

# INDEX-BASED INSURANCE FOR FARMERS IN SENEGAL

August 2024

voice of the farmers

#### **LIST OF ABBREVIATIONS**

ARS Agricultural Research Service

CIMA Inter-African Conference on Insurance Markets (Conférence Interafricaine des Marchés d'Assurances Compagnie)

CNAAS National Agricultural Insurance Company of Senegal (Compagnie Nationale d'Assurance Agricole du Sénégal)

**EHCVM** Harmonised Survey of Household Living Conditions (Enquête Harmonisée sur les Conditions de Vie des Ménages)

**EUR** Euro

**ILO** International Labour Organization

MFIs Microfinance Institutions

RFE Rainfall Estimated

RGPH General Population and Housing Census (Recensement Général de la Population et de l'Habitat)

SSNUP Smallholder Safety Net Upscaling Programme

UNDP United Nations Development Programme

USAID United States Agency for International Development

**XOF** West African CFA frances

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### 1. CONTEXT

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In Senegal, agriculture is the main economic activity, involving almost 47% of households. However, it is also predominantly rain-fed and therefore vulnerable to weather conditions. The main risks include droughts, floods, pests and bushfires, all of which are exacerbated by climate change. Because of reduced rainfall and rising temperatures, a 20% reduction in the length of the agricultural season is expected by 2050.

Despite the role that insurance can play in protecting farmers against climate risks, it remains underdeveloped and costly to set up. Although Senegal is a pioneer in agricultural insurance in the Inter-African Conference on Insurance Markets zone (CIMA), and the Senegalese government subsidises insurance premiums by 50%, the take-up of agricultural insurance remains low, with producers reluctant to subscribe.<sup>3</sup> Around 9 out of 10 small-scale producers in Senegal are not insured.<sup>4</sup>

In 2021-2022, the impact investor Oikocredit and SSNUP supported Inclusive Guarantee (formerly Planet Guarantee), the first licensed microinsurance broker in Senegal, to distribute agricultural index-based insurance products. Index-based insurance, based on weather indices that automatically trigger compensation payments, makes agricultural insurance more accessible and suitable for small farms in remote areas. The aim of the project was to offer a greater number of small producers an innovative solution for managing agricultural risks in an affordable and effective way.<sup>5</sup>

Inclusive Guarantee specialises in the brokerage and management of index-based agricultural insurance for smallholders in West Africa. The company connects agricultural producers with insurers and reinsurers via various aggregators. Oikocredit has been a shareholder in Inclusive Guarantee since 2017, currently holding a 27% stake alongside InsuResilience, Planet Finance, Pleiade Conseils and Finarea.









Financial services

Non-financial services

Impact investor



Benficiary organisation Inclusive Guarantee

Country

Senegal

Agricultural value chains Cotton, maize, millet, multi-cereals, peanut, rice

Project period January 2021 - December 2022

Duration

24 months

€ 166,201

Total expenditure

Including a contribution of € 75,201 (45%) from SSNUP

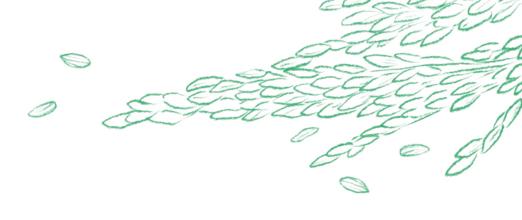
- 1. Global Index Insurance Facility, Agricultural Weather Index Insurance in Senegal.
- 2. Insurance Development Forum (2023). Implementation Update: Pioneering an Inclusive Insurance Roadmap in Senegal.
- 3. USAID (2019). Feed The Future Senegal Naatal Mbay Project Agricultural Insurance.
- 4. UNDP (2024). Inclusive insurance and risk financing in Senegal. Snapshot and way forward 2024.
- 5. This project in Senegal is part of a wider initiative funded by SSNUP to develop the Inclusive Guarantee service in four West African countries: Burkina Faso, Côte d'Ivoire, Mali and Senegal.

  The most significant results were obtained in Senegal, which is why we chose to carry out the impact survey in this country. For more information on the project as a whole, please consult the publication here.

### 2. PROJET OBJECTIVES

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Oikocredit's technical assistance project with Inclusive Guarantee consisted of **four main components** to provide agricultural insurance tailored to smallholder farmers:

### Improving index-based agricultural insurance products

to adapt them to different crops and agroecological zones and make them affordable. This should enable a large number of smallholder farmers to take out agricultural insurance for the first time.



### **Awareness-raising sessions**

run by Inclusive Guarantee, the National Agricultural Insurance Company of Senegal (CNAAS) and local partners for smallholder farmers on the importance of insurance to protect against risks, how insurance works, financial management and good farming practices to reduce losses linked to inefficient production management.



### **Working with aggregators**

(cooperatives, microfinance institutions, agricultural businesses) to distribute insurance products to their members, with each aggregator having several agents trained to pass on insurance knowledge.



### **Development of a digital platform**

to manage underwriting, policies and claims to extend reach into rural areas.



### 3. PROJECT RESULTS - END 2022





### Incurred claim ratio of 32%

(total value of claims paid / total value of premiums collected).

(higher than the median ratios of agricultural microinsurance products in developing countries (27%) and Africa (23%)) 6



Inclusive Guarantee

(insurance broker)





(re-insurer)

#### index-insurance products developed or improved

to protect policyholders against the risks of drought, excess rain, or loss of yield, based on satellite data, yield data or ground data.

new products developed

for maize, millet and groundnuts (variety 90).

#### improved products

for maize, millet, groundnuts (variety 90 and variety 110), upland rice, lowland rice and irrigated rice.





aggregators contracted to distribute insurance products, including:

>60 agricultural producers' cooperatives

microfinance institutions (MFIs)

2 non-governmental organisations

1 agricultural company



agents from the aggregators trained to relay information and manage subscriptions.

>107.000 smallholder farmers were made aware of insurance in general, agricultural insurance in particular and good farming practices.

66.388 smallholder farmers (27% of whom are women) took out agricultural insurance for the first time.

20.819 smallholder farmers (31%) compensated following extreme weather events detected by the indices.

### XOF 273,083,324 total value of compensation paid to smallholder farmers

each compensated farmer received an average of XOF 13,000 (EUR 20), (EUR 416,313) knowing that they pay a premium of XOF 6,000 (EUR 9) on average. (after government subsidy).



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### Methodology

At the end of the project, a survey was carried out among the insured farmers and other stakeholders to:

- Better understand their satisfaction with the services offered and possible areas for improvement by:
  - ✓ Identifying obstacles encountered throughout their journey: awareness, product information, understanding, access, payment, claims, policy renewal, relationship with Inclusive Guarantee and the distributors.
  - Gathering their feedback to adjust insurance products (premium amount, payment terms, compensation conditions).
- Analyse the effects of insurance on the farmers, including awareness of the importance of agricultural insurance, changes in risk management strategies, access to advantageous financing, adoption of high-risk/high-yield production methods, investment in insured crops, and reallocation of resources.
- Identify best practices and lessons learnt to offer index-based agricultural insurance services in a relevant and effective way by:
  - ✓ Examining the reasons for renewal or non-renewal.
  - Comparing the advantages and disadvantages of different types of distributors, indexing technologies and insurance products covering different risks and crops.
  - Analysing and identifying the basic risk problem whereby policyholders suffer losses without being compensated.



The study was based on:

A quantitative telephone survey of 358 insured farmers at the end of 2023.7

**Producer sample:** 

Compensated
252

A qualitative face-to-face survey among three distributor focal points in the field and three operations managers from the Inclusive Guarantee team in Senegal in early 2024.

The questionnaires used the '3-D Client Value Assessment tool' developed by the International Labour Organisation and the University of California at Davis. This is a widely recognised tool for assessing the value that index insurance brings to clients. The tool was adapted to the specific objective of the perception survey and SSNUP's technical and financial capacity.

The summarised main results and lessons learnt will help development actors further support the development and expansion of index-based agricultural insurance.



## Farmers' profile





Male dominance, similar to that generally observed in agriculture in Senegal<sup>8</sup>

Average age



48 years old

Majority of farmers of advanced middle age

### Level of education

Literate and/or have attended
Koranic or primary schools

No education

26%

Secondary or higher education

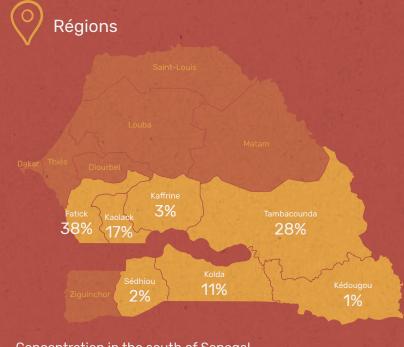


A generally low level of education, similar to that of the rural population of Senegal

### Median household size



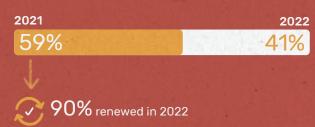




Concentration in the south of Senegal



### First year of subscription



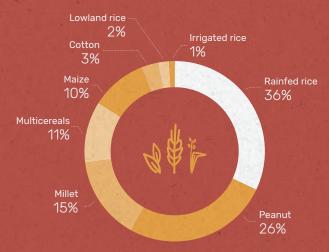
<sup>8.</sup> According to data from ILO-STATISTICS - Microdata processing based on Senegal's 2018-2019 Harmonised Survey of Household Living Conditions (EHCVM) and among heads of agricultural households, according to the 5th General Population and Housing Census of 2023 (RGPH-5, 2023).

<sup>9.</sup> According to 5th General Population and Housing Census of 2023 (RGPH-5, 2023).

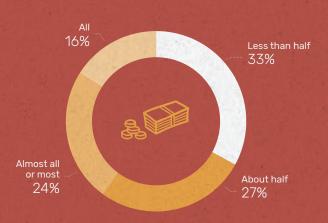


Insured crops are the main source of income for producers' households.

### Crops covered by insurance



Proportion of income from the crops covered by insurance







### Distribution channels



Cooperatives



**MFIs** 



Others



90% 3%

Farmers took out insurance mainly through their cooperatives.





Median land area of all cultivated crops

### Types of indices on which the insurance products are based



#### Rainfall index

based on rainfall data recorded by ground rain gauges.



a combination of a rainfall index and an area yield index. The latter is based on the actual yield of a representative field in each geographical area.



#### **ARS** satellite index

developed based on satellite evapotranspiration data.



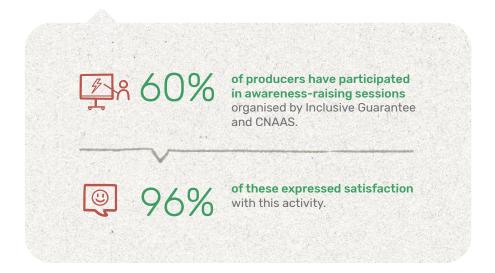
the level of rainfall is estimated using satellite data.

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### Distribution and raising awareness of insurance

Distribution of insurance products is a crucial step to ensuring their adoption. For this purpose, Inclusive Guarantee and CNAAS formed partnerships with various stakeholders in agricultural value chains and organised numerous awareness-raising sessions for producers.

The project achieved its reach thanks to a large number of aggregators acting as distribution channels, such as cooperatives, agricultural enterprises, agricultural banks, microfinance institutions, decentralised technical services and local non-governmental organisations working with large networks of farmers.

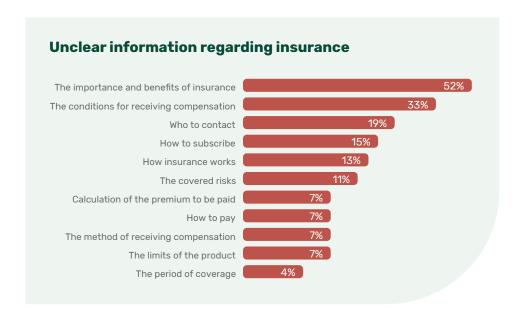




It's a bit difficult today to go directly to the end customers, who is the producers. So, with the aggregators, it's easier. We work with them, whether they are banks, groups, cooperatives, village vouchers or input distributors. Very often, we train them so that they can first understand because they are not professionals. They need to understand what insurance is and then be able to explain it to their customers or their bank, as well as the different management tools that will enable them to manage the products.

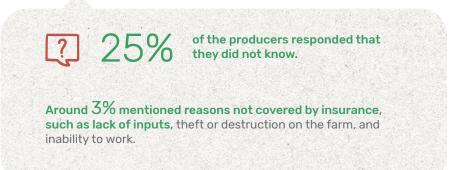
Testimonial from a manager at Inclusive Guarantee on the need to work with aggregators to achieve scale

Regarding information received on insurance, **15% of the producers questioned found it unclear or not at all clear.** According to these 15%, the least clear information is listed in the graph below.



The survey also tested producers' understanding of the insurance they had taken out, specifically regarding:

#### The factors that trigger compensation



### The procedure for receiving compensation



Interviews with operations managers at Inclusive Guarantee in Senegal revealed that the trainer training programme had been well carried out, but replication of this training by the trainers was not working well because of local language barriers and multiple levels of intermediaries, resulting in loss of accuracy of the transmitted information. As a result, Inclusive Guarantee and CNAAS had to increase monitoring and reinforcement on the ground, for which additional activities were undertaken.



If there is a real problem transmitting information, it may be due to language. It's difficult to explain certain technologies from French to Wolof and then from Wolof to Pular. The more the language differs, the lower the quality of the information. Sometimes, the person may not have used the right terminology when relaying information. That's why we were present last year, even during the multiplication sessions, listening and intervening as necessary to correct and reformulate the information correctly. However, it's true that taking part in all these multiplication sessions generates significant costs that aren't always planned in advance.

An Inclusive Guarantee manager talks about the importance of ensuring that information is passed on properly



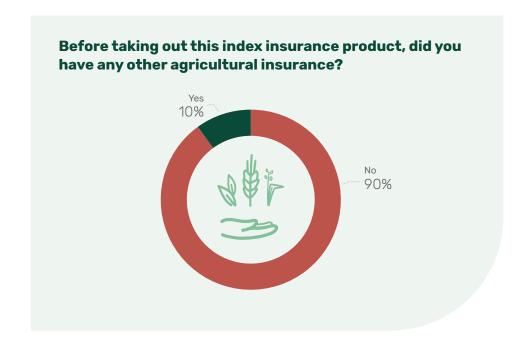
Effective, ongoing communication is essential to inform producers about the benefits and costs of these insurance products. Proximity to producers is essential, requiring a greater presence on the ground to ensure that messages are clearly understood and products are correctly promoted.

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### Relevance of the insurance products

Thanks to the service provided by Inclusive Guarantee and its partners, 90% of farmers have access to agricultural insurance for the first time. This demonstrates this service's significant contribution to this population's financial inclusion.

Most of them say they decided to take out a policy after being informed and convinced of its usefulness by the insurance product's distribution agents.





We had no help and no one to support us in the event of a loss.



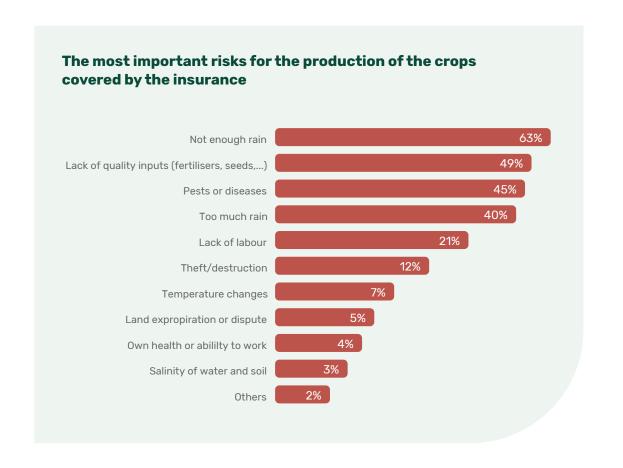
In recent years, we didn't even know what insurance was; we were losing our entire harvest.



In the old days, the harvest could fail, and you'd only have your eyes to cry about, but with insurance, you don't have that problem anymore.

Testimonials from producers on access to insurance for the first time

According to the producers, the most important risks for their production are (i) lack of rain (63%), (ii) lack of inputs (49%), (iii) pests or diseases (45%) and (iv) excess rain (40%). The first and fourth risks can be covered by insurance based on a rainfall index, while the third risk can be covered by insurance based on an area yield index. This shows that the insurance products offered by Inclusive Guarantee and its partners address the main risks to farmers' agricultural production and are therefore relevant.





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### Farmers' views on insurance premiums

In terms of insurance premium, most insured producers consider the premium to be reasonable (61%), low (14%) or very low (9%). The principle of index insurance reduces operating costs and the government subsidises half of the insurance premium, making this product accessible to agricultural producers in Senegal.

How do you assess the cost of the insurance premium?

Very high
12%

Very low
9%

Low
14%

Average / reasonable
61%

Regarding the timing of premium collection, nearly half of the producers interviewed found it difficult to obtain the money at that time. **Producers and distribution focal points suggested that premium payments should be requested when households have more cash** – that is, just after the season's produce has been marketed, rather than waiting until the lean season.



As for the date and methods of payment, you shouldn't wait until there's only a month left to ask them to pay. The important thing is not to wait until June or July to tell them how much they have to pay.



Why not claim the insurance when the groundnuts are marketed?

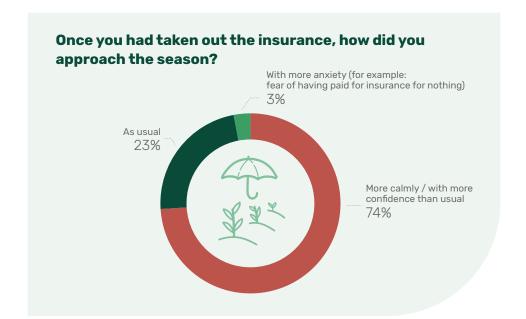
Testimonials from a focal point in Kolda and a producer about the difficulty of paying premiums at a bad time of year



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# Effects of insurance access on farmers and their production

Thanks to insurance, farmers express greater confidence in their farming activities. Once insured, three-quarters looked forward to the new agricultural season with greater serenity. The increase in confidence was higher among those who had participated in awareness-raising sessions on insurance and lower among those who felt that the information they received on insurance was unclear, which confirms the vital role of financial education in general and awareness-raising on this type of product in particular.<sup>11</sup>



In addition, the training courses offered by Inclusive Guarantee / CNAAS and their partners have enabled farmers to learn more about the effective use of phytosanitary products, optimal sowing times, crop integration and the use of machinery to sow with appropriate spacing. They also learnt how to make and use compost, apply fertiliser in the most effective way, manage harvests efficiently and adopt new weeding methods, including the use of the tractors made available to them.

"I've been growing for a long time, but I didn't know about these techniques." "It gave me a better understanding of farming techniques to increase production."

"Before insurance, we didn't have enough knowledge."



Before the training, we didn't have enough techniques, but after the training, I understood the different rains.



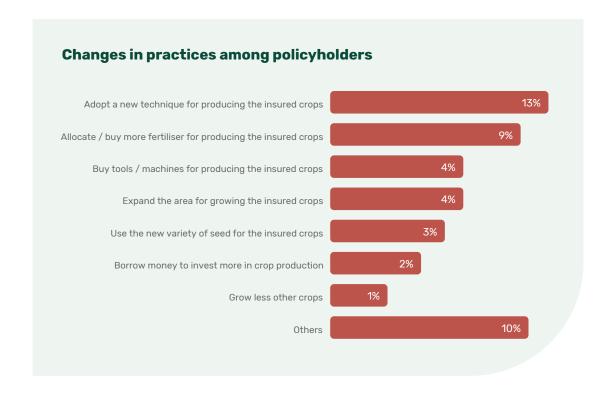
beneficial since I signed up."

"Thanks to the insurance, we've learnt a lot."

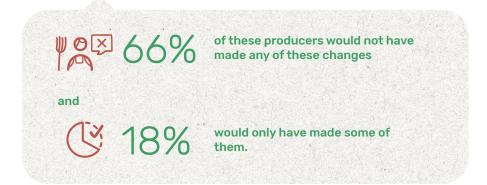
"Testimonials from farmers on the impact of training in good farming practices."

Testimonials from farmers on the impact of training in good farming practices

After taking out insurance, 40% of producers changed their practices or invested more in their production, regardless of whether they received compensation. The graph below shows changes in practices of these 40% of producers.



#### Sans l'assurance...





Because having insured my rice makes me a bit more confident, knowing that I'll certainly be compensated in case of loss.



Because when you're insured, you have more courage than usual, thanks to the indemnity.

**Testimonials from producers on** how insurance has boosted their confidence

Farmers whose insured crops account for their entire income are less inclined to adopt new techniques than others. This is understandable because changing practices means taking greater risks than for those whose insured crops represent only part of their income.

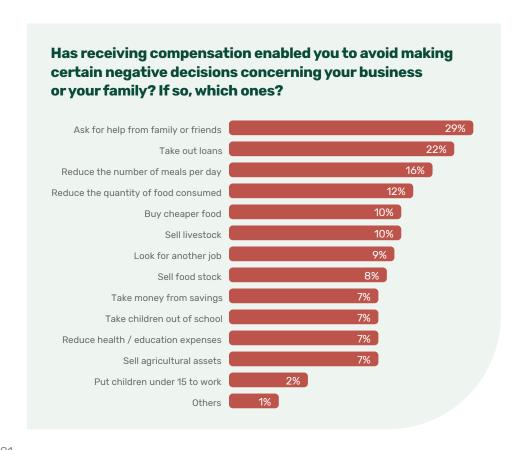


Producers who felt that the information they received about insurance was clear were more likely to change their practices. This confirms the importance of a good understanding of the insurance product and therefore the essential role of awareness-raising and training.

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### Effects of compensation

For almost 80% of farmers compensated for crop losses, the compensation enabled them to avoid taking measures that would have been detrimental to their business or household:





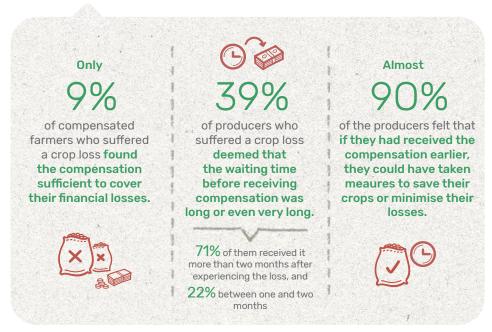




I'm really pleased with your work because last year's harvest wasn't good, and it's thanks to the compensation that we've been able to bounce back.

### Testimonials from producers on the help provided by compensation

# Amount paid and waiting time: factors limiting the compensation's effects



Analysis of the survey data also shows that **producers are less inclined to change their practices when compensation is paid late** (more than one or two months after the loss occurred).

Nevertheless, verifying farm losses is crucial to ensuring that compensation is accurate, especially when the insurance product is new.

An estimate of the compensation is made at the end of each agricultural season. For this, data from different sources are compared. This validation stage is essential to ensure that compensation payments are accurate. However, this process often takes a long time. During this period, producers are uncertain about their eligibility for compensation, which can cause concerns and financial difficulties. Producers often have to wait one or two months after the harvest, usually until December or January, to find out whether they will be compensated. Although verification of losses is essential for fair compensation, it also leads to delays in payment. Improvements in the speed of data collection and comparison could reduce these delays.

In relation to the basis risks, analysis of the quantitative survey data reveals that compared to the hybrid index, the frequency of type 1 errors increases with the rainfall index and more strongly with the RFE index. This confirms that the hybrid index, which incorporates a field assessment of yields, is more reliable than indices based solely on ground rain gauges whose presence is geographically uneven or on rainfall levels estimated based on satellite data. In the analysis, we found no statistically significant correlation between type 1 error and different crops, regions or distribution channels. It is therefore mainly the type of index that influences the probability of error.<sup>12</sup>

### Methodology for analysing the effects of compensation



To analyse the effects of compensation, the sample is limited to only those producers who suffered crop losses due to the main risks covered by the project's insurance: lack of rain and excess rain.



Other specific causes cited by farmers were problems with access to inputs (lack, delay or poor quality of fertilisers, seeds, machinery and labour), health problems affecting the ability to work, and theft or destruction on the farm.

#### In this way, producers who had suffered two types of error were identified:



Type 1 error: an insured farmer has declared that s/he has suffered a loss linked to the risks covered by the insurance but has not been compensated.

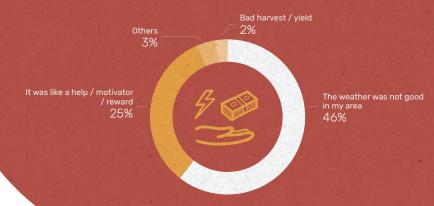


Type 2 error: an insured farmer has not declared having suffered a loss linked to the risks covered by the insurance but has been compensated.

In our sample, we find that there are more type 2 errors than type 1 errors. Specifically, our statistics show 9% type 1 errors and 23% type 2 errors among the 210 policyholders in 2021, and 10% type 1 errors and 15% type 2 errors among the 337 policyholders in 2022. The reason is that compensation was not calculated based on individual losses but on the situation in a wider area.

The type 2 errors explain why a quarter of those receiving compensation saw it as a help or a source of motivation.

You have received compensation from Inclusive Guarantee / CNAAS, do you know why you have received it?



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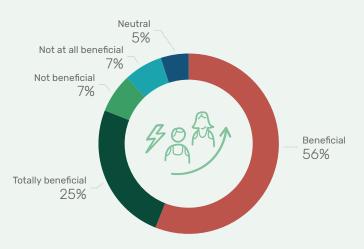
# Farmers' general satisfaction with insurance

The producers responding to the survey had a predominantly positive perception of the effects of insurance on their households' living conditions and were very satisfied with the services provided by Inclusive Guarantee and CNAAS. The majority (81%) felt that the insurance was beneficial or completely beneficial to their living conditions, and the majority (90%) said they were fairly or completely satisfied with the services provided.

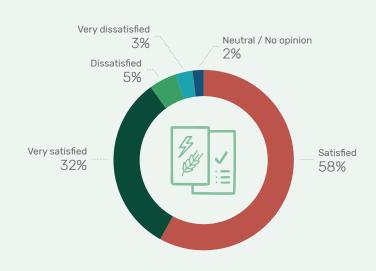
Almost all (96%) farmers plan to continue taking out Inclusive Guarantee / CNAAS insurance the following year. Some expect to receive compensation in the event of a claim, which offers them additional financial security. Others see the benefits that their peers derive from it. For some, insurance is a necessary condition for access to loans, which encourages them to renew it.



### In general, how would you rate the impact of Inclusive Guarantee / CNAAS insurance on your household's living conditions?



## Overall, are you satisfied with the service provided by Inclusive Guarantee / CNAAS?



Experience with Inclusive Guarantee / CNAAS insurance has also helped improve the opinion of 65% of producers about insurance in general. The positive opinion is mainly due to a better understanding of insurance and its benefits. The remaining third of respondents say that their experience has not changed their opinion of insurance. This may mean that their opinion was already positive because most of them are satisfied with the Inclusive Guarantee/CNAAS insurance service. For the others, the experience was not sufficiently significant to influence their perception. A very small proportion of respondents (2%) said that their experience had worsened their opinion of the insurance, suggesting that cases of dissatisfaction are rare but do exist.

### Has your opinion of insurance in general changed after your experience with Inclusive Guarantee / CNAAS?

have a more positive opinion of insurance in general after their experience with Inclusive Guarantee / CNAAS insurance.

Yes, it has been improved	No, nothing has changed	Yes, it has become worse	
65%	33%	2%	

### After subscribing to Inclusive Guarantee/CNAAS insurance, would you be willing to subscribe to other insurance products?

of producers would be willing to take out other insurance products after subscribing to Inclusive Guarantee / CNAAS insurance.

Yes, most certainly	Maybe	No
73%	21%	6%

Three-quarters of producers are very favourable to the idea of taking out other insurance products. Producers strongly prefer insurance products covering risks related to health, work safety, livestock, other crops, and the protection of agricultural assets. These needs vary, reflecting the diversity of risks to which they are exposed.







I haven't received any money from the insurance company, which is why I'm not satisfied.

#### Testimonials from producers on the lack of trust due to the absence of compensation



Analysis of the survey data shows that perceived positive impact and satisfaction with insurance increase with the clarity of the information provided and the number of claims received over two years.

Producers are also more likely to recommend insurance if they have participated in training, received clear information, and been indemnified several times.

That said satisfaction and the decision to renew declined when producers suffered crop losses without being compensated.

## 5. **CONCLUSIONS**

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## Summary

In Senegal, agricultural insurance is essential to strengthening farmers' resilience in the face of climate risks. Customer feedback on the index-based agricultural insurance deployed by Inclusive Guarantee as part of the SSNUP confirms its importance.



#### The benefits of insurance

- Thanks to the services provided by Inclusive Guarantee and its partners, 90% of farmers in the target areas have purchased agricultural insurance for the first time. The insurance products address the main risks to agricultural production, confirming their relevance.
- Once they were insured, farmers expressed greater confidence in their farming activities. Insurance encourages many producers to translate this increased confidence into concrete action by changing their practices and investing in farm improvements.
- For almost 80% of farmers compensated after a crop loss, the compensation enabled them to avoid taking harmful measures such as selling assets or reducing food consumption. The majority of the farmers surveyed viewed the impact of insurance on their households' living conditions as positive and expressed great satisfaction with the services provided by Inclusive Guarantee and CNAAS.



### The challenges that remain

- During the project, the transmission of information was not always effective, leading to a poor understanding of how the insurance worked among some producers.
- Premiums were collected late, often making payment difficult. In addition, many producers consider that they have received compensation late, which has limited their actions to minimising losses.
- Basis risk was also present, as the indices used did not always reflect the actual losses incurred.



### The added value of complementary services

Despite these difficulties, supplementing the insurance with additional services has increased the value of the product. In fact, an important number of producers want to subscribe to the insurance product to benefit from the capacity-building services on good production practices and financial management that are offered as a complement. This confirms that producers have multiple needs in terms of covering the risks to which they are exposed and that a combination of services is the most appropriate way of meeting them. It also shows that combining insurance with other services can be an effective strategy for adding value to insurance, which can sometimes remain abstract and intangible for policyholders.

Finally, policyholders' experience with Inclusive Guarantee / CNAAS insurance has helped improve their perception of insurance in general, highlighting the importance of trying out a product to fully understand how it works and the benefits it provides.



### Lessons learnt

#### Keys to the success of an index-based agricultural insurance product

#### Use distribution channels such as aggregators to reach a large number of producers

The Inclusive Guarantee/CNAAS insurance service stands out for its ability to reach a wide audience with a high number of insured producers. This success rests on a particularly effective distribution strategy. Inclusive Guarantee relies on a vast network of distributors, including cooperatives, agricultural businesses, agricultural banks, microfinance institutions, decentralised technical services and local non-governmental organisations. These entities work closely with large networks of farmers, enabling insurance to reach significant numbers in remote areas.

#### Providing clear information to policyholders on how insurance works, its benefits and maintaining regular contact

Feedback from the survey shows that providing simple, clear information about insurance is essential to boosting customer confidence, encouraging them to change their farming practices and recommending the insurance product to those around them.

Feedback from the focal points also highlights the importance of increasing the frequency and continuity of contact with producers, possibly organising several workshops throughout the year and covering all areas equally. The focal points also need regular contact with Inclusive Guarantee and CNAAS via weekly or monthly calls, beyond collection times or campaign periods.

#### ✓ Ensure the timely collection of premiums and payment of compensation

It is recommended that premium payments be requested when households have cash - that is, just after the agricultural products have been marketed rather than during lean seasons.

Similarly, if indemnities are insufficient or late, producers do not have the necessary liquidity or adequate time to adjust or improve their farming practices. This reduces their ability to respond effectively to hazards and can also reduce their confidence in insurance as a safety net. Ensuring prompt and appropriate compensation is therefore essential to maintain producers' confidence and ability to manage risk, thereby boosting take-up and satisfaction with insurance services.

#### ✓ Improving the perception of insurance through a positive claims experience

For a population whose perception of insurance is often negative and for whom taking out insurance is new, the experience of receiving compensation can improve their opinion of insurance, strengthen their confidence in this service and encourage them to adopt it further. In the microinsurance sector, a number of innovative solutions enable people to experience compensation, such as lowering the threshold for triggering indices and envisaging several moments of compensation while adjusting premiums and compensation proportionately. This allows producers to receive a small amount of compensation in advance, providing them with the liquidity to react quickly to problems of the current season rather than compensating for losses after the end of the season.

#### Combine financial services with capacity-building programmes to maximise impact

The diversity of risks to producers reflects the need for an integrated approach going beyond simple agricultural insurance. Combining insurance with agricultural advice proves to be a winning strategy for minimising the risks faced by producers and adding value to insurance. Offering a comprehensive range of complementary services (access to inputs, capital, tools, labour, information, and training) and other types of insurance (health, work safety, theft, etc.) would address the needs of producers in a comprehensive manner and maximise the positive impact on agricultural communities.

#### ✓ Reduce basis risks by using new technologies to obtain more accurate and reliable real data and combining these technologies with regular checks in the field

To reduce the basis risks, Inclusive Guarantee and CNAAS strive to (i) obtain reliable data, (ii) offer more products based on area yield index and (iii) carry out regular field missions.

In relation to the data used to calculate indices, inaccurate or poorly selected data can compromise the effectiveness of the indices and affect customer trust. Each new index therefore requires indepth studies and feasibility analysis to ensure that it accurately meets producers' needs.

Unlike the rainfall index, which is limited to precipitation, the area yield index takes into account various factors affecting agricultural productivity. This allows insurance to be more closely aligned with the interests of farmers, whose focus is primarily on the yield of their crops. However, it requires field surveys and the deployment of teams to collect and analyse the data, which incurs additional costs.

According to the managers interviewed, the Inclusive Guarantee and CNAAS teams visit the field several times throughout each agricultural season. These missions include training producers on insurance products, collecting impressions and observations on the start of the rainy season, adjusting index parameters, evaluating rainfall records taken by ground rain gauges, checking claims, preparing compensation payments and resolving individual or technical problems, particularly those relating to rainfall measurement equipment. These missions are crucial to guaranteeing the reliability of the indices, improving the perception of insurance products and adapting offers to the real needs of producers.

#### ✓ Seeking win-win partnerships with value chain actors can reduce insurance costs

All activities aimed at improving the quality of the index insurance product, including investing in new equipment, increasing the frequency of field missions, using yield indices and offering complementary services, entail significant costs. These costs could be passed on to insurance premiums, making the products less accessible to smallholders. It is therefore essential to find solutions to make insurance both effective and economically viable for insurers and producers. Several initiatives rely on collaboration between players in value chains to share the costs of insurance. For example, agricultural processing companies, which depend on producers' ability to supply raw materials, could pay part of the insurance premiums, making them more accessible to producers.





