

Empowering marginalized communities in biosphere reserves through a metacoupling approach

Metacoupling offers a framework for multi stakeholder dialogue when managing biosphere reserves, and is crucial for achieving sustainable and fair outcomes – particularly when addressing equity issues.

What are biosphere reserves (BRs)?

Biosphere reserves are sites for testing interdisciplinary approaches to understanding and managing changes and interactions between social and ecological systems in multi-functional landscapes, including conflict prevention and management of biodiversity.

Biosphere reserves uphold three pillars:

- Conservation of biodiversity and cultural diversity
- Economic development that is socio-culturally and environmentally sustainable
- Logistic support, underpinning development through research, monitoring, education and training

South Africa is home to ten UNESCO biosphere reserves:

the Cape West Coast, Cape Winelands, Garden Route, Gouritz Cluster, Kogelberg, Kruger to Canyons, Magaliesberg, Marico, Vhembe, and Waterberg Biosphere Reserves. These reserves occupy a total of 115 732 km² or 9.5% of South Africa's land mass and thus make them important sites for understanding resource flows across scales and the equity implications thereof.

(For more information on Biosphere Reserves visit <https://en.unesco.org/biosphere>)

What is a metacoupling approach?

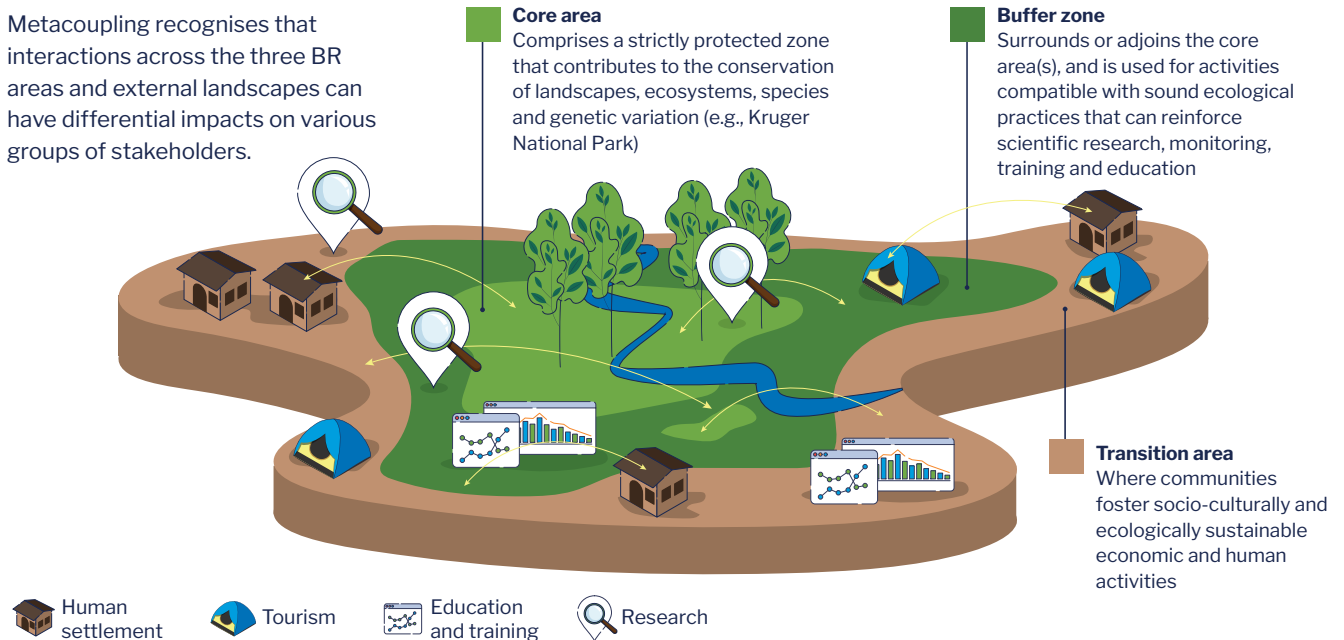
A metacoupling approach helps to systematically understand human-nature interactions (couplings), by highlighting intricate connections between multiple regions and communities. In this way, metacoupling helps to unveil the ways in which environmental changes and resource use in one area can affect vulnerable communities and ecosystems in distant locations. This can lead to a broader perspective on equity issues, making it clear that seemingly local actions have global consequences and vice versa.

➔ See SARA's Metacoupling brief for more details

Applying a metacoupling approach, according to the steps outlined in the SARA Metacoupling brief, can facilitate in **understanding important social-ecological flows and associated actors** who might mediate or be impacted by these flows. In order for BR to be

collectively governed across jurisdictional and sectoral levels, and to the benefit of both people and nature, a deeper understanding of **who wins and who loses from natural resource decisions is needed** and a metacoupling approach can help with this.

Metacoupling recognises that interactions across the three BR areas and external landscapes can have differential impacts on various groups of stakeholders.



WORKING GROUP:
Enhancing equity and resilience in an interconnected world

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Since 2022, the Southern African Resilience Academy (SARA) has supported collaborative working groups to pursue inter- or transdisciplinary synthesis research under the guiding theme of “**Building equitable resilience in Southern Africa**”. This is in line with SARA’s role as a convening and support space for researchers and practitioners working across Southern Africa to engage around pressing resilience and development challenges in the region.

SARA is an initiative of the Global Resilience Partnership (GRP), with support from the Swedish International Development Cooperation Agency (Sida). The academy’s goals are to strengthen existing expert networks, expand collaboration, and facilitate the co-production of policy and practice-relevant knowledge.

Through its links with other regional networks, SARA aims to contribute directly and meaningfully to regional and global policy discussions around resilience and development, and elevate the Southern African voice in international fora. SARA is coordinated by the Centre for Sustainability Transitions (CST) at Stellenbosch University in South Africa. It is co-funded by the South African Research Chair in Social-Ecological Systems and Resilience.

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