

PhD Position in the Institutional & Behavioural Economics group at ZMT Bremen (Natural Experiments) (TVL 13/2)

The Leibniz Center for Tropical Marine Ecology GmbH (Leibniz-ZMT GmbH) in Bremen is a member of the Leibniz Association, which is supported by the German Federal and State Governments. Through its research, Leibniz-ZMT GmbH contributes to developing science-based strategies for sustainable use of tropical coastal systems (www.zmt-bremen.de).

The newly established working group "Institutional & Behavioural Economics" is looking first for an economist (Master degree or equivalent), who is interested in behavioural economics and is ready to do experiments on environmental awareness of users of coastal resources (reefs and beaches) in the Philippines. Monitoring and enforcement of sustainable behaviour is extremely costly in those ecosystems and therefore, awareness raising measures (e.g. information and infrastructure) might often be more cost-effective instruments than using monetary incentives. We want to test with the help of natural experiments the effectiveness of those instruments.

Raising environmental knowledge and awareness is a precondition for fighting further environmental degradation. Although, sometimes strong regulations are favored by conservationists in most remote settings monitoring is costly to be carried out by inefficient and understaffed agencies and regulations remain only imperfectly enforced. As a result participative measures and increased environmental awareness might be the most suitable instruments to counter some environmental problems.

Philippine coral reefs are Asia's second largest. In 2007, Reef Check, the world's largest reef conservation organization, stated that only 5% of Philippines 27,000 square kilometers of coral reef are in "excellent condition". Major threats are unsustainable fishing (cyanide, dynamite), ornamental trade (80% of world trade), coral mining, and pollution of reefs and beaches. We aim to design natural experiments that propose low-cost solutions related to one or two of these problems.

As an example a possible natural experiment might be targeted towards preventing littering in coral reefs or along a coastline. Possible solutions to remedy the littering of beaches and the sea involve increasing environmental awareness of the population (treatment A), providing small monetary incentives (treatment B) or providing the necessary infrastructure for the population (treatment C) in order not to use the ocean as a garbage bin. However, there is little or no scientific evidence on which (or a combination of which) is the most cost-effective intervention that leads to a long-term behavioral change of the population?

The most powerful statistical design to overcome selection problem is through randomized treatment assignments using a control group. A sufficient sample size would be to have at least 20 different communities/islands per treatment. For implementation and data collection we need support from local NGO or Government. The impact would be measured shortly after implementation and after one year of introduction of the different interventions (medium-term impact).

The PhD candidate will get a three years contract (TVL13/2). The start of the contract can be at the moment the suitable candidate has been found. The PhD in Economics will be done at the School of Humanities and Social Sciences at the Jacobs University Bremen, where Achim Schlüter holds a

professorship for Social Systems and Ecological Economics. We expect the ability to work in a team, good communication and writing skills in English (TOEFL test for Jacobs required), basic analytical skills in econometrics, experimental design and empirical research methods and particularly commitment for the project. First experience in working in developing countries is an advantage.

The Leibniz-ZMT GmbH is an equal opportunity employer. Disabled persons with comparable qualification receive preferential status.

Your application should include a cover letter stating your motivation and a CV and two letters of reference. Please send it as a single pdf file by e-mail to achim.schlueter@zmt-bremen.de Please don't hesitate to contact us for further information.