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“Filling gaps and removing traps
for sustainable resource management”

Barriers to Implementation of Climate Change Adaptation Measures - The Case of Madagascars' Agricultural Sector

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Abstract

With climate change being one of the main challenges of the current century, strategies responding to climate change impacts, like adaptation or mitigation, are becoming increasingly important. Especially developing countries are in need to adapt to avoid increasing vulnerability and negative effects like decreases in agricultural production and the impacts of extreme weather events. Though many adaptation projects exist, few examples of successful implementation of adaptation measures can be found in literature. The present work analysed what barriers to implementation of climate change adaptation measures can arrive and offered recommendations on how to overcome them. By applying a framework for diagnosing barriers to climate change adaptation measures, six adaptation options were analyzed. This was done for the agricultural and livestock sector of two regions in Madagascar, one of the most vulnerable countries to the impacts of climate change, with more than three-quarter of the population working in the agricultural sector. Further, seven expert interviews with employees in international organisations and development agencies in Madagascar were conducted to identify implementation processes in climate change adaptation projects. The results show that the main barriers to implementation of climate change adaptation measures in the agricultural and livestock sector in Madagascar are resource, financial and crosscutting barriers. In addition, several externalities seem to hinder successful implementation. Moreover, a certain path dependence enforced by socio-cultural factors might block the uptake of new practices. An existing dichotomy in the strategic approaches of the interviewed international organisations and development agencies seems to enforce existing barriers for adaptation. Several recommendations were proposed to resolve this operational dichotomy and path dependence. A transmission of responsibility to local stakeholders can act as prerequisite for successful long-term implementation. Participatory approaches, development-focused collaboration and a facilitating role of project organisations can support the creation of this responsibility for implementation. Lastly, the development of a common framework to support adaptation processes and reduce barriers to implementation is highly recommended.

Keywords: Adaptation, barriers to adaptation, climate change, Madagascar