



## LIVEDIVERSECR: PROTECTING LIVELIHOODS AND BIODIVERSITY IN COSTA RICA

### THE CHALLENGE

Costa Rica is known as a biodiversity hotspot and has invested heavily in environmental protection. While the Central American country is internationally recognised as a world leader in sustainability, placing environmental concerns at the core of its policies, it struggles with persistent social and ecological conflicts, namely with the trade-offs between biodiversity protection and economic development. These conflicts are characterised mainly by competition between various sectors, in particular tourism and natural resources, that together guarantee the country's economic prosperity.

The four-year project aims to develop inter- and transdisciplinary approaches in research and education that address the relevant complex socio-ecological issues with a focus on the Gulf of Nicoya as a case study.

### THE APPROACH AND SCIENTIFIC COOPERATION

The Convention on Biological Diversity highlights the complexity of biodiversity protection and incorporates traditional knowledge, education, and involvement of stakeholders.

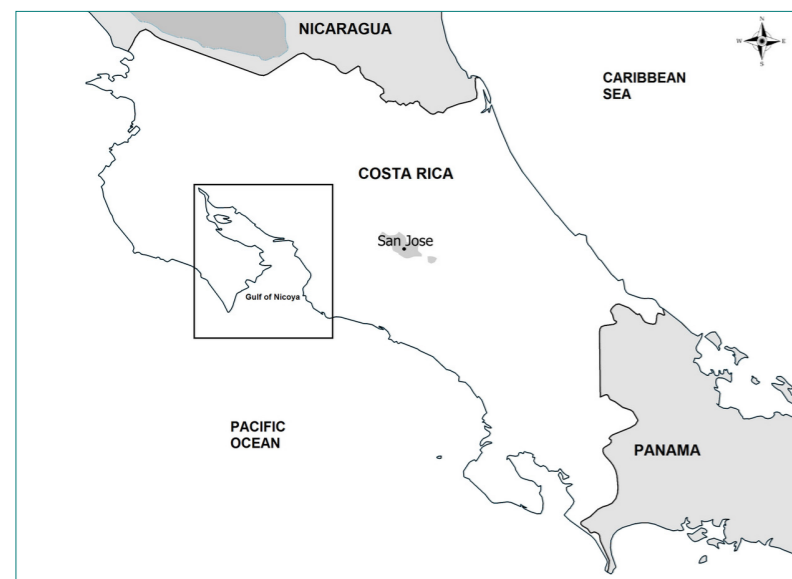
The main objectives are to enhance systemic understanding of the drivers that jeopardise biodiversity, to identify



Summer school 2022: interviews with local actors done by UTN and UOS students during field trip

key actors (public, private, local leaders) and strategies to facilitate sustainability transformations, and to promote transdisciplinary co-development of sustainable business models.

Joint inter- and transdisciplinary research and the implementation of capacity-building activities are proved to be effective. The following activities have been carried out or



Map Gulf of Nicoya

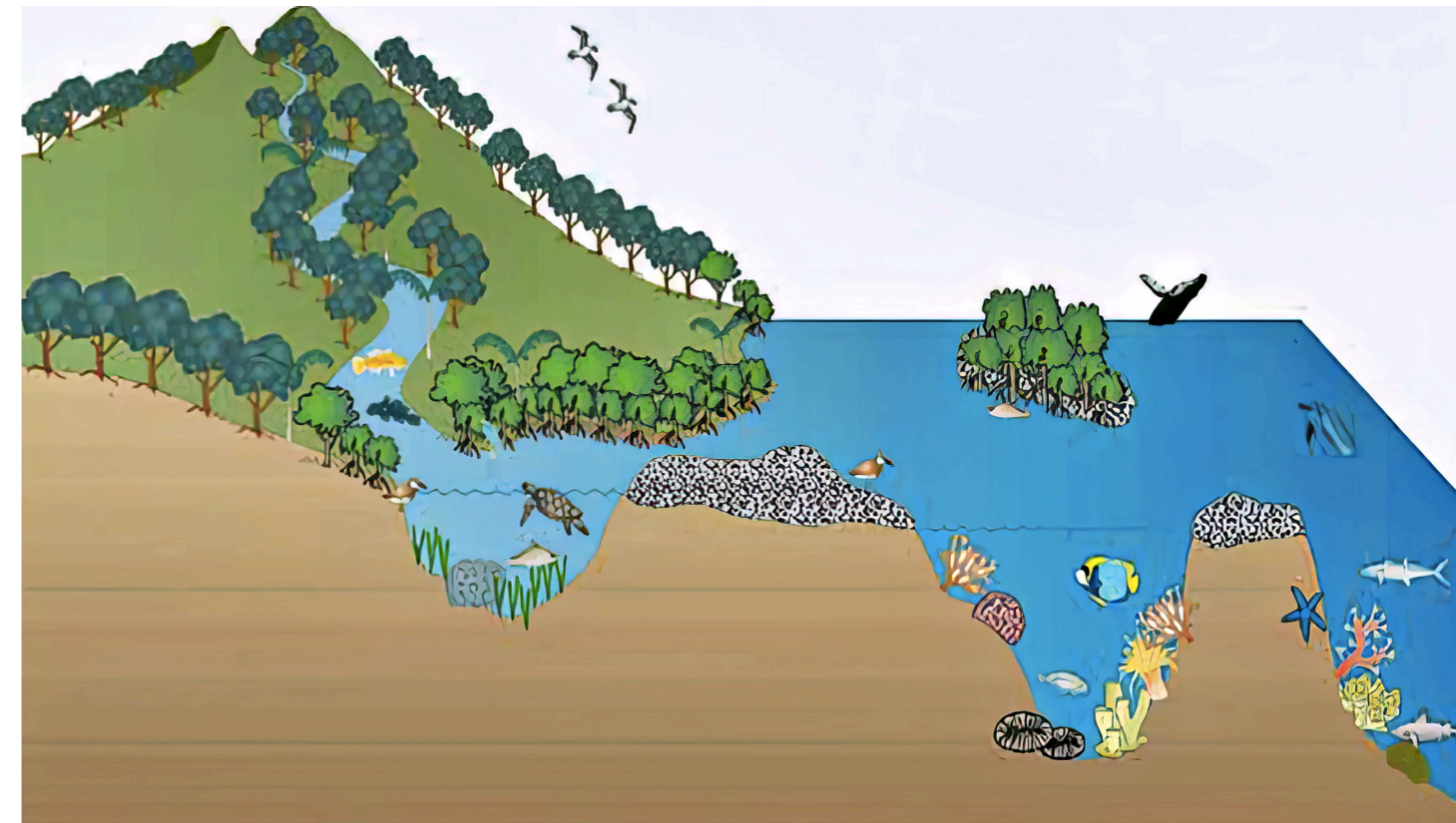


Diagram Gulf of Nicoya

are planned: online colloquia, development of teaching modules, summer schools (2022 in Costa Rica and 2024 in Germany), and exchange of students (PhD, master's, diploma, bachelor's theses).

The project draws on the cooperation between the Institute of Environmental Systems Research, Osnabrück University, and the Vice Rector of Research and Extension, Universidad Técnica Nacional.

### THE INTENDED IMPACT

The innovation of the project idea stems from the repertoire of methods and approaches used, including participatory modelling, environmental governance, human-environment-relations, qualitative interviews, and cultural studies approaches.

Developed teaching modules will be made available through appropriate platforms (in Costa Rica via COLY-PRO). Students will become familiar with, and able to apply, inter- and transdisciplinary methods. In doctoral, master's, diploma and bachelor's theses, they will work on specific case studies with selected actors and stakeholders in the fields of water and energy management, aquaculture and fisheries, conservation, and ecotourism. The studies are documented and will be scientifically evaluated and disseminated by the researchers involved. Universidad Técnica Nacional can further use the results with its non-university cooperation partners. Both universities will expand their networks with local partners in the mentioned areas.

This will ensure the sustainability of the project work.

### SUSTAINABLE DEVELOPMENT GOALS

The project aims to develop strategies to reconcile biodiversity protection and livelihoods. SDG 1 (reduce poverty), SDG 14 and 15 (here, protection of maritime and terrestrial biodiversity) are covered. Furthermore, SDG 12 (responsible consumption and production) is touched upon.



A delegation from Osnabrück University at central campus of UTN in Alajuela

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