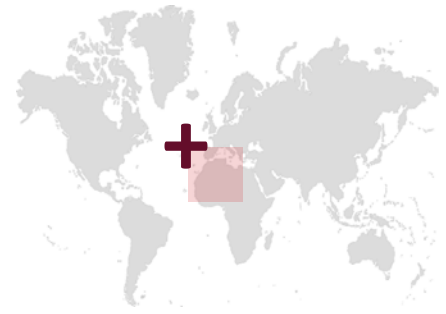


# Developing Climate Risk Management Approaches for SMEs in Morocco



## AT A GLANCE

### Name of Project

Developing Climate Risk Management Approaches for SMEs in Morocco

### Duration

01.01.2018 – 30.09.2021

### Focus area

Morocco, Ait Melloul Pilot Industrial Park / Souss Massa Region. The project plans to enlarge its scope to 2-3 other industrial parks.

### Target group

Small and Medium Enterprises (SMEs) located in industrial zones; local and national public authorities.

### Funds available

The project activities are jointly funded by the Public-Private Partnership program (develoPPP.de) of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) and Allianz Climate Solutions GmbH / Allianz SE – Reinsurance (Allianz).

### The project is jointly implemented by ...

GIZ and Allianz in cooperation with several local and international partners.

### The overall aim of the project is ...

to develop integrated solutions for the management of climate risks including prevention measures and risk transfer solutions and to enable SMEs to use those with a view to reducing their overall risk exposure.

On behalf of



## BACKGROUND

The industrial zone in Ait Melloul was selected as a pilot zone due to its historical exposure to flash floods which have caused significant financial losses. It lies in the Souss Massa region, 20km from the port of Agadir. This industrial zone is managed by the local government in close cooperation with the business association *Association des Investisseurs de la ZI d'Ait Melloul (ADIZIA)* and hosts approximately 300 enterprises, most of which are SMEs operating in the food processing industry. Overall, 25,000 employees depend directly or indirectly on business in this industrial zone.

The park was successively hit by major floods in 2010, 2014 and 2016 caused by heavy precipitation events. A badly maintained drainage system is essentially responsible for the damage and losses which occurred. In addition, a low level of risk awareness and prevention by the individual companies increased the impact. The plight of Ait Melloul is indicative of broader climate trends facing the country. The effects of climate change are more and more present in Morocco, which has been identified as very vulnerable country by the 4th Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC). Thus, SMEs in Morocco are vulnerable to a broad range of extreme weather events such as floods, severe rainfalls, heatwaves and droughts, which become more frequent in warmer climate conditions.

## OUR APPROACH

Moroccan industrial zones are rapidly gaining importance as innovation hubs and cross-points for long value chains for local production and export leverage. Yet, several of these zones are not well prepared for disasters. The overwhelming majority of SMEs do not have a plan in place to deal with climate-related risk.<sup>1</sup> Across markets, SMEs' climate change-related activities are predominately focused on mitigation.

Integrated Climate Risk Management (ICRM)<sup>2</sup> can improve the resilience of societies and promote sustainable development. ICRM improves resilience through a cycle of risk analysis, prevention and mitigation, preparedness and risk transfer solutions.

In practice, these steps can overlap and merge. For example, risk transfer solutions such as insurance can improve post-disaster damage and loss situations by providing timely financial resources directly to the affected. They can also provide a buffering capacity and prevent knock-on effects after an event to stop further losses. At the same time, risk transfer solutions are not stand-alone remedies to manage climate risks but should be part of a holistic ICRM.

**The ICRM under this project is structured into five components:**

### 1. Risk analysis: Evaluate available data on hazard and exposure

The project assesses the SMEs' historic flood loss damage; creates flood maps and vulnerability curves. Meteorological, geographical and financial data (e.g. by Met Offices, Emergency



Offices, Ministry of Finance) will be analysed and if possible improved.

This includes clarifying ownership and responsibility for maintaining and financing the reconstruction of the park infrastructure, as well as quantification of economic costs - availability of high-quality hazard data like rainfall amounts and runoff volumes - in a consistent manner.

### 2. Assess demand-side

The project assesses the demand for risk transfer solutions among SMEs / park owners as well as the capacity to pay and whether any of the SMEs already have insurance cover for this type of risk.

### 3. Identify risk reduction measures and funding sources

An ICRM concept including all key stakeholders (local agencies, cities, industrial park managements as well as their related companies, suppliers and employees) is designed. In addition the project identifies funding sources for recommended measures including adaptation against climate change (prevention); preparation measures for emergency (preparedness), immediate relief measures (response) and preventive reconstruction (recovery / build back better).

### 4. Design risk transfer solutions, engage in capacity building and identify suitable distribution channels

Based on existing data and preferences, different options for risk transfer solutions are designed and presented to key stakeholders. Additional SME parks and industrial zones are identified for awareness-raising and a roadshow at five existing and three planned parks will be conducted.

### 5. Structure risk transfer solutions and tender process

Preferred risk transfer solutions will be brought to the market for underwriting through an open tender process.

<sup>1</sup> AXA Group & UNEP FI (2015). Business unusual: why is the climate changing the rules for our cities and SMEs?. Retrieved from: <https://www.unepfi.org/publications/insurance-publications/business-unusual-why-the-climate-is-changing-the-rules-for-our-cities-and-smes/>

<sup>2</sup> For more details on the concept, see [www.climate-insurance.org/projects/advancing-climate](http://www.climate-insurance.org/projects/advancing-climate)



## CHALLENGES

- **Lack of historic hazard and loss data.** The available hazard data and sources do not allow for granular modelling and the reliable monitoring of rainfall and flood events.
- **Lack of systematic risk mitigation.** No holistic ICRM approach for the park has been implemented. The project aims to translate the conceptual work by the predecessor project ACRI+<sup>3</sup> and propose concrete solutions to the park management and the SME tenants.

## OPPORTUNITIES

- **Close cooperation with Allianz Morocco (and Allianz HQ in Africa).** Allianz Group is currently strongly expanding its activities in Africa. With a portfolio of over 1000 corporate customers, many of those situated in the industrial zone in focus of this project, Allianz Morocco has a good understanding of risk exposure and value chains in the region.
- **Building on the preliminary works** of the ACRI+ project by the GIZ/Munich Climate Insurance Initiative (MCII) – ICRM approach for SME parks – as well on the Climate Adaptations Literacy work of the Global Programme on Private Sector Adaptation to Climate Change (PSAAC).

## EXPECTED OUTCOMES

- **Understand and quantify the risks.** To understand and quantify flood risks in the participating industrial park(s), meteorological, geographical and financial data is analysed and improved.
- **Reduce the risk.** To improve the risk management of all stakeholders involved by encouraging cost-effective investments in risk reduction measures. To raise SMEs' awareness in mitigating the impacts of negative events and to expand the offer of comprehensive risk management solutions by providing education on risks, risk management strategies and insurance.

## COVID-19 UPDATE:

The disruptions from Covid-19 are heavily impacting Moroccan SMEs. According to a study published by the Moroccan Entrepreneurial Association CGEM, 57% of SMEs ceased their activities during the lockdown. To better understand these impacts, the project will run a study that surveys SMEs' risk coping mechanisms.

While climate risks may not be first priority when existential questions arise, SMEs that have survived an external shock are more receptive to prevention activities and fostering entrepreneurial and financial risk management skills. In response, the project will be developing risk management training for SMEs jointly with the International Labour Organization (ILO). The objective of the training is to raise SMEs' awareness about the different risks to which they are exposed, including climate-related ones, and the different mechanisms available to help them manage these risks.

- **Financing needs.** A lack of capacity for financing the premium might be a limiting factor. The size of the premium depends, however, on a number of factors including the success in implementing an ICRM approach and the structure of the insurance cover.
- **New natural catastrophe insurance** requirements will contribute to awareness and could help with the distribution process.
- **Transfer the residual risk.** To transfer the residual risk to the insurance sector, thereby providing financial stability to the stakeholders and a greater freedom of action for when catastrophes strike.
- Further proof of the potential of **leverage and synergy effects of insurance products as part of an ICRM approach.**
- **An effective ICRM approach** for SME Parks.

<sup>3</sup> ACRI+ Advancing Climate Risk Insurance Plus.





## WHY IS CLIMATE RISK INSURANCE RELEVANT FOR SMEs?

Extreme weather events can roll back decades of economic progress in developing and emerging economies. Currently, weather-related disasters force an estimated 26 million people worldwide into poverty each year. The impact of disasters on wellbeing is equivalent to a global annual consumption loss of about \$520 billion (World Bank, 2016).

Climate change is exacerbating this situation. Extreme weather events are becoming increasingly common with a peak of 760 events in 2019 (Munich Re) with floods affecting 35m people in 2018 (UNDRR). Their impact is also intensifying, especially considering accelerating urbanization and other socio-economic developments. Last year, the insurance industry experienced the highest ever weather-related losses.

Developing countries suffer disproportionately from disaster losses. Vulnerability to climate change and extreme weather events is highest in these countries, because of weak infrastructure and insufficient resources to assess and manage these risks. Furthermore, local authorities typically take an ex-post approach to disaster management, i.e. concentrated on emergency relief efforts and reconstruction of critical infrastructure after an extreme weather event.

Chronic cash constraints mean that reconstruction of non-critical

infrastructure is often delayed or not undertaken at all. This often leads to a gap between economic losses and what is recovered (“protection gap”).

The impacts of extreme weather events represent a significant challenge for the private sector and especially for SMEs, which constitute more than 90% of all businesses in Morocco. SMEs are particularly vulnerable because of their low awareness of climate-related risks and their lack of knowledge of risk management strategies. While the impacts of climate change on the agricultural sector are obvious, the industry and service sectors are also highly exposed to adverse weather events. Flooding of premises, damage of transport routes, and rising prices for energy and water are typical examples.

Experiences from other parts of the world show that businesses that had to cease their operations for more than one month after a major natural disaster are usually forced to declare bankruptcy. The impact can be direct, through physical damage to business-relevant assets like buildings, machines, surrounding streets, etc. Oftentimes, indirect impacts have even more severe economic ramifications than pure asset losses i.e. the disruption of value chains, rising unemployment, health effects, and the deterioration of housing infrastructure.

Insurance solutions can help SMEs to build their financial resilience to shocks by making their emergency funding and resources more reliable.

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For more information please refer to the factsheet “Developing risk management approaches for climate risks”.

