

## Developing resilience to recurrent food insecurity in Senegal: evidence ecosystem map

The different food security surveys reveal a high prevalence of food insecurity in several regions of Senegal. Food security has thus become a priority for policy makers because of its multiple challenges. Although this result is consistent with the specific aspects of the Senegalese economy and the context of climate change however, the main pillars of resilience to food security and contributing factors at the household level need to be clarified and further investigated. The same is true of the role of climate variables, shocks and other household characteristics in food security and household resilience. Therefore, it is relevant to develop a evidence-informed decision-making philosophy (EIDM).

In line with the themes of the Evidence 2018 conference: "Engage, understand, impact", our analysis will focus on one of the priority areas in Senegal, namely the resilience to climate change of vulnerable populations.

Resilience is a polysemic and multi-actor concept. It is transversal to several sectors of the Senegalese economy. In order to circumscribe our field of study, we will approach it through the lens of food security. This work is a contribution to the reflection aimed at encouraging and promoting the EIDM in Senegal. This will ultimately contribute to the development of effective public policies and the introduction of learning in interventions to combat poverty and inequality in Senegal.

### II. Stakeholders in resilience to food security

There are many stakeholders involved in developing resilience to food insecurity for vulnerable populations in Senegal. They can be categorized as follows:

Actor	Role
<b>Producers</b>	
National Agency of Civil Aviation and Meteorology (NACAM)	production of climate data and forecasts
Senegalese Institute of Agricultural Research (SIAR)	development of agricultural research
Ecological Monitoring Center (EMC)	environmental monitoring and sustainable management of natural resources
National Agency for Statistics and Demography (NASD)	studies and research on statistical, economic and social issues
Universities	teaching and research
<b>Users of research data</b>	
Programs and Projects	applications of research results and data providers
Producer organizations	
Communities	
<b>Brokers</b>	
National Agency for Agricultural and Rural Advice (NAARA)	agricultural and rural council
Support Base for Methods and Techniques for Agriculture, Other Rural Activities and the Environment (SODEFITEX/BAMTAARE)	support for rural development
National Authority For Land Reclamation & Development of the River Basin of "Senegal" area (SAED)	Promote the development of irrigated agriculture on the left bank of the Senegal River and Faleme.
Agricultural and Industrial Development Company (AIDC)	promotion of agricultural, industrial and infrastructure projects within the national territory
National Food Security Council (NFSC)	collection, centralization, analysis and dissemination of food security information

Actor	Role
National Aquaculture Agency (NAA)	contribute to the development of aquaculture
Unit of Fight against Malnutrition (UFM)	Technical assistance in the definition and implementation of the National Nutrition Policy.
Food security commission (FSC)	development and implementation of the national food safety policy
Department of Analysis, Forward Planning and Statistics (DAFPS)	production of agricultural statistics
National Direction (Agricultural, Rural Equipment, Retention basins, Livestock, etc.)	mechanization of agriculture, control of water, development of livestock, etc.
Multidisciplinary working group (MWG)	

### III. Gaps in the evidence ecosystem

For a promotion of the EIDM in Senegal in the area of food security, several obstacles must be overcome, in particular: (i) lack of data at the relevant scales, (ii) diversity of data collection approaches, (iii) data obsolescence, (iv) high cost of data acquisition, (v) capacity building of actors.

### IV. Bottlenecks or organisational silos

They can be summarized in four points: (i) the compartmentalization of the various services highly jealous of their prerogative, (ii) lack of harmonization of data collection methodologies, (iii) a lack of coordination between the deconcentrated services and the central level and (iv) lack of a data sharing culture.

### V. Conclusion

***Link to the three themes of the Evidence 2018 conference: engage, understand, impact.***

In a context of climate change, in order to strengthen in Senegal a philosophy of the EIDM in the food security sector, a number of improvements are needed, in particular:

Understand the impact of climate change on the determinants of resilience to food security. This will go through: a better understanding of the main pillars of resilience and their contributing factors at the household level and (ii) better knowledge of climate variables and shocks. A better understanding of the determinants of resilience to food insecurity makes it possible to assess the effects and impacts of policies, programs and projects in this area. To do this, it requires a strong commitment of different stakeholders and a real political will of decision makers.

In addition, it will be necessary:

- Develop an information system on the resources of the different localities. This will provide policy makers with an instrument that provides them with relevant information and thresholds.
- Improve information feedback from the ground up
- Establish a consultation framework on food security, nutrition and social protection. This will improve the impact of the actions undertaken and / or envisaged.
- Find the financial resources needed to implement the actions identified.

