

Rural Resilience Enhancement Project in the Federal Democratic Republic of Ethiopia



AT A GLANCE

Name

Rural Resilience Enhancement Project
in the Federal Democratic Republic of Ethiopia

Duration

March 2012 – March 2016

Focus area

Ethiopia

Target group

Farmers and pastoralists in the drought-prone areas of
Oromia and Somali region, and local government officials

Funds available

This project was carried out as technical cooperation of Japan
International Cooperation Agency (JICA).

The project is jointly implemented by ...

(1) Ethiopian Ministry of Agriculture and Natural Resources,
(2) Oromia Bureau of Agriculture, (3) Oromia Pastoral Area
Development Commission, (4) Somali Livestock, Crop and
Rural Development Bureau, and (5) Oromia Insurance
Company S.C. (OIS).

The core objective is ...

to contribute to enhancing the resilience for those people
dwelling in drought prone areas such as southern parts of
Oromia region and Somali region through a series of surveys/
studies and implementation of pilot projects.



Ministry of Agriculture
and Natural Resources

BACKGROUND

South Eastern and Eastern parts of Ethiopia, so-called “Horn of Africa”, have experienced recurrent severe droughts, resulting in acute food shortage. The region is one of the most climate-vulnerable regions in the world. Historical documents reveal that more than 18 major drought episodes were registered in Ethiopia between 1900 and 2011, and 7 of those events occurred in the last 30 years.

In the events of severe droughts, emergency assistance in a form of food aid has been provided. For protecting human security and livelihood of the region, however, external supports need to

be extended to resilience building in the societies. In Ethiopia, therefore, a linkage and synergy between emergency assistance and resilience building support towards sustainable future have been sought.

This project tried to respond to the needs of people living in these climate-vulnerable areas through implementation of a series of surveys/studies and pilot projects. As one of the pilot projects, Weather Index Insurance scheme was introduced in Oromia region.

APPROACH

Weather Index Insurance (WII) scheme was introduced to enhance resilience of farmers who practice agriculture in low rainfall areas. The pilot project was composed of 3 phases, namely product development and pilot entry phase (Phase I), promotion and extension phase (Phase II) and follow up phase (Phase III).

Design of WII:

There were 3 key players in WII scheme; 1) insurance company, 2) intermediaries, and 3) local development agents (DA). The insurance company (OIC; Oromia Insurance Company S.C.) was a risk taker and designed the insurance product, and intermediaries such as agricultural cooperative unions sold the products and collected premium from insured-farmers. DAs raised farmers’ awareness for drought risk management and introduced the basic concept of WII to the farmers. A unit premium amount was set at 100birr and the maximum payout was designed to be 5 times of the premium. Because the drought frequency, severity and rainfall patterns were different for each kebele, different rainfall trigger and exit were set for each kebele.

Data for design of insurance index:

WII development often faces difficulties in acquiring local weather data with sufficient quality and covering sufficient period for designing insurance index, which are seldom available in African rural area. This WII was developed with rainfall data derived from satellite observation as substitute.

Challenges

Difficulties with understanding the WII scheme:

In general, there was a lack of insurance literacy among the local farmers. Due to its relative complexity, WII was even more difficult for them to understand its benefits and payout system.

Unavailability of local data:

A lack of local historical data such as rainfall and crop yield made it difficult to design the payout scheme including parameters such as “trigger” value and “exit” value. Precipitation data from global reanalysis products were used as the substitute for rainfall data.

Basis risk of WII:

Due to the above-mentioned lack of local data of rainfall and corresponding crop yield, there were some cases where gaps were observed between the payout and the actual loss incurred by farmers, which had to be adjusted.

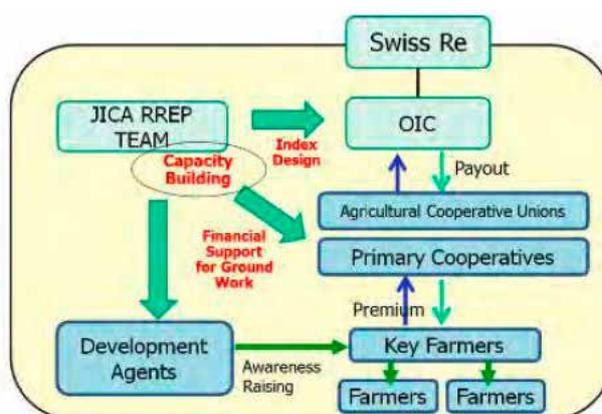
Opportunities

Local stakeholders:

Agricultural cooperative unions played an important role as intermediaries to provide farmers with WII products because they had longtime strong relationship with local farmers. Local development agents (DAs) such as agricultural extension workers and health workers also played an important role to raise awareness of farmers with regard to the benefit of insurance and the knowledge of WII.

Better regulatory framework:

World Bank has supported the Government of Ethiopia to develop Micro Insurance Regulatory Framework. This regulatory framework covers different types of micro insurance products including index-based crop insurance, and this would facilitate the penetration and sustainability of WII.



Institutional set-up for Phase II of the pilot



RESULTS

WII introduced in this pilot project provided remedial measures in mitigating risks of agriculture being practiced in drought prone areas under meager and erratic rainfall, and thereby enhancing the rural resilience against droughts.

There are a great number of farmers who need a means of risk-hedge over their unstable rainfed agriculture. The Phase I of the pilot project had enrollment of 1,286 farmers in 15 kebeles (more than 10 % take-up rate among entire target region) and the Phase II had 5,623 farmers in 45 kebeles (about 20% take-up rate). There was no premium subsidy from the project or the government.

For the Phase I, the insurance covered planting and flowering periods, which were April-June and August-October, respectively, in most kebeles. The rainfall in these periods was beyond the triggering amount in all the kebeles in Phase I and, therefore, there was no payout. For the Phase II, the total rainfall amounts in the planting period in 8 kebeles were below the triggering amounts. Because there were reports from the field that there were insufficient rainfall in kebeles where the trigger was not pulled, OIC undertook a field survey to assess the impacts of droughts on crops to minimize the basis risk and secure trust of farmers towards WII. The survey found that there was crop failure in 29 out of 45 target kebeles including the 8 kebeles where trigger was pulled and OIC decided to make a payout not only for the 8 kebeles where the trigger was pulled but also for 21 kebeles where crop failure was observed by the field survey. The total payout amounted to 773,250 birr in total.



Protection by WII may have affected the choice of agricultural practice of the insured farmers. A survey by the project revealed that the insured farmers were more inclined to increase application of fertilizer, improved seeds, weeding and plowing than those who were not insured. Also, 51% of insured farmers stated in an interview that they had become confident/ peace of mind in their agriculture practice, and 29% answered that they were motivated to work harder for further improvement of their agricultural practices.

LESSONS LEARNED

- 1) External support including capacity development of all stakeholders of WII scheme is needed to first introduce the scheme in rural agricultural areas. Without such support, local private insurance companies will not be able to launch it.
- 2) WII pilot should continue long enough so that most farmers experience receiving payout and realize the real benefits of the WII. Without such experience, a lack of trust from farmers may threaten the sustainability of WII after the end of external support.
- 3) Appropriate selection of target sites of WII is important to ensure sufficient take-up rate of the insurance by farmers. Adequate level of take-up rate is essential to make the WII program financially sustainable. Local key stakeholders such as DAs and kebele chairpersons should be included in the process of selecting the target sites to assess farmers' need for protection against droughts.
- 4) Most farmers do not have enough cash in the beginning of cropping season because their saving has been reduced by that time usually do not have saved and extra money for a new activity. Also, farmers need enough time to make a decision if they purchase the WII. From this point of view, awareness raising meetings with farmers and the sales of the WII should commence soon after the harvest of main crops to give them sufficient time to decide whether to buy WII. The sooner after the harvest, the more ability to pay they have, which consequently tends to result in better take-up rate.
- 5) Weather data, often being the bottleneck of WII, should be collected by national meteorological agency or private weather data suppliers because it is usually beyond the capacity of most insurance companies.



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June 2018

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This publication has been prepared by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the Munich Climate Insurance Initiative (MCI) in the frame of the project "Promoting Integrated Mechanisms for Climate Risk Management and Transfer" funded by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB). The information in this publication is solely based on the project documentation provided by the project implementer(s).