



Soil protection and rehabilitation for food security

WHAT ARE THE CHALLENGES?

Soil is a valuable, non-renewable resource. Excessive and inappropriate land use leads to nutrient depletion, erosion and other forms of degradation. This dynamic is exacerbated by climate change, for example through droughts or more and more frequent heavy rainfall. **EACH YEAR, AROUND TEN MILLION HECTARES OF SOIL IS DEGRADED WORLDWIDE**, equivalent to an area approximately the size of Iceland. Land productivity and the area available for agricultural use are declining while the number of people that require food is rising. In particular, this affects smallholders in developing countries: soil degradation has a **DIRECT IMPACT ON THEIR INCOME AND FOOD SECURITY**.

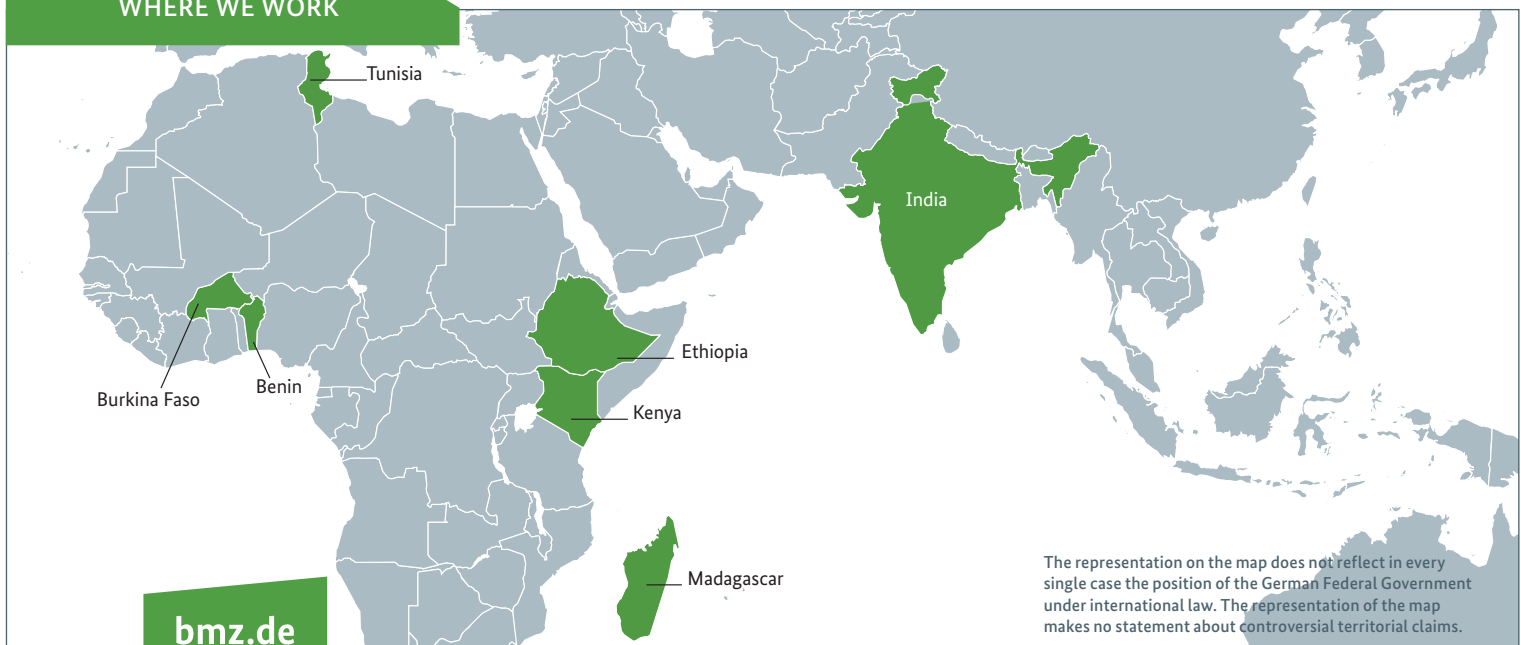
WHY IS THE SOIL DEGRADED AND NOT BETTER PROTECTED?

- The policy-making, institutional and financial capacities in the developing countries frequently are not sufficient to meet the challenges.
- There are no economic incentives to encourage sustainable soil use.
- Although best practice examples for sustainable land management exist, they are not sufficiently widespread.
- In many areas, agricultural extension services are poorly equipped and inadequately trained to disseminate their know-how on soil conservation and rehabilitation.
- At policy-making level soil protection often fails to attract the required interest due to high costs.

The programme contributes to the following sustainable development goals.



WHERE WE WORK



The representation on the map does not reflect in every single case the position of the German Federal Government under international law. The representation of the map makes no statement about controversial territorial claims.



HOW WE WORK

The programme strengthens the self-help capacities of small farmers to preserve the basis of their livelihoods. They are taught how to apply soil conservation measures through training courses that are further developed with advisory services and private companies. Local authority and government representatives are trained and receive advice on how to improve the legal and political framework for investments to boost sustainable land use. These training measures are supported by systematic transnational learning initiatives, contribution of international experience and links to expert networks.

THE OBJECTIVES FOR SOIL PROTECTION:

The programme aims to support partner countries with the broad-scale implementation of field-tested approaches for soil conservation and rehabilitation. It helps protect or rehabilitate degraded soil and increase yields of key crops by more than 30 percent on protected land. At the same time, the programme strengthens strategies and incentives for sustainable land use.



AT A GLANCE



Up to **706,000 hectares** of soil are conserved or rehabilitated. The resilience against droughts and the consequences of climate change is increased through **sustainable land use**. It therefore prevents conflicts and the **increase in yields contributes to income security**.



Soil conservation is included in the **agendas of partner countries** – they address and integrate the topic into **political strategies** or include important elements of soil conservation in **agricultural education**.



Soil conservation on a global scale: actors from the partner countries feed **lessons learned** into national and **international events and fora**.



Planned term: 2014 to 2026



The programme is running **eight projects** in **seven partner countries**.



Budget: approx. 205 Mio €



SOIL PROTECTION AND REHABILITATION: COMBINED FARMING METHODS FOR BETTER SOIL

In Kenya the programme is cooperating with local non-governmental organisations. They organise practice-oriented training courses in which farmers learn about the interrelationships between farming methods and soil health and fertility. Soil samples play a key role here. Based on soil tests, advisors and farmers can apply the best combination of adapted farming methods: to add lime, increase composting, plant more legumes, cover soils with vegetation, use different methods of ploughing or none at all, and ensure rotation of fruit crops. Trees are particularly important for sustainable farming. They increase the soil's water retention, generate key biomass that can be used to form humus, and can – depending on species – enrich the soil with valuable nitrogen. They also provide wood for cooking. Smallholders are interested in receiving advice and applying new approaches. They have seen how more fertile soils can lead to better harvests.

