

Inputs provided by: German Development Cooperation (German Climate Finance provided by the Federal Ministry of Economic Cooperation and Development (BMZ) and the Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU))

1. General description of mandates and objective(s) of your organization / associated network with institutional structure

Germany, being one of the largest donors for climate action in developing countries and emerging economies, is committed to assisting developing countries in adapting to the impacts of climate change and financing climate protection measures. The major part of climate finance provided by BMZ e.g. through the German Energy and Climate Fund (ECF) and the Initiative for Climate and Environmental Protection and by the BMU International Climate Initiative (ICI) goes to bilateral projects. Projects are, amongst others, implemented through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the KfW Development Bank, both supporting the German Government in achieving its objectives in the field of international cooperation for sustainable development.

2. Relevant operational framework(s)

German Development Cooperation addresses loss and damage associated with climate change impacts through numerous initiatives, such as bilateral and regional cooperation projects, which promote the design and implementation of climate risk management approaches, data collection and enhanced access to data. Examples of ongoing initiatives are:

Africa

Adapting to Climate Change in Mozambique with a focus on disaster risk management: Building on the experience of a number of disaster risk management (DRM) projects, which have produced a body of experience in areas such as community mobilization, early warning schemes and institutional capacity development, the current project draws on these experiences as it pursues its aims to link climate adaptation with income generation for the poor, to support the coordination of institutions involved in climate-focused urban development in the country's second city Beira and to mainstream climate adaptation by climate proofing public planning and private investments. Together with the National Authority for Disaster Management (INGC) and Ministry of the Environment (MICOA), the project supports local DRM committees, producer groups, city, district and provincial planning boards, private enterprises, sector departments and technical education institutions. (Implementation Period: 2012-2017; Funded by BMZ; Implemented by GIZ, [More Information](#)). This project will closely cooperate with the new financial cooperation project "Climate Adaptation in Mozambique - Rehabilitation of the sewerage system of the city of Beira" which is currently planned by the KfW Development Bank.

Risk management strategies for adaptation to climate change in Kenya: The project helps smallholders, processors and marketing enterprises throughout selected agricultural value chains appraise climate risks, select or develop suitable adaptation strategies and implement these. It documents the experience made, especially with regard to the utilization of insurance-based solutions as an adaptation strategy, disseminates this experience at national and international level and makes it widely available as an example of best practice. (Implementation Period: 2012-2014; Funded by BMU/ICI; Implemented by GIZ, [More Information](#)).

Innovative Insurance Products for Climate Change Adaptation in Ghana: This project aims to help Ghana manage the socio-economic costs and risks associated with climate change. It will do so by developing and placing on the market climate-related agricultural insurance schemes for selected value chains. The project involves cooperation with regulatory and supervisory bodies, insurance companies and insurance industry associations, as well as consumers. (Implementation Period: 2009-2013; Funded by BMU/ICI; Implemented by

GIZ, [More Information](#)).

Water and Climate Monitoring in Zambia: The objective of this financial cooperation project is to build an Integrated Water-Resource-Management and Information System (IWRMIS) for Zambia taking climate change into account and including hydrological, meteorological as well as groundwater-related data. For this purpose, existing hydrological and meteorological stations will be rehabilitated, groundwater level measurements will be conducted, data transfer and the implementation of the IWRMIS will be ensured. By these measures, the Zambian government will be enabled to manage groundwater resources more sustainably and to support climate change adaptation in water-relevant sectors and of the vulnerable population. The IWRMIS will be an important data source for other national institutions (such as national Disaster Risk Management) and climate change adaptation programs. (Implementation Period: 2012-2017; Funded by BMZ/ECF; Implemented by KfW Development Bank).

Asia

Remote sensing-based Information and Insurance for Crops in Emerging economies (RIICE) in Asia: RIICE is a public-private partnership aiming to reduce the vulnerability of rice smallholder farmers in low-income countries in Asia (Bangladesh, Cambodia, India, Indonesia, Philippines, Thailand and Vietnam) and beyond. The parties make use of remote sensing technologies to map and observe rice growth in selected regions in Asia. Such information can help stakeholders involved in rice production to better manage the risks involved. A key option at hands for governments is to establish agricultural insurance solutions to protect rice smallholders. In the same way, the risks involved in agricultural lending by banks to rice smallholders can be reduced through insurance that protects the farmers' loans against defaulting due to yield losses and thus trigger more investments in agricultural production. (Implementation Period: 2012-2015; Funded by BMZ; Implemented by Allianz SE, GIZ, SDC, IRRI, SARMAP, [More Information](#)).

Adaptation to climate change and regeneration of people's livelihoods in south-west Bangladesh: The project objective is to adapt and safeguard the livelihoods of the people, particularly women, minorities, the elderly and the disabled, in the long term to and against climate change. Municipalities and their infrastructure, such as access roads, protective structures, dikes, schools and other public buildings, are prepared for future natural disasters. (Implementation Period: 2011-2016; Funded by BMZ; Implemented by GIZ, [More Information](#)).

Innovative financing scheme for strengthening the resilience of the coastal population - Vietnam: The project aims to increase the ability of the coastal population to adapt to the effects of climate change, thus reducing their vulnerability and poverty. It addresses this issue on three levels: it is preparing a strategy for climate change adaptation through integrated land use; it is establishing a financing mechanism (which includes a subsidy component); and it is developing a weather insurance model in which local actors can reduce the impact of climate risks on their livelihood. (Implementation Period: 2011-2014; Funded by BMU/ICI; Implemented by SNV, [More Information](#)).

Flood Protection Programme for Improved Climate Change Adaptation in Bangladesh: This financial cooperation project aims at promoting adaptation to climate change and improving the living conditions of the rural, poor population of the two highly vulnerable coastal districts, Barguna and Patuakhali, by an increased protection from extreme-weather events, such as storm surges, cyclones, and floods. This will be achieved by building and improving infrastructure for the protection of the population and livestock as well as safe access paths to shelters. (Implementation Period: 2012-2017; Funded by BMZ/ECF; Implemented by KfW Development Bank).

Promotion of regulative framework conditions for poverty-oriented insurance markets in Asia: This project aims at improving regulative and institutional framework conditions for an effective insurance coverage of the low-income population in Asia. The development and implementation of insurance products for micro, small

and medium enterprises, for disaster risk protection and agriculture in particular will be supported through innovative policy and regulative approaches. (Implementation Period: 2013-2015; Funded by BMZ; Implemented by GIZ, [More Information](#)).

Middle East and North Africa

Improvement of hydro-meteorological information systems in Jordan: Water shortage, which is exacerbated by Population growth and climate change, leads to severe supply bottlenecks in Jordan. Many existing hydrological and meteorological stations operate unreliably, i.e. information crucial to decision-making is not dependable, and so climate records are incomplete. KfW Development Bank is supporting Jordan with a range of different activities which are designed to help the country adapt. The financial cooperation project makes relevant and reliable hydrological information available to the Water Ministry, the meteorological service and experts/scientists in order to use this information to improve water resource management and reduce the vulnerability of the population (Implementation Period: 2012-2017; Funded by BMZ/ECF; Implemented by KfW Development Bank).

IWRM Coast Protection Programme Tunisia I: This financial cooperation project aims at increasing the resilience of the Tunisian coastal area against climate change by reducing vulnerability against storm surges and sea level rise, therefore sustaining the functionality of vital infrastructure, preserving natural habitats and securing existing and future economic potential (tourism/industry). This will be achieved by a combination of infrastructure measures such as building groynes and breakwaters and dune stabilization and sand refill. Implementation period: 2013-2017; funded by BMZ/ECF, implemented by KfW Development Bank.

Latin America and the Caribbean

Insuring Agricultural Microloans for Adaptation to Climate Change in Peru: This project aims at establishing a market for innovative insurance products which farmers in coastal areas can use to safeguard against the impact of extreme climate events, thus enabling them to adapt to climate change in the long term. Furthermore, loans can be linked to these insurance products, in order to avoid defaulting behaviour and to stabilise the microfinance sector over the long term. Experience from the pilot project can be transferred to other sectors, regions and countries. (Implementation Period: 2010-2013; Funded by BMU/ICI; Implemented by GIZ, [More Information](#)).

Climate risk adaptation and insurance in the Caribbean (Jamaica, St. Lucia, Grenada, Belize and Guyana): The project intends to identify solutions for managing weather-related risks, such as hurricanes and droughts, via insurance products. The project partners are designing and implementing products that combine risk reduction and climate risk insurance in order to safeguard low-income population groups in the Caribbean, such as farmers, smallholders and day laborers against extreme-weather events. (Implementation Period: 2011-2014; Funded by BMU/ICI; Implemented by Munic Climate Insurance Initiative (MCII), [More Information](#)).

Adapting public investment to climate change in Peru: In cooperation with local partners, the project is preparing specific catalogues of criteria for climate change adaptation for two selected sectors. These catalogues will be incorporated into Peru's national approval procedures for public investment (SNIP). Adaptation measures supported in line with the criteria are making an important contribution to reducing climate-related economic damage. At the same time, the activities promote the conservation of biodiversity as well as the safeguarding of income in the country's regions and sectors particularly affected by climate change. (Implementation Period: 2011-2014; Funded by BMU/ICI; Implemented by GIZ, [More Information](#)).

South-East-Europe

Flood prevention and protection measures on the Danube and protection measures against soil erosion on

the Bulgarian Black Sea Coast: A development loan plus additional technical assistance has been provided to prepare and implement prevention and protection measures on two sites in Bulgaria against increasingly extreme Danube and tributary river floods and, additionally, to protect one site on the Bulgarian Black Sea coast line against soil erosion due to climate change impacts such as stronger storms etc.. One of the main targets of the project measures is the adaptation of the intended measures at least to the nature preservation standards of the EU Water Framework Directive and thus to gain and provide practical experience in the application of modern, nature preserving methods in the prevention of loss and damage associated with climate change impacts. (Implementation period: 2012 - 2015; funded by BMZ through KfW Development Bank; Implemented by Bulgarian Ministry for Regional Development and Public Works)

3. Focus areas of risk management for loss and damage associated with climate change impacts

Ongoing initiatives presented above address the following areas included in decision 3/CP.18 (links to relevant project information, if available, are provided above):

- Identifying options and designing and implementing country-driven risk management strategies and approaches, including risk reduction, and risk transfer and risk-sharing mechanisms; (e.g. *Risk management strategies for adaptation to climate change in Kenya; Climate risk adaptation and insurance in the Caribbean, or Innovative Insurance Products for Climate Change Adaptation in Ghana*).
- The systematic observation of, and data collection on, the impacts of climate change, in particular slow onset impacts, and accounting for losses, as appropriate; (e.g. *water and climate monitoring in Zambia, Improvement of hydro-meteorological information systems in Jordan*).
- Implementing comprehensive climate risk management approaches, including scaling up and replicating good practices and pilot initiatives; (e.g. *Adapting to Climate Change in Mozambique with a focus on disaster risk management; Adaptation to climate change and regeneration of people's livelihoods in south-west Bangladesh; or the IWRM Coast Protection Programme Tunisia I*).
- Promoting an enabling environment that would encourage investment and the involvement of relevant stakeholders in climate risk management; (e.g. *Promotion of regulative framework conditions for poverty-oriented insurance markets in Asia*).
- Involving vulnerable communities and populations, and civil society, the private sector and other relevant stakeholders, in the assessment of and response to loss and damage; (e.g. *Risk management strategies for adaptation to climate change in Kenya; Adaptation to climate change and regeneration of people's livelihoods in south-west Bangladesh*).
- Enhancing access to, sharing and the use of data, at the regional, national and subnational levels, such as hydrometeorological data and metadata, on a voluntary basis, to facilitate the assessment and management of climate-related risk; (e.g. *water and climate monitoring in Zambia; Improvement of hydro-meteorological information systems in Jordan*).

4. Geographic coverage

Ongoing initiatives cover a broad geographic area, including those regions most vulnerable to the impacts of climate change, such as Small Island Developing States (SIDS), e.g. the Caribbean Islands, Least Developed Countries (LDCs), e.g. Mozambique, Zambia or Ghana, and low-lying delta regions, such as Vietnam and Bangladesh as well as Middle East and South East Europe.

5. Key stakeholders

Key stakeholders of bilateral cooperation projects are the national governments of partner countries. Projects and programs focus on those fields and those regions that have been identified as priority areas in national negotiations together with the partner country in question and are implemented collaboratively by the German and the partner country's government. Key target groups of cooperation initiatives are generally the most vulnerable groups of society, sectors and regions within a country. The private sector also plays an important role in projects that work on risk management strategies, such as insurance approaches.

6. Implementation modality / delivery mechanisms

The cooperation projects addressing L&D presented above provide technical and/or financial assistance to partner countries. General modalities of technical and financial assistance are the following:

The focus of **technical assistance**, mainly provided by GIZ on behalf of the German government, but also by UN-Organizations (e.g. FAO, UNED, UNDP), NGOs, and foundations, is on capacity building of individuals, organizations and societies in partner countries, for example in the field of climate change adaptation, climate risk management, or climate risk assessment. Through its bilateral and regional projects, Germany transfers technical, economic and organizational knowledge and skills. Technical cooperation mainly consists of advisory services provided by experts in the relevant field and the supply of materials and equipment, e.g. for pilot projects demonstrating risk management approaches. It also includes financial contributions to qualified local executing agencies to enable them to implement development measures independently as well as inputs in the form of studies and specialized reports, such as climate risk assessments or impact studies.

The main focus of **financial assistance**, implemented by the KfW Development Bank on behalf of the German government on the basis of a grant financing or loan agreement, is to support partner countries in the financing of measures important for their development, such as investments in (urban) climate proofing infrastructure, in water supply, agriculture, early warning systems and insurance pools. To least developed countries (LDCs) and developing countries funds are accorded in the form of non-repayable grants (financial contributions). To developing countries loans are generally made available at an interest rate of 0.75 per cent over a 40-year period, including a 10-year grace period (IDA conditions). Funds for parallel and preparatory measures such as studies, advisory services for the project executing organisations or training for local specialists are provided free of charge.

Regular reporting is a precondition for all cooperation projects. However, progress and final reports for individual projects are not published. Further project-specific information is available upon request.

7. Key activities / outputs to date

Exemplary achievements of completed cooperation projects addressing loss and damage:

- In the framework of **disaster risk management in Mozambique** (a predecessor project to the current climate change adaptation project) community-based early warning systems have already shown to be successful and effective in preventing human losses in rural areas and also in the city of Beira: during the floods 2008/2011 considerably less victims than in 2000 were registered. Further, disaster hazard maps have been created for the Buzi River area, and experts from both GIZ and the Munich Re Foundation, which also provided financial support for the project, have advised the National Disaster Management Institute of Mozambique on setting up its own disaster risk management advisory service. (*Implementation Period: 2007-2012; Funded by BMZ; Implemented by GIZ*).
- A **demand study on weather-related insurance and risk management** was conducted within the low-

income segment in **Jamaica, St. Lucia, Grenada and Belize**. The study is designed to support the development of financial risk management strategies in the Caribbean through a partnership between the Munich Climate Insurance Initiative (MCII, hosted at the United Nations University, Bonn), the Caribbean Catastrophe Risk Insurance Facility (CCRIF), MicroEnsure and MunichRe. It is further aimed to advance the understanding of the role parametric weather risk insurance for low-income groups can play in providing swift and unbureaucratic assistance following weather events, and thus safeguard livelihoods and build resilience. . *(Implementation Period: 2012; Funded by BMZ; Implemented by GIZ, [More Information](#)).*

- **Climate risk insurance policies** as a risk management strategy against the impacts of extreme weather events have been developed and implemented in several countries (St. Lucia, Kenya, Ghana, China, and Peru). Most vulnerable groups of society, particularly smallholder farmers, now have the opportunity to enhance their climate resilience and to adapt to these incidents. In the case of an extreme event, the policy holders receive financial compensations and will have a better chance to absorb shocks, temper downturns and start-off with more dynamics after such an event. Institutional arrangement are generally supported by the linking of governmental structures, i.e. regulatory and supervisory bodies, insurance companies, and institutions that provide climate and weather data. *(Implementation period: several projects/started 2008-2014, Funded by BMU/ICI, several implementing agencies).*
- In the framework of the project **disaster-preventive rehabilitation in selected municipalities of the coastal region in Bangladesh** the population of 46 villages in remote areas at risk have not only been able to sustainably regenerate their livelihoods, but are now also better prepared for natural disasters and the effects of climate change. Many households have made savings themselves, opened bank accounts and set up self-help groups. Communication and cooperation between men and women in the field of disaster prevention and adaptation to climate change have improved. The means of livelihood of a total of 5,000 households (25,000 people) have been regenerated and strengthened in the long term. 11,000 families (55,000 people) have been provided with clean, unsalinated drinking water. 1,200 road builders, more than 70 per cent of whom were women, have built 15 access roads in a catchment area with more than 200,000 people and have rebuilt schools and other public buildings. 1,600 male and female volunteers have received training in the field of disaster protection, first aid, search and rescue and water rescue. Some 95,000 people have been informed about cyclone warning signs and disaster protection. *(Implementation Period: 2012; Funded by BMZ; Implemented by GIZ, [More Information](#)).*
- Climate Change has become an issue of great relevance for the economy. Corporations, banks and other private and public institutions increasingly include climate risks and opportunities in their long-term development strategies. The role of the scientific community in supporting this corporate evolution has become of highest importance. To address this issue, KfW Development Bank and the German Climate Service Center (CSC) established an **expert network on “Management of Climate Change Induced Risks”**. The main purpose of this network is to discuss specific research questions related to “Climate Change Information” and “Climate Risk Analysis” to contribute to an assessment of future demand on adaptation activities in financial cooperation projects. To bridge the gap between research and practice, development cooperation needs scientific support. The network offers a platform for exchanging knowledge and providing expert judgement as well as publishing research results on relevant topics, respectively. As a first product in order to help in generating consistent climate information, the "Climate-Fact-Sheets" have been elaborated at request of KfW Development Bank in cooperation with CSC: Further information on existing climate-fact sheets can be found [here](#).

8. Any additional information and contact details

We would like to emphasize that **various initiatives explicitly addressing L&D are currently under preparation** and many of them are in their final planning stages. These include:

- A global project on climate change adaptation focusing on risk assessment and loss & damage-preventive adaptation measures funded by BMZ/ECF and implemented by GIZ, which will be commenced this year.
- The German Government is planning to support efforts to strengthen drought resilience in the Horn of Africa through the project "Strengthening Resilience of Pastoral and Agro-pastoral Livelihoods in Ethiopian Arid and Semi-arid Lands" which is financed from the German Energy and Climate Fund (EKF and which will be implemented by KfW. Aim of the project is to enhance drought resilience through the development of small-scale irrigable areas for sustainable agro-pastoral utilization.
- Climate Adaptation in Mozambique - Rehabilitation of the sewerage system of the city of Beira: Wide areas of Beira are only a few metres above sea level. Beira suffers of flooding during high tides and persistent flooding after heavy rains. Due to sea level rise these problems will increase in the future. The financial cooperation project will focus on the rehabilitation of the natural drainage scheme by reopening the Chiveve drainage canal and the rehabilitation of the sewerage system including the establishment of the drainage maintenance as municipal task to improve the resilience of Beira to the negative consequences of climate change. This project will closely cooperate with the project "Adapting to Climate Change in Mozambique with a focus on disaster risk management" implemented by GIZ.
- A project focusing on glacial monitoring for energy and water security in Pakistan is currently under preparation. The project is funded by BMZ and will be implemented by the KfW Development Bank.
- A global climate insurance fund, which aims at improving access to and the use of insurance against extreme-weather events in developing countries in order to improve their adaptation capacities.

Contact Details

Gottfried von Gemmingen

Division Climate Policy and Climate Financing
Federal Ministry for Economic Cooperation and Development
Dahlmannstr. 4, 53113 Bonn, Germany
Tel.: +49 (0)228-99-535-3213
Email: gottfried.gemmingen@bmz.bund.de

Susanne Schwan

Climate Protection Programme for Developing Countries
Competence Center Climate Change
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
P.O. Box 5180
65726 Eschborn, Germany
Tel.: + 49 6196 79-6516
Email: susanne.schwan@giz.de

Florian Wieneke, Ph.D.

Senior Sector Economist Climate Change
Competence Centre for Environment and Climate

*KfW Development Bank
Palmengartenstrasse 5-9
60325 Frankfurt am Main
Germany
Tel +49 69 7431-2971
Florian.Wieneke@KfW.de*