

# Climate change and rural development

Climate policy engagement in the agriculture and food sectors

#### WHY IS ENGAGEMENT IMPORTANT?

- → Developing and emerging countries are already suffering from the impacts of climate change. Extreme weather events, such as droughts and floods, threaten yields and the survival of millions of people. Climate impacts jeopardize development gains already made under the 2030 Agenda.
- → Agriculture must meet the demand for food in the context of a growing world population. The slow-onset effects of climate change, such as rising temperatures and changing precipitation patterns, make this even more difficult.
- → Between 25 and 30 per cent of total GHG emissions can be attributed to the food system, including food production, land use change and agricultural supply chains. About 80 per cent of global deforestation is caused by the conversion of forests into agricultural land.
- → The Paris climate agreement is to be implemented through Nationally Determined Contributions (NDCs) that set mitigation and adaptation targets. Almost all adaptation targets adopted by developing countries include agriculture.

## **OBJECTIVES AND SOLUTIONS**

→ For the Federal Ministry for Economic Cooperation and Development (BMZ), the Sustainable Development Goals (SDGs) and the UN conventions on climate change (UNFCCC), combating desertification (UNCCD) and biodiversity conservation (CBD) are important reference frameworks

- → The BMZ promotes resilience and food security through systemic approaches to low-emission and climate-resilient agriculture and supports partner countries by means of:
  - → comprehensive risk management that combines measures to reduce disaster and climate risks, such as climate risk and agricultural insurance, climate risk analysis, and early warning systems;
  - → improved access to agroecological practices, expansion of climate-informed digital agricultural extension services, access to markets, finance, and social safety nets.
- → Agroecological approaches optimize farm cycles and promote synergies in resource use. Efficiency gains and diversification of agriculture contribute to adaptation and climate protection. The longterm goal is a socially just and ecologically sustainable transformation of agricultural and food systems.
- → Soil protection and rehabilitation of degraded soils enrich organic material in the soil. This increases fertility and water storage capacity and stores CO<sub>2</sub>. This contributes both to climate protection and increased resilience.
- → The application of water-saving cultivation systems and integrated water resource management helps agricultural value chains adapt to increasing water scarcity. Digital solutions improve the reach of agricultural extension services.
- → Spatial planning as part of a landscape approach combines natural resource use with climate and environmental protection.

### SCOPE OF THE BMZ'S CONTRIBUTION

- → Between 2014 and 2018, the BMZ supported around 190 projects on climate and agriculture with funding of approximately 1.3 billion euros. Many of these projects simultaneously benefit climate protection and adaptation.
- → Adaptation measures in African agriculture are a central focus.

#### MULTILATERAL ENGAGEMENT

- → Through the NDC Partnership (NDC-P), Germany is supporting NDC implementation in partner countries. A working group coordinated by the Food and Agriculture Organization of the United Nations (FAO) and financially supported by the BMZ is focusing specifically on the agricultural sector.
- → As member of the Koronivia Joint Work on Agriculture (KJWA), Germany is strengthening knowledge exchange and the development of lowemission and climate-resilient food systems within the framework of the UNFCCC.
- → In the Global Commission on Adaptation (GCA), the BMZ has been involved in the "Food and Agriculture" action track and has committed to make 60 million people in rural areas more climate secure by 2030.
- → The BMZ has committed to providing 670 million euros to support various risk financing and insurance solutions as envisaged under the InsuResilience Global Partnership. Insurance products for the agricultural sector make an important contribution to cushioning financial losses caused by crop failures.
- → The BMZ is contributing 33 million euros to the Adaptation for Smallholder Agriculture Programme (ASAP) to ensure that climate is given greater consideration in the activities of the International Fund for Agricultural Development (IFAD).

## **SELECTED PROJECT EXAMPLES**

- → The BMZ supports bilateral, regional and global projects at the nexus of climate and agriculture. The BMZ special initiative ONE WORLD No Hunger alone supports adaptation and mitigation activities with funding of around 130 million euros annually. Selected BMZ projects include:
  - → As part of the BMZ special initiative ONE WORLD – No Hunger, KfW has expanded the eco.business Fund to sub-Saharan Africa. It promotes the transformation of existing economic systems (agriculture, forestry, fisheries, aquaculture and tourism) in line with ecological principles. Funding and technical assistance to local financial institutions and the private sector create incentives for sustainable business and consumption practices.
  - → The Global Project Soil Protection and Rehabilitation for Food Security promotes the restoration of fertility to degraded soils in seven countries. Soil protection measures, adapted crop rotations and efficient water use enable sustainable land management and increase resilience to climate change.
  - → The Programme for Climate-Smart Livestock Systems develops promising climate-resilient and low-emission approaches together with livestock farmers and tests them in practice. These include improvements in the cultivation of fodder crops, in fodder preparation, and in manure and pasture management.
  - → The Programme for Adapting Agricultural Value Chains to Climate Change supports smallholder farmers in Madagascar with tailored weather information and insurance products, as well as structural measures such as the training of cooperatives to improve their economic situation.

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