INFOCUS

Product Development: Design of a flood cover insurance for SMEs in industrial zones

SUBJECT

In Morocco, on behalf of the German Federal Ministry for Economic Cooperation and Development, the Public-Private Partnership between Allianz Reinsurance and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH focused on developing climate risk management approaches for small and medium-sized enterprises (SMEs) in industrial zones, including prevention measures and risk transfer solutions, with the aim to reduce their overall risk exposure. A need for new, innovative insurance products protecting SMEs in the industrial zones against climate risks arose, because several places in the country, such as the Agadir zone, are more exposed to and suffered from prominent floods in 2008, 2009, and 2010. Therefore, as a part of the integrated risk management approach in Morocco, an insurance product was designed to transfer residual flood-related risks of industrial zones to the insurance market.

In collaboration with an innovative weather index insurance start-up, Oko, Allianz developed an index-based flood cover insurance for the city of Ait Melloul based on the ground weather station at the airport and a digital elevation model. This is similar to a model that has already been applied to a crop insurance scheme in Mali that was developed jointly with the Allianz Re Agri team. It is a statistical model that predicts the presence or absence of water for a grid point. This insurance product was specifically targeting industrial zones of the city of Ait Melloul, but was also relevant for three other zones in the country (Agadir, Mohammedia, and Tangier). This meso-level insurance approach was supposed to decrease overhead costs and diversify the risks across the industrial zones. However, due to the lack of loss history and poor index correlation, ultimately, the rates were relatively higher than an indemnity-based solution would have provided.

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On behalf of

Federal Ministry for Economic Cooperation and Development

Building on predecessor projects by the GIZ in the region (PSACC/ACRI+), this specific project planned to expand the institutional network on flood insurance, undertake financial literacy trainings, co-develop and pilot a dedicated SME risk management.

CHALLENGES

Since March 2021, the project was unfortunately put to a halt because of the strained political relationship between Germany and Morocco. However, the most important challenges related to the design of the insurance product are still able to be identified and are explained below.

Lack of data.

There was insufficient data available, challenging the design of the flood cover insurance product. Moreover, the data which was available had to be bought from the meteorological agency and was quite expensive.

Early identification of local needs from the consumer side.

The flood cover faced a number of problems that affected the ability to identify and meet the needs of the targeted customers. Firstly, the correlation between the ground data and the index was poor (30%). This means that there was a high basis risk, i.e. a flood occurs and there is no pay-out.

Secondly, the calculated risk-based price point of the index-based product was above the market price of the indemnity-based flood insurance product. The Moroccan insurance market remains underdeveloped and is highly competitive, especially in the multi-risk enterprise segment.

The high price point of the index-based product combined with the low appetite for insurance products in the country represented a major difficulty towards positioning this parametric solution in the market. Stakeholders rather expressed a strong interest for a broader risk approach focused on bundling several risks together.

Complexity and flexibility prevented proper affordability analysis.

The ambition of the project was to identify the need for insurance products based on hazard and exposure analyses of all stakeholders of an industrial park. These encompassed the national and local government, the investors, the municipalities, the park management, the SMEs, and the value chain actors who deliver raw materials to and take products out of the industrial park.

This long-maintained flexibility in determining a specific target group for the insurance product, as well as the complex stakeholder environment, prevented a proper affordability analysis at the beginning of the project. Moreover, the industrial park management bodies were inadequately organized with a very small secretariat with rotating chairmen drawn from members of the industrial zone and no source of income that would allow to pay for any premium. This further enhanced the challenges of premium affordability.

Insurability.

The hazard and exposure model identified the major risk outside the industrial park, on the transport ways towards the park, which imposed several challenges, as these risks are hard to insure.

SOLUTIONS

In order to overcome some of the abovementioned challenges, several solutions were found. However, due to the COVID-19 pandemic and the halt in the project, most of them were not implemented.

1. ### Data collection, analyses, and workshops.

   In order to address the challenges of data scarcity and unclear stakeholder needs, the project conducted several analyses, studies and data collections. Missing data was replaced by proxies, studies analyzed if SMEs implemented any risk reduction and preparedness measures, and workshops were conducted to find out specific stakeholder needs.

2. ### Understanding the Moroccan context.

   It is crucial to early include local experts who understand the Moroccan context and market products that are already available, but not well known internationally. Alternatively, a dedicated customer needs assessment could assist in identifying the needs of customers way in advance of the start of the product development process.

   Determining the specific target group earlier in the project could also help conduct an affordability analysis at the beginning of the project.

   Both, however, are only possible in favorable diplomatic conditions, which has not been the case during this specific project.

3. ### Increasing insurability.

   It was a major challenge to design an insurance product that, despite the scarce data availability, would meet the needs of the target group while keeping the premium affordable. Although the solutions were not implemented due to the stop to the project, there were several ideas of how these demands could be met.

   Firstly, the premium could be made more affordable by extending the coverage to other vital business continuity risks in order to diversify the risk profile. Quite a number of larger companies in Ait Melloul were already customers of Allianz and had, upon request, received a flood cover with varying but low additional premium.

   Moreover, if all enterprises in a restricted geographic area are insured, the cumulation risk will be higher from an underwriting perspective. Therefore, although not considered in the project, an establishment of a regional pool covering multiple industrial zones could substantially decrease the cumulation risk as proven in other emerging economies.

Other ideas to lower premium and increase insurability include the incorporation of digital and multi-risk contracts with self-retention.

LESSONS LEARNED

The experiences from adapting to the challenges presented several lessons to be learned during the product development phase.

1. **Early defined product requirements & clear communication is key.**

In order to be able to better identify consumer demands in the future, good preparation and communication among the project partners are vital. A pre-study should be conducted to identify the local needs that are critical to understanding the local requirements. Approaching local insurance entities/bodies to discuss the development of a new product in comparison with already existing products would probably also have helped in identifying the real demands/needs. Furthermore, to be more specific on the product requirements, internal resources must be mobilized in advance of the product development.

Lastly, in terms of communication, proper communication is required as there was confusion among local SMEs in the industrial parks about how this particular project fits in a larger context along with other projects such as ACRI+, PSACC, and TAM. Frequent dialogue between the demand side and industry partners, facilitated by GIZ, has the potential to lead to innovative solutions for both sides - a lesson which cannot be learned often enough!

2. **High relevance of a strong relationship with the public counterparty and its commitment.**

The project aimed to conduct a real PPP with a public counterparty, in this case, the municipalities as the "owner and operator" of the commercial areas. As such, the project hoped for a strong cooperation with the municipalities. One eye-opening aspect is the fact that it only became apparent during the project that the municipalities were not as strongly involved and/or interested as originally thought.

A classical fact-finding mission including meetings and workshops with local experts could have proven to be very worthwhile, also from the industry side. Simultaneously, it was hoped that there would be additional funding (1) for the premium by the national disaster budgets and international donor money which could be allocated to municipalities and (2) for prevention measures from donor money as part of climate risk insurance efforts. These were aspects that require a strong relationship and commitment from the public counterparty.

3. **Need for local staff presence.**

Improving "prerequisites" for "insurability" takes time and requires close collaboration with the beneficiaries. As such, a project cannot be effectively implemented remotely, which has been the case for this project. A local senior staff member would have been necessary in this case. In the future, involving Allianz Morocco, an organization that is familiar with the Moroccan market and understands the local context and availability of market products that are not widely known, would be a good starting point. The availability of a local senior project manager would also be highly beneficial to facilitate coordination with major local stakeholders.

4. **Prospects for future potential product development targeted at industrial zones exist and differ upon the type of industrial zone.**

First, in the newer industrial zones (post 2015, often set up as PPP) and techno parks (post 2018, mainly for start-ups and SMEs), classic commercial insurance at scale would be an opportunity. These types of parks typically have owners who can be insured. Second, in older commercial zones, zones that have companies that are self-organized much like an "association"-style, index-based, prevention-focused solutions would be more beneficial. Here, instead of an industrial park owner, the businesses themselves would likely need to be insured. However, without adaptation by the companies in such industrial zones, the areas might face the biggest future risks. Therefore, it might require more efforts for those areas to either support individual risk prevention measures or have a dialogue with the business and the municipalities to fortify the entire sewer infrastructure. Insurance alone might not be the answer in such cases. This type of solution will probably necessitate public financial support. Finally, classic property products for SMEs can be offered within both types of commercial parks. However, because such products are already on the market, it is important to conduct a market study as to why these types of products have not been taken up despite their low costs.

SOLUTIONS

The planned insurance product concept was an index-based solution designed by Allianz and Oko. However, it is important to reiterate that this product concept was not materialized. The main reasons for this were twofold. Firstly, there was low interest from the demand side as a result of low awareness of insurance benefits and that the design did not meet the expectations of the individuals. Secondly, the Covid-19 pandemic and the ongoing political situation hindered both the insurance product design as well as the overall project's complimentary activities. Therefore, the insurance product was not rolled out into the market.

However, the project was successful in (1) examining the gaps in knowledge, (2) identifying the needs of the public after a first product concept was developed, and (3) realizing several strong local connections that helped understand current obstacles.

Overall, stakeholders expressed a strong interest for a broader, less focused, risk approach. This could be met through widening the approach to include vital risks to business continuity other than just flood risks. To be successful, the product has to be simple, easy to sell and to explain. Transparency has been proven to be a key tool in positioning insurance products in emerging markets along with the availability of a local representative who can explain the product to the client.

Moreover, the foundational idea of this insurance product is also extremely relevant for SMEs and industrial zones in other emerging markets that face similar weather issues. Therefore, the concept for such an index product could be considered in future similar projects, both inside and outside of Morocco, if the demand situation for an index cover will change in the future.

Activity name
Product Development: Design of a flood cover insurance for SMEs in industrial zones

Focus areas
Four industrial zones in Morocco: Agadir, Ait Melloul, Mohammedia, Tangier

Local partner
COZINE

Target group
SMEs in industrial zones in Morocco

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For more information, please refer to the factsheet "Developing Climate Risk Management Approaches for SMEs in Morocco".