

Reducing the Gap between Vulnerable Communities and Climate Change Research: the Case in the Sahel September 2009

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With rising awareness about climate change and its potentially devastating impacts, the number of research projects investigating adaptation options has multiplied. Many of these initiatives are producing concrete information that could help the most vulnerable groups to manage climate risks.

However, local communities, particularly in rural areas, often have very little access to scientific climate change knowledge. With better access to scientific knowledge, communities can enhance their coping mechanisms and reduce their vulnerability to climate change and variability. Likewise, researchers have also overlooked communities' own knowledge, gained through their first hand experience with the changes already taking place.

Two projects in the Sahel region show that making scientific research and information accessible to local communities can make a real difference to farmers coping with climate change.

Agro-meteorological assistance to rural populations in Mali

The provision of agro-meteorological services such as weather/climate knowledge, data and information can help people working in the agriculture sector to make decisions and prepare for climate risks. These services can include monitoring of rainfall, temperatures and winds. They can also include weather forecasts tailored for farmers to prepare for the next season and advice on how to mitigate adverse factors such as severe weather and outbreaks of pests and diseases which are often weather dependent.

The National Meteorological Service of Mali has been providing agro-meteorological assistance to rural populations in Mali. Sahelian farmers now count on receiving technical assistance and timely information which they are using to guide their farming practices. This is helping them to reduce climate risk

for their agricultural production in an area where desertification and droughts had put smallholders in a critical situation.

The information packs the farmers receive are prepared by a team of specialists in meteorology, agronomy, communications and agricultural extension. These information packages integrate meteorological and climatological data methodologies developed by the Mali Agrometeorological Pilot Projects of Rural Assistance. As a result of the project, farmers have seen their yields increase by 30 per cent and avoided frequent re-sowing.

Participative research for stronger crops

Research institutes in the Sahel have been working towards improving cereal varieties using techniques such as natural hybridisation, which can naturally make crops more resilient. These projects have been implemented in partnership with local farmers. Their activities include programmes that promote better water and manure management amongst farmers and support the rehabilitation of degraded soils. Agricultural innovations by research institutes substantially increase agricultural production despite constraints such as access to water, poor soils, aridity, etc. The project PROMISO for instance, implemented in Niger, Burkina Faso, Mali and Nigeria by the research organisations ICRISAT and CIRAD contributed to building farmers capacity to identify relevant crops (sorghum, millet) adapted to the Sahel.

There are positive experiences that should be scaled up and replicated elsewhere to make more research accessible to local communities and to ensure that scientific research builds on traditional knowledge.



Emmanuel Seck
Programme Manager
Energy Environment
Development Program
ENDA Tiers Monde