Internship in environmental / development / conservation economics / statistics
Preferred starting date: March / April 1st, 2025
Duration: 6 months

Title: Evaluation of the impact of conservation policies in low income countries, with a particular focus on transdisciplinary projects in the South Western Indian Ocean

Keywords: Conservation, protected areas, poverty, food security, climate change, South Western Indian Ocean.

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Host institution: CEE-M (Economics), Center for Environmental Economics – Montpellier, France.

Funding project: BRIDGES (PEPR, 2024-2034) project: “Fishing and biodiversity in the Indian Ocean”, PC6 : Impact Evaluation of Marine Social-Ecological Systems Transformations in the South West Indian Ocean (SWIO), WP3, Task 6.3: Measuring and reflecting on sustainability transformations

Rationale:
The relationship between conservation policies and socioeconomic outcomes in the global south is a long-running debate in academic and policy circles. There is limited evidence of the potential complementarity or substitutability between development and environmental objectives, hindering the development of innovative policy direction aimed at harmonizing these goals.

The degree to which societies are likely to be impacted by climate change ultimately depends on social, cultural and economic adaptation. The use of multiple (terrestrial and marine) food production systems can offer a source of resilience for coastal human societies facing severe drought and land desertification. However the balance between agricultural production and fish catches remains poorly investigated. Protected areas (PAs hereafter) or locally managed resource extraction activities, defined as geographical spaces where regulations are set to limit human impacts and conserve species, can directly support food security and economic development.

Protected areas are the backbone of conservation policies in terrestrial and marine ecosystems and have shown some results globally, though there is room for improvements. Surprisingly, their impact on livelihoods is not well known, mainly due to a lack of quality data. The literature suggests however that conservation measures can improve both socio-economic and conservation outcomes when designed to account for local community needs.

On one hand, PAs restrict access or exploitation of edible/nutritive resources to local users who depend on them to sustain their livelihood. On the other hand, PAs preserve a natural capital that can bolster yields and production. Empirical evidence is thus mixed: some studies show socioeconomic benefits of living close to PAs while others report no effect or even negative impacts. The complexity of long-run interrelations/interactions between ecosystems and societies could make transdisciplinary approaches particularly accurate to address these issues.

BRIGDES aims to strengthen social and environmental resilience through ambitious collaborative research efforts and to support a future generation of researchers and stakeholders in the region. BRIGDES impacts (PC6) proposes to build on studies that inform past conservation policies or more generally co-constructed sustainable organisational change and understand how it could impact the resilience of coastal zones of the South West Indian Ocean (SWIO). The aim of the funding work package (WP3) is to look into the impact of transdisciplinary projects on conservation policies in these coastal zones. BRIGDES PC1, should provide a full overview and distribution of available datasets in the area, during the two first years of the project.

The main originalities of BRIDGES in the identification and understanding of theories of change in resilient coastal management are: (i) the holistic view of coastal socio-ecosystems and (ii) the transdisciplinary and collaborative approach to analyse such complex systems facing climate change.

Internship proposal

In collaboration with sociologists & environmental/conservation scientists the Master student will first gather information relative to transdisciplinary projects and conservation policies implemented in the SWIO. Second, she/he will collect socioeconomics and biophysical datasets that would be matched spatially with conservation policies. The dataset will be used for a counterfactual impact analysis in order to look at the impacts of resource management rules or proximity to a Protected Area on socioeconomic outcomes that will take place after the internship

Planned tasks:
- Gather informations to construct a database about research projects and conservation actions / rules in the region.
- Manipulate geolocalised national or global data (demographic, health and micro-economic data, land cover, weather...) and statistical impact analysis
- Interact with sociologists, experts of ecosystems, geographers (multidisciplinary team)
- Potentially initiate the statistical analysis to evaluate the impact of projects, actions and policies.

Desired profile of the candidate:

Master in development / environmental / agricultural economics or other relevant disciplines.
- topics: environmental economics, development economics.
- methods: statistics, econometrics, experimental economics.

Ability to handle data and econometric analysis (e.g. Stata or R), basic knowledge of impact assessment methods and GIS.

Prior experience in design and implementing micro-level socio-economic surveys, knowledge in behavioural economics and experimental economic method is a plus, kowledge of subSaharan Africa is a plus.

The internship may lead to a PhD grant, founded by BRIDGES. In that aim, willingness to engage in a PhD and ability to work in an english environment is a plus.

Monthly training allowance: 609€

To apply: Detailed CV + recommendation letter(s)
can be sent to: antoine.leblois@inrae.fr & derya.keles@inrae.fr
As soon as possible, before February 15st 2025.