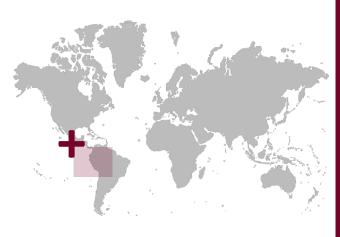
# Climate, agriculture, and risk transfer (CAT) in Peru

Integrated financial management of climate risks in the agricultural sector





## AT A GLANCE

### Name

Integrated financial management of climate risks in the agricultural sector

### Duration

February 2014—February 2019

### Focus Area

Peru

### Target group

Public and private sector institutions, actors involved in the agricultural value chain, such as smallholder farmers, commercial farmers, producers associations, financial institutions and insurance companies.

### **Funds available**

The project is funded by the German Ministry for Environment, Nature Conservation, Building and Nuclear Safety (BMUB) with EUR 5 million, as part of the International Climate Initiative (IKI).

### Federal Environ Building

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

### The project is jointly implemented by ...

Ministry of Agriculture and Irrigation (Ministerio de Agricultura y Riego, MINAGRI); Superintendence of Banking, Insurance and Private Pension Funds (Superintendencia de Banca, Seguros y AFPs, SBS); Ministry of Economics and Finance (Ministerio de Economía y Finanzas, MEF); Financial and insurance companies

### The project maintains a strategic alliance with...

Munich Reinsurance Company (Munich RE). As a leading global reinsurer, Munich Re is offering highly valuable technical support to the project activities, based on its long-standing experience with the development and implementation of agricultural insurance schemes.

### The core objective is ...

leutsche Gesellschaft ür Internationale usammenarbeit (GIZ) GmbH

to create a risk transfer system which is generated and funded by the State as well as private sector. The system aims to contribute to the adaptation of the agricultural sector to climate change in a sustainable way.



# +

### BACKGROUND

The adverse effect of climate change has emerged as a key pressing issue for the Peruvian agriculture sector. Due to the climate change, the glacier surface of the Peruvian Andes has shrunk by 43% over the last four decades; a figure that is predicted to escalate to an alarming 57% by 2030. Melting glaciers make Peru extremely vulnerable to climate change, affecting its social and economic progress. Some negative consequences have also already been observed in the agriculture sector, emanating from frequent frost and droughts.

Agriculture in the country has significant potential in terms of the diversity of ecosystems. Peru presents over 90% of the existing microclimates in the world, which allows diversified agricultural production and distribution throughout different seasons. However, this agricultural potential contrasts with the low levels of competitiveness and profitability of the sector, which stems from different causes. The situation is further aggravated

by the occurrence of adverse climatic events. Total or partial production losses, loss or impairment of assets and declining incomes for producers are one of the main direct effects of adverse natural phenomena.

In recent years, the Peruvian agricultural sector has developed dynamically, especially in regard



to the increase in exports. It is currently regarded as the most important economic contributor to the rural areas. However, this development is threatened by increasingly frequent and intense climate change-triggered incidents of droughts, floods, and unusual temperature fluctuations. Financial services have the potential to increase the resilience of agricultural producers, helping them cope with adverse weather-related events in an effective manner. It can also help alleviate the risks, where traditional risk mitigation measures used by the farmers prove to be inadequate. However, complexity and heterogeneity of the agriculture sector coupled with scarcity of data create challenges for the insurance market and hinder the efforts to serve the sector. Therefore, both the Ministry of Agriculture and Irrigation and the Ministry of Economy and Finance have prioritized the adaptation to climate change in their sectoral policies for disaster risk management.

The current national legal framework contains the basic rules in order to implement a risk transfer system in the agricultural sector and establishes the functions of public institutions related to agricultural insurance. Agricultural insurance is a part of the national aims and strategies such as: (1) food security, (2) social inclusion (3) financial inclusion, (4) the promotion of competitive development in the agricultural sector, (5) statistical information and risk management, (6) climate change management, (7) fostering family agriculture, (8) the sustainability of natural resources, and (9) a risk management system. Hence, agricultural insurance appears in the legal framework in a multi-dimensional, multi-sectoral and multi-level manner, being still the main challenge for the efficient articulation of the respective tasks of the different actors involved.

# Factsheet - Climate, agriculture, and risk transfer (CAT) - Peru

# APPROACH

The project works towards creating mechanisms and instruments as well as enabling the institutions to build public-private partnerships. The purpose is to develop an agricultural insurance market and to transfer climate-related risks. A three-pronged approach is pursued to achieve the following objectives:

### 1) Institutional structures

An appropriate institutional and legal framework is being put in place to establish a risk transfer system. The system will provide a cushion against the impact of weather-related shocks, triggered by climate change.

### Challenges

1. Limited awareness of the benefits of financial and insurance products

2. Lack of good quality data on agricultural production and yield

3. Limited offer of agricultural insurance products

4. There is often the misleading perception that insurance products are a panacea in the Peruvian context. In order to overcome this limited view on how to cope with the effects of climate change, an integrated disaster risk management approach is needed.

5. Availability of public sector staff depends on the political will, which may be volatile.

### 2) Information system

A geo-referenced system of data collection and administration is being established, with the aim to gather agricultural information, particularly on output and yields.

### 3) Management of the risk transfer system

The specialist and decision makers are being upskilled through training. The process will equip them with the enhanced skills required to efficiently manage and monitor the risk transfer system. Additionally, appropriate management instruments are being introduced.

### **Opportunities**

1. Better capacities and knowledge of risk management and agricultural insurance concepts have led to better terms and conditions for the catastrophic insurance contract, as the public sector staff was better trained to negotiate them

2. An increase in the co-financing of the Commercial Agricultural Insurance product is necessary in order to reach: higher market penetration, better insurance coverage (65%-75%), more affordable premium rates for small and medium-size farmers, an increase in the offer of agricultural credits (financial inclusion) and a reduction in the fiscal burden of government expenditures due to natural disasters.

### Outcome

The SBS has been organizing a bi-monthly Public- Private Dialogue Forum. The forum acts as a platform for facilitating discussions and reaching agreements for the implementation of the risk transfer system in the agricultural sector. It also supports and strengthens the coordination of key actors of the private and public sectors, in order to jointly design implementation processes for the risk transfer system under the framework of the 'National Strategy for Financial Inclusion'.

A multi-annual insurance contract was signed in 2015. This contract allows the Catastrophic Agricultural Insurance product to continue during the election year in 2016. The MINAGRI was able to negotiate better conditions for the contract: the premium rate fell from 14% to 11%, the trigger augmented from 40% to 45% of the average production, allowing for better indemnity payments.

With the support of the CAT Project, the MINAGRI published an interactive map with information on the agricultural seasons in February 2016, covered by the SAC. The map was elaborated in an ArcGIS Online platform, aiming to enable the users, especially the MINAGRI to view the information and elaborate their own maps.

The platform is publicly accessible at:

http://catgiz.maps.arcgis.com/apps/Viewer/index.html?appid=143b10dd589c4a679d39ae28467e2bdd

### **Lessons learned**

1. There is not an ideal moment to begin developing an agricultural insurance market. The process of improving instruments and overall framework has been kicked off, which is expected to pave the way for market development in the long run. The market penetration and improvements are being made gradually.

2. It is important to clearly define the roles of actors in the private and public sectors.

3. It is challenging to penetrate the agricultural insurance market without partial co-financing of the premium by the State. This is especially true for the and medium sized agricultural producers whose financial capacity to pay premiums can be limited.

4. Mismatches exist between what policyholders expect insurance policies to cover and what the insurance contracts actually provide as loss indemnification. Basis risk has to be reduced through better information.

5. It is important that financial instruments, such as weather insurance, are integrated within a comprehensive risk management and transfer strategy.

### CASE STUDY

### Catastrophic Agricultural Insurance and the Commercial Agricultural Insurance

Presently, two insurance products are being offered: the Catastrophic Agricultural Insurance (Seguro Agrícola Catastrófico, SAC) and the Commercial Agricultural Insurance (Seguro Agrícola Comercial). Peru has 7,125,007 hectares of agricultural land, out of which only 4,155,678 hectares (58%) are being cultivated. The Catastrophic Agricultural Insurance protects 13.2% of this area and the Commercial Agricultural Insurance covers 0.7%. Hence,

a significant area highly vulnerable to climate risks still remains uninsured.

The Catastrophic Agricultural Insurance has been promoted by the MINAGRI and is being offered by the private insurance companies. More than 350,000 farmers were indemnified between 2009 and 2015. The Commercial Agricultural Insurance was generated by private initiatives and is available mainly for the borrowers of financial institutions. Starting in 2013, the commercial insurance had already insured 70,000 farmers by 2015.



These two insurance products partly cover the insur-

ance coverage needs of a risk transfer system in the agricultural sector. However, further insurance products that cover livestock, forestry, fishing, and aquaculture among others, still needs to be developed.

### IMPRINT

### Published by

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

### **Registered Offices**

Bonn and Eschborn, Germany Dag-Hammarskjöld-Weg 1-5 Bonn and Eschborn P.O. Box 5180 T +49 61 96 79 – 0 F +49 61 96 79 – 11 15

### CONTACT

Alberto Aquino alberto.aquino@giz.de cat@giz.de http://www.agroyriesgo.pe/

For overall information, please contact: ACRI@giz.de

### Photo credits

GIZ (single credits to be checked with ACRI@giz.de)

Eschborn, August 2016