

# Why a transdisciplinary case study in the Global South?

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## Background

Since the start of the programme of the ETH school board to cut emissions from air traffic, many people argue why the TdLab is offering teaching courses in the Seychelles. This brief document should serve to answer these concerns. It needs to be stressed that environmental impact considerations were from the very beginning guiding our efforts when designing and implementing this course. We were and still are convinced that such courses (but as well any other activity at ETH that require air traffic) need to be thoroughly scrutinized to establish the added-value and/or necessity of respective CO<sub>2</sub> emissions.

Our transdisciplinary case study (tdCS) in the Seychelles, and in particular the concern regarding CO<sub>2</sub> emissions has been discussed in both Unterrichtskommissionen (UKs) of the Department of Environmental Systems Science (D-USYS) – and approved. Its added-value was recognised and acknowledged which is one of their main criteria when deciding about new courses and/or financial support for such international courses. In addition, the Resourcenkommission (RK) has recently approved the request of the TdLab for a contribution to run the case study (field phase) in the Seychelles 2018 (approved in December 2017).

The tdCS is a research-oriented, project-based learning program for master's students offered by the TdLab. Students work on real-world problems and interact with actors from government/ administration, private sector and civil society. The tdCS has been organized in Switzerland successfully since 1994. In 2016, the TdLab organized the case study for the first time overseas, in the Seychelles. The Seychelles serve as a case example for the highly vulnerable group of Small Island Developing States (SIDS). The development of our teaching activities in the Seychelles followed closely the principles for transboundary research partnerships as stipulated by the Swiss Commission for Research Partnerships with Developing Countries (KFPE)<sup>1</sup>.

The tdCS is a yearly recurring course. It will take place in the Global South every second year only, alternating with courses in Switzerland.

The TdLab compensates all CO<sub>2</sub> flight emissions via myclimate projects in developing countries.

## Why a course in the Global South?

We strongly believe that many of our current grand challenges have a global component or even are global in nature. Thus, if we are interested in educating students for coping with such challenges, students need to learn how to work, both as researchers and/or practitioners, in the context of the Global South. Such skills cannot be learned here in Zurich, neither in neighbouring regions of Europe. As always in learning, experiential learning is key for developing not only knowledge and skills but as well building personalities and necessary attitudes so essential for research and/or practice in the Global South – preventing neo-colonialism is key here.

### *Specific learning objectives for the Global South*

The general learning objectives of the tdCS are understanding a case in its context, knowledge application in the real world, independence in managing research activities, use of transdisciplinary (and other) research methods and engage with stakeholders. For the case study in the Global South, the following additional learning objectives become relevant: working in intercultural teams and adapting to foreign social, economic, cultural and political settings, overall thus getting trained for research and/or practical work in the Global South.

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<sup>1</sup> See [https://naturalsciences.ch/organisations/kfpe/11\\_principles\\_7\\_questions](https://naturalsciences.ch/organisations/kfpe/11_principles_7_questions)

During field work abroad, students are exposed to completely unknown environments and contexts. Collaboration with people from another culture, differently trained and with another working culture is a challenge; the intensive exchange with a big number and variety of stakeholders on a topic where students are not yet experts is demanding; the political context and the sensitivity of the topic brings the students sometimes to their limits. All in all, students are required to work outside their disciplinary and mental comfort zone. This means that consistent and regular irritation at various levels occurs, and many things need to be unlearned. Accordingly, this requires on-going reflection and fosters critical thinking in its best way.

## **Why a course in the Seychelles?**

The Seychelles are a developing country (though no longer among the least developed countries) and thus seriously lack administrative resources and expertise. Likewise, knowledge to guide essential decisions is needed but hardly available beyond the classical consulting services by international organizations, think tanks and NGOs which are hardly adapted to local contexts. Thus, students' input, perceived by the local stakeholders as neutral and free of hidden agendas, is very valuable and highly welcomed by local decision-makers and actors.

The Seychelles have recently opened a University (UniSey) to educate future leaders in and for their country. Yet, education standards are still rather low, research is widely lacking, and exposure to international standards in methods and skills though needed. Thus, the ETH courses can offer valuable contributions to local university teaching and build the respective capacities among faculty, too. On the other hand, ETH teachers/researchers and students can learn from context specific knowledge and locally available expertise. Pairs of ETH and UniSey students allow for direct intercultural exchanges and peer to peer learning.

ETH (especially D-USYS) has long-standing collaboration with the Seychelles, mainly with a focus on nature protection, biodiversity and invasive species. The former Geobotanical Institute and the former Dean of the USYS, Peter Edwards, respectively, started collaborative activities with the Ministry of Environment in the early 1990s already. A large number of masters' students contributed to the success of this long-lasting collaboration. In addition, the TdLab (Pius Krütli, co-director) has over the last years built strong knowledge about the area and an extensive network with local actors from academia, different ministries, NGOs, private sector, and civil society (Diploma thesis in 1999; numerous trips, inter alia half a year sabbatical in 2015) while expanding the scope of activities.

Teaching activities in the Seychelles are part of the TdLab's long-term engagement which we consider key for any such teaching (and research) project that serves both sides. Being engaged over years, allows building up networks and capacity locally and achieving and monitoring impacts. The tdCS is combined with ETH master's theses and internships and local method courses to allow for close follow-up and for more in-depth studies. Results of our activities are shared locally through workshops, oral presentations, media presence, book publications and newspaper supplements.

A last point: "waste" was been jointly defined with our local partners as topic for our case studies in 2016 and 2018, thus following the KFPE principle that research should not be guided by external interests but rather by local needs. Waste is a burning issue for the Seychelles but evidently as well for many other developing countries and especially for all Small Island Developing States (SIDS). On the other hand, waste can be understood as case for many other challenges (wicked problems) in these regions, thus a perfect learning platform fostering students' (of various curricula and foci) competence to adapt their knowledge and skills to new topics.