree of *cost and care*

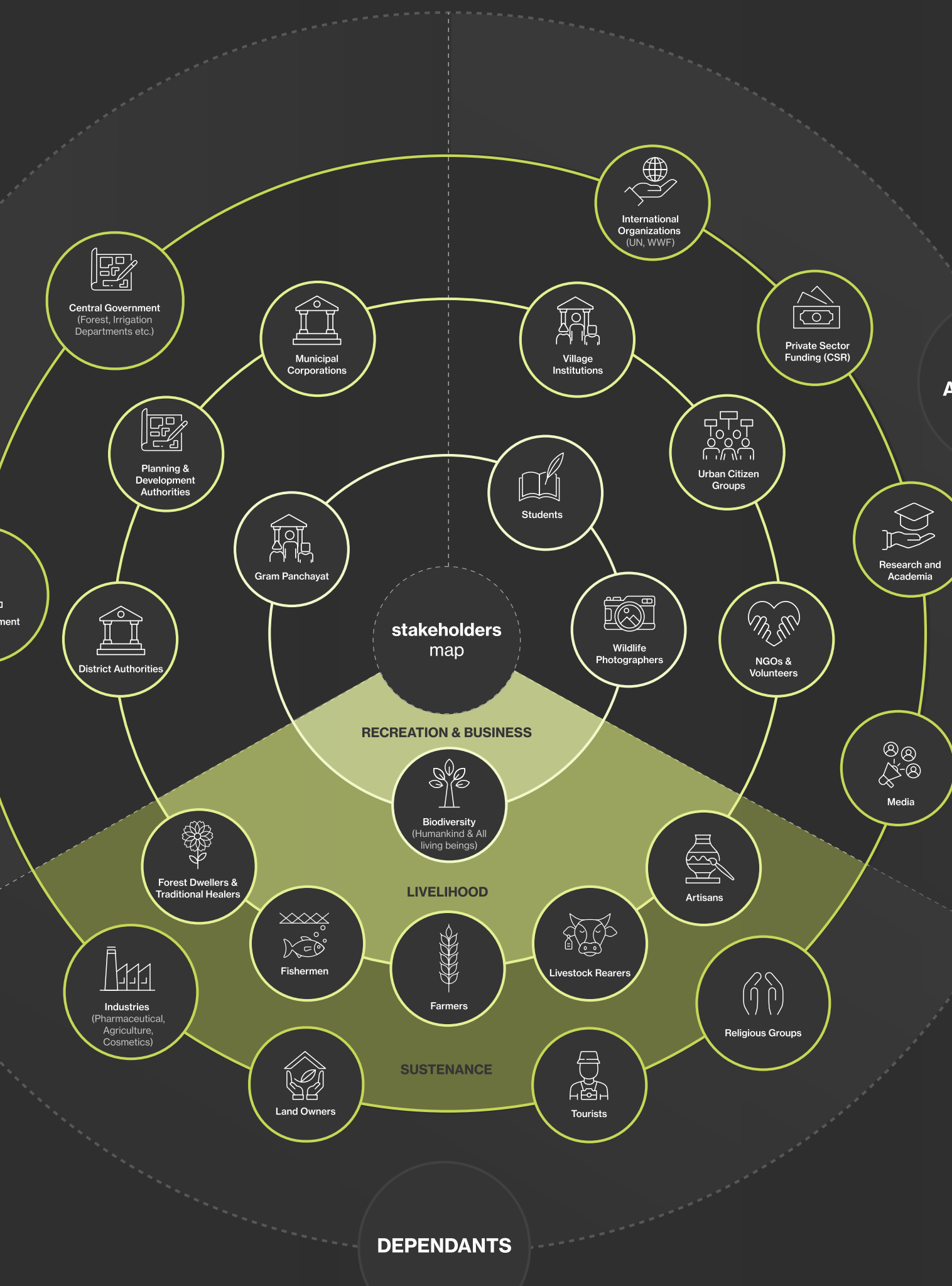


COST OF CONSERVING

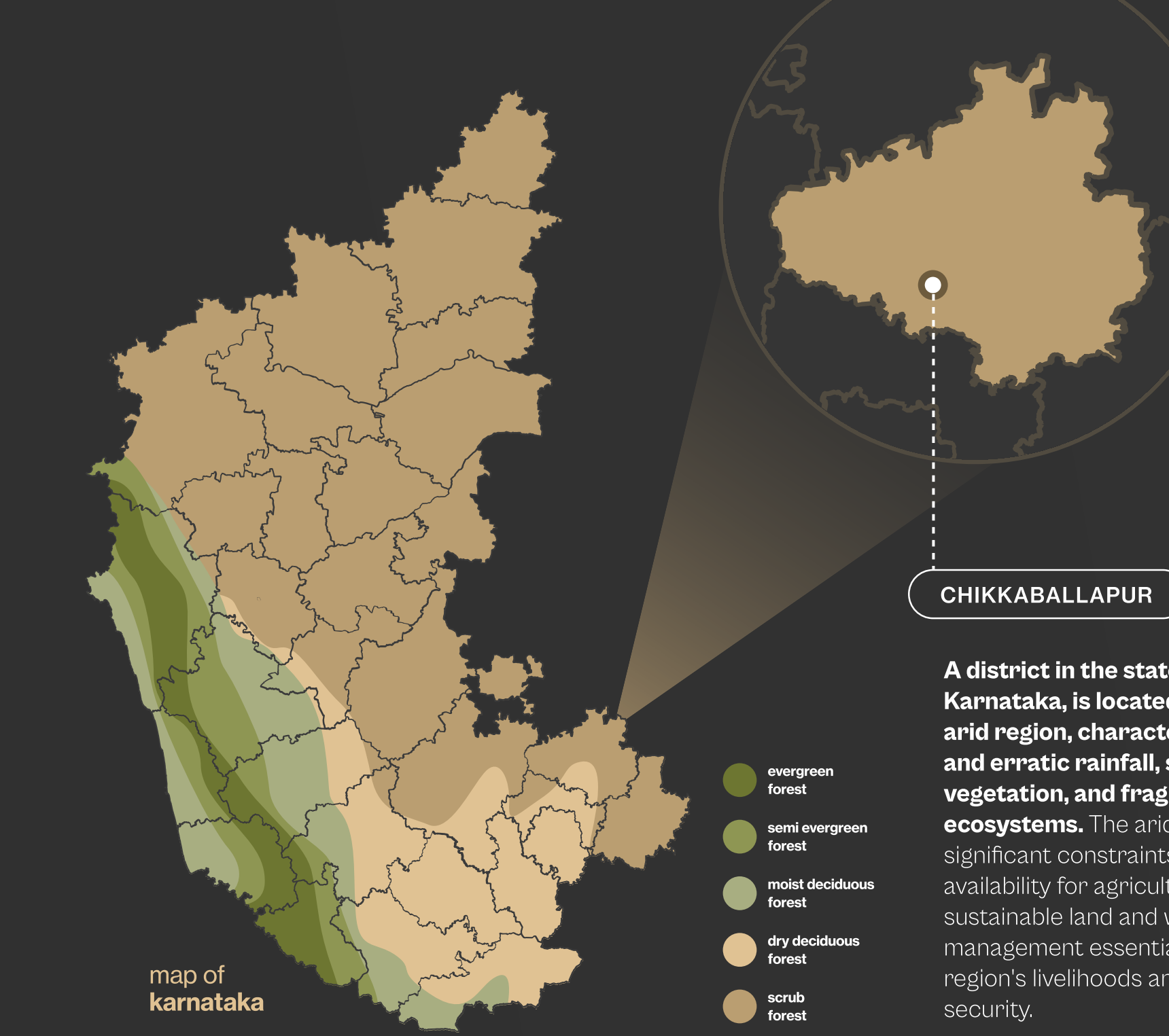
- Tangible Costs:**
- Direct Financial Costs
 - Research, monitoring & surveillance
 - Opportunity Costs
 - International co-operation & public awareness
 - On-field conservation programs & management

- Intangible Costs:**
- Long-term socio-economic benefits
 - Resilience to environmental, climate change & its impacts
 - Scientific advancement

Neglecting biodiversity has wide-ranging economic, social, and environmental repercussions, while conserving it offers long-term benefits. These benefits, such as ecosystem services, economic opportunities, and well-being, often surpass the costs of conservation. Prioritizing proactive biodiversity conservation is crucial for a sustainable future.



Managing the Commons of the Semi-Arid Regions of *Chikkaballapur*



what are *commons*?

Commons are **vital community-owned resources** that sustain millions in India, providing livelihoods, food, water, and safety nets. Despite indigenous efforts to restore and conserve these ecosystems, **mainstream policies disregard them as 'wastelands'** and deny secure tenure. Macro-level land use decisions often overlook the social, cultural, ecological, and economic values associated with Commons.



the *price* we pay for conservation



Balegowanahalli village becomes a new home for the forced migrants: Hakki Pikis tribe from Gujarat. Restoring the village's common lands enhanced their sense of belonging, livelihoods, and decision-making power. They actively contributed to land restoration and protection, thus acting as custodians of the land.

the *gains* of conservation practices



Dyrganahalli's commons, once a mined wasteland, became a thriving plantation through community efforts. Recognizing the ecosystem services it provided, the community took pride in their work and felt a deep sense of responsibility.

The Invisible Pitfalls: Overlooking Social & Cultural Dimensions in Biodiversity Policies

- Inaccessibility of commons due to lack of awareness on legal rights & secure tenure, & its privatisation.
- Inequitable Distribution of Benefits of Ecological Services and Conservation Policies
- Inadequate Stakeholder Engagement and Community Collaboration
- Displacement, Loss of Traditional Knowledge, and Livelihoods
- Limited accountability for rehabilitation losses
- Lack of Ecological Understanding and Limited Effectiveness

the path ahead:

Actionable gaps to fill for positive change in Biodiversity Conservation

- Improved Coordination and Understanding:**
Enhance interdepartmental coordination and understanding of ecological, social, cultural, political, emotional, and economic impacts to inform policy and development decisions.
- Empowerment for Secure Ownership:**
Empower rural and tribal communities through legal and financial literacy to secure tenure, foster stronger consumer-producer relationships and actively protect ecosystems for equitable impact.
- Foster Sustainable Choices & Connection to Land:**
Revive the connection to the land, promote awareness, and encourage responsible decision-making for sustainable choices. Revitalize urban commons for the well-being of communities.
- Promote Awareness of Ecological Impact:**
Raise awareness about consumption, supply chains, and ecological impact by fostering stronger consumer-producer relationships and promoting local consumption practices.
- Community Engagement in Conservation Policies:**
Involve communities in the development of holistic biodiversity conservation policies that prioritize community well-being and foster active participation in conservation efforts.