

# Index-based agricultural insurance

ADA supported the Insurtech OKO in Mali in expanding its activities and in conducting a customer survey. This document summarises the findings of this survey and the results of the project.

#### Background

Despite the importance of insurance in mitigating financial losses from hazards or damaging events, the penetration rate of insurance remains low in developing countries. Efforts by all stakeholders in the sector are needed to provide more accessible and responsive solutions for low-income populations. Therefore in 2020, ADA decided to support the work of OKO, an Insurtech in Mali that distributes index-based agricultural insurance products to small-scale maize producers via mobile phones.

#### Objective

ADA's support aimed at enabling OKO to improve its products and services in order to increase the resilience of small-scale farmers to climate hazards.

#### **Activities**

Between 2020 and 2021, ADA's support consisted of 3 activities:

#### 1. Expansion of the distribution network

This activity had an objective of bringing OKO's insurance services to more regions of Mali and of covering a larger number of farmers. ADA's support made it possible to expand the network to two additional areas, recruit new agents and create new partnerships with two local microfinance institutions (MFIs) Baobab and Nyesiguiso. OKO's ser-vices consist of four elements:

 an index-based insurance covering drought and flood risks. The thresholds for triggering compensation are determined in proportion to the evolution of rainfall in each geographical area and according to the growth stages of the maize;

#### **Project duration**

1 March 2020 - 31 December 2021

#### Geographical area

Africa (Mali)

#### **Budget**

Financial contribution from ADA: € 37,968 (project) + € 21,212 (survey)

#### **Stakeholders**

MAEE, ADA, OKO Mali, University of Göttingen

#### Contribution to the SDGs





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Index-based agricultural insurance is based on climatic and satellite indices and not on the observation of damage for the compensation decision. As a result, the assessment process is less costly and compensation times are shorter than with conventional insurance.





<sup>&</sup>lt;sup>1</sup> According to the Microinsurance Network's (MiN) "The Landscape of Microinsurance 2021", only 6% to 14% of the low-income population is covered by microinsurance in 30 developing countries.



- an insurance product called "OKO insurance", which guarantees the partial or total reimbursement of the outstanding capital owed by the insured farmer to the MFIs in the event of drought or flooding. If the producer has received a loan from one of the MFIs and receives compensation from OKO at the end of the season, the compensation amount is paid directly into the account of the MFI in question;
- · agronomic advice;
- weather warnings.

#### 2. Creation of a local server

This server would allow OKO to better process requests and advise customers by telephone.

## 3. Conduct a survey of a representative sample of customers<sup>3</sup>

This survey was conducted in collaboration with the University of Göttingen in late 2021, aiming to:

- find out how satisfied customers are with OKO's service and insurance product;
- detect obstacles along the customer's journey;<sup>4</sup>
- understand why customers did or did not pay for insurance in 2020 and why they renewed or did not renew their policy in 2021;
- help OKO to better design its insurance product;<sup>5</sup>
- understand the impact of OKO's insurance on its customers;
- check whether customers were able to access favourable loans because they were already insured by OKO.

#### Survey findings and project results

## 1. Many small-scale agricultural producers in Mali were insured for the first time.

ADA supported OKO's service offering in two additional regions. In total, OKO operates in four rural regions in southern Mali, Koulikoro, Ségou, Kayes and Sikasso. In 2020, more than 1,800 small-scale maize farmers in these four major regions subscribed to OKO's insurance. According to the survey results, the insurance product is relevant because: (i) maize production constitutes a major part of farmers' income in the areas concerned; (ii) for 98% of the customers, OKO's insurance is the first agricultural insurance they have taken out; (iii) the two risks covered by OKO's insurance are perceived as the most important for maize production by the customers.

"For the first time, we, the farmers, are insured."

# 2. Farmers insured by OKO were able to obtain loans on less stringent terms and with fewer collateral requirements.

At the time of the survey, approximately 150 insurance policy holders had applied for loans from MFIs to finance their agricultural activities. 70% of those who already had experience with loans consider that the loan obtained with OKO's insurance is more favourable. 75% of these customers stated that less collateral was required. 15% felt that the conditions for accessing loans were less difficult. 100% of customers who obtained loans recognise the role of OKO. According to them, OKO's insurance helped them obtain their loan. Thus, index-based agricultural insurance not only plays a protective role in the event of a loss but can also contribute to strengthening the productive capacity of small-scale farmers by facilitating their access to micro-loans and their overall financial inclusion.

"I got my loan thanks to OKO."

<sup>3</sup> Stratified sampling from the list of OKO customers with 5 different statuses: (i) uninsured, (ii) indemnified insured having renewed, (iii) indemnified insured not having renewed, (iv) non-indemnified insured having renewed, (v) non-indemnified insured having renewed. The final sample consists of 847 customers.

<sup>&</sup>lt;sup>4</sup> Awareness of insurance in general, information on the existence of the product, understanding of the product, access to the product, payment, receipt of compensation, claims, policy renewal and relationship with OKO throughout the journey.

<sup>&</sup>lt;sup>5</sup> By collecting customers' views on the amount of the premium, the date and method of payment, the conditions of compensation, the waiting period for the payment of the compensation and the method of receiving the compensation.

## 3. OKO policyholders have more knowledge and confidence to adopt better production practices.

OKO's agronomic advice has helped policyholders to improve their production practices, for example by planning activities to better coincide with the rain cycle. They have more confidence in their farming activity because they know they are protected in case of loss. OKO's insurance therefore also emboldened them to adopt high-risk, high-reward practices: 25% of policyholders increased the area for maize cultivation by an average of 1.7 hectares; 10% allocated/purchased more fertiliser for maize production; 8% used new and improved maize seed varieties such as Sotubaka and Dembanyuma. 75% of those who made a change in their activity said that they would not have done so without OKO's insurance.

"I work better and with peace of mind because I know I am protected."

"If I had made the changes, the loss would have been too much for me, but now the insurance helps."

#### 4. Customers have a more positive view of insurance.

70% of policyholders improved their general perception of insurance thanks to a better understanding of how it works and how useful it is, thus increasing their trust in this service. After the experience with OKO, half of the policyholders are willing to take out other insurance products, such as health insurance.

# 5. The survey enabled OKO to better understand the needs of its customers, to identify problems with its services and to take concrete steps to improve them.

OKO contacted customers who were dissatisfied with its services to offer them better solutions. The survey collected very detailed information on the socio-economic characteristics of the customers. This allowed OKO to better understand the specific needs of its customers, who are part of a poor population with a low level of education, and therefore to adjust its communication and service delivery strategy. OKO will further automate its verification process to shorten the time it takes to disburse compensation. The company will also collect crop data to improve its predictive model to reduce the basic insurance risk, for cases in which customers suffered a crop loss but were not compensated.



# Lessons learned for the inclusive insurance sector



Microinsurance customers are part of a low-income population that requires verbal communication in their local language.

In the survey, 76% of OKO customers expressed a preference for insurance information to be explained verbally. The percentage of customers who understand the local Bambara language in written or spoken form is higher than those who understand French. This information prompted OKO to send messages to its customers in Bambara rather than in French, as they were doing previously.



Policy renewal, trust in the insurance, customer satisfaction and recommendation are mostly dependent on being compensated.

The most important reason why customers decided not to renew OKO's insurance in 2021 was a lack of compensation in 2020. 85% of those who were paid compensation decided to renew their policy, while this percentage is only 33% among those who weren't compensated. 81% of those who received compensation now have a better opinion of insurance, compared to 55% of those who did not receive compensation. 85% of those who received compensation are satisfied with OKO's services and only 47% of those who did not receive it feel this way.

"I received compensation. Therefore, I have more trust in OKO."

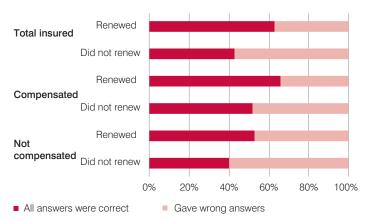
<sup>&</sup>lt;sup>6</sup> Term used by the Compagnie Nationale d'Assurance Agricole du Sénégal, World Food Programme, Sofrecom (2021). Agricultural insurance and digital payment: challenges of the dematerialisation of payments in rural areas in Senegal.



# A good understanding of how insurance works strengthens the commitment of customers, even if they are not compensated.

The survey tested customers' knowledge of the terms and conditions of OKO's insurance compensation. 61% of them answered all the questions correctly and therefore had a good knowledge of how the index-based insurance product works. They showed a higher level of satisfaction, were more likely to recommend OKO's service to others and were more likely to renew their policy, including those who had not been compensated. Customers who knew how the insurance product works and why they were not compensated were more satisfied with OKO's service and renewed their policy with OKO. This result shows the importance of explaining how the insurance product works and of financial education in general for a better adoption of insurance among customers.

### Customers' proper understanding of how things work promotes insurance renewal



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# The digital distribution channel must be accompanied by physical contacts with customers ("phygital" approach).

OKO's strategy is based on the digital distribution channel to reduce costs and make its insurance product more accessible. However, through the survey, customers expressed the need to be in more regular communication with OKO agents to build their trust. OKO intends to have more direct contact with customers through regular field visits and a more stable network of agents.

# "I can't keep giving my money to people I can't see."

"It is important to stay in constant contact with the customer, to inform or remind them regularly."



## It is important to strengthen the partnership between the insurance sector and MFIs.

After forwarding its customers' loan applications to the MFIs, OKO followed up to verify that they had contacted them. Although the benefits of microinsurance are widely recognised, there is still a need to raise awareness among MFIs on this subject. This confirms the importance of improving partnerships between microinsurance companies and MFIs in order to increase agents' awareness of the link between the two types of services and, ultimately, to serve their customers better.

#### Outlook

The survey of OKO's customers in Mali allowed the insurtech to better understand how its services were perceived by its customers and to take steps to improve them to better meet their needs.

More generally, the lessons learned from this experience, including how small-scale producers understand and perceive insurance, should be useful to other actors in the inclusive insurance sector who wish to support or engage in the development of such products.

ADA will take this experience into account in its new projects to develop inclusive insurance products. In particular, at the beginning of 2022, ADA launched a project to develop an index-based insurance solution to protect the livestock of farmers in northern Senegal in the event of drought. This project will be carried out with the insurtech IBISA Network, the Compagnie Nationale d'Assurance Agricole du Sénégal (CNAAS) and the network of pastoralist organisations in Africa (the Réseau Billital Maroobé or the RBM) and will build on the lessons learned from the OKO experience.



ADA also coordinates the Smallholder Safety Net Upscaling Programme (SSNUP), in which other insurance products tailored to the needs of small producers are being developed. The lessons learned from these new experiences will be further shared with the sector.



4