



**Asia-Pacific
Economic Cooperation**

2016/EPWG/SDMOF/012


Catastrophic Agriculture Insurance

Submitted by: Peru



APEC PERU
2016


10th Senior Disaster Management Officials Forum
Iquitos, Peru
8–9 October 2016



Directorate General Agricultural


Catastrophic Agricultural Insurance

OCTOBER 2016





1

28995 comprehensive law intended to Guarantee Fund for the Countryside and Agricultural Insurance




I. Legal Framework of Agricultural Insurance


- 28995 comprehensive law intended to guarantee fund for the countryside and agricultural insurance.
- Law 29148 which establishes the implementation and operation of FOGASA
- Supreme Decree N° 019-2008-AG, which approved the operating regulations for agricultural insurance trust
- Supreme Decree N° 008-2009-AG approving the contract of trust between MINAGRI and COFIDE
- Supreme Decree N°002-2014-MINAGRI approves the new regulation of Agricultural Insurance and addendum N° 001 contract trust.
- Ministerial Resolution N° 076-2014-MINAGRI approving the new texts of the general conditions and special agricultural insurance catastrophic crop insurance policies



2




PERÚ Ministerio de Agricultura y Riego




II. Function of the Directorate General Agricultural


The Directorate General Agricultural - DGA is the body responsible for promoting sustainable productive and commercial development of agricultural products, access to national and international markets, financial services and insurance in coordination with sectors and institutions that apply; and promote a competitive national agricultural supply, value-added and sustainable, and physical healing - legal and formalization of land ownership, according to the National Agricultural Policy and current regulations. Hierarchically subordinate to the Vice Ministry of Agriculture and Irrigation Development and Infrastructure.



3




PERÚ Ministerio de Agricultura y Riego



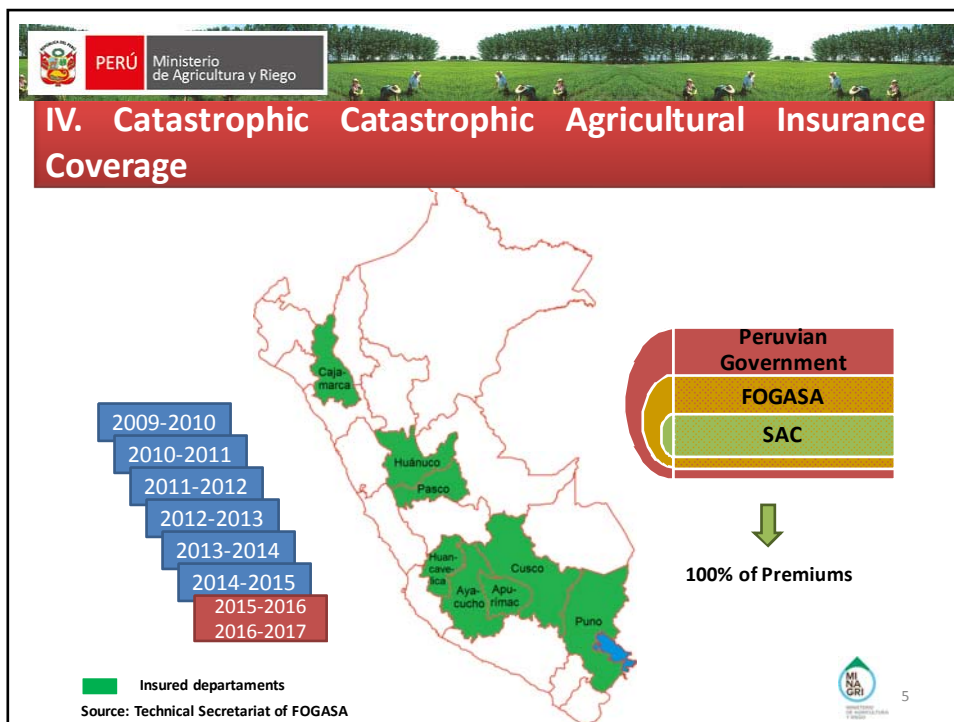
III. Technical Results Catastrophic Agricultural Insurance

AGRICULTURAL CAMPAIGN	PARTS	AMOUNT OF INVESTMENT TOTAL PREMIUM S/.	NET PREMIUM (NO TAX INCLUDED) S/.	TOTAL INSURED VALUES S/.	SECURED AREA (Ha)	INDEMNIFIED AMOUNTS (S/.)	INDEMNIFIED AREA (Ha)	LOSS RATIO (%)	NUMBER OF COMPENSATION PRODUCERS
2009-2010	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco y Puno	39,447,693.84	33,149,322.55	220,995,300.00	490,069	9,658,773.00	22,387.06	29.14%	31,788
2010-2011	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Pisco y Puno	39,970,678.29	33,588,805.29	238,387,122.00	442,210	23,981,364.00	40,722.00	71.40%	111,856
2011-2012	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Pisco y Puno	39,982,850.01	33,883,771.19	241,922,716.20	450,108	9,775,019.20	16,192.40	28.85%	44,231
2012-2013	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Pisco y Puno	39,589,760.05	33,550,644.10	239,543,306.00	414,149	11,918,838.08	20,509.96	35.52%	57,937
2013-2014	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Pisco y Puno	30,000,000.00	25,423,728.81	181,468,697.62	329,943	12,200,776.50	22,183.23	47.99%	64,775
2014-2015	Amazonas, Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Junín, Pisco, Puno y San Martín	24,117,855.22	20,438,860.35	188,892,324.50	343,441	9,550,200.00	17,364.00	46.73%	48,318
2015-2016*	Apurímac, Ayacucho, Cajamarca, Cusco, Huancavelica, Huánuco, Pisco y Puno	39,000,001.22	33,050,848.49	302,662,800.00	550,296	10,266,366.00	18,666.12	31.06%	35,000
TOTAL		252,108,838.63	213,085,980.79	1,613,872,266.32		87,351,336.78	158,024.77	40.99%	393,905

Source: Technical Secretariat of FOGASA
* Preliminary results.



4




V. Insured Matter of SAC 2015-2016 y 2016-2017


CATASTROPHIC AGRICULTURAL INSURANCE, AGRICULTURAL CAMPAIGN 2015-2016 (100% FINANCING BY THE PERUVIAN GOVERNMENT)

WINNING CONSORTIUM	TRIGGER INDEMNITY %	REGION BENEFITED	AMOUNT OF PREMIUMS (S/.) (FINANCING FUND)	SUM INSURED BY HECTAREA	SECURED AREA	TOTAL SUM INSURED	CROP INSURED
LA POSITIVA - MAPFRE PERU	45.00%	HUANCAVELICA	S/. 5,644,094	S/. 530.00	80,432	S/. 44,237,600	Potato, corn starch, barley grain, bean dry grain, grain dry bean, pea green bean, Wheat, Vetch dry grain, bean green beans, quinoa, corn, alfalfa
		APURIMAC	S/. 4,511,844	S/. 530.00	64,397	S/. 35,418,350	Corn starch, potato, barley grain, bean dry grain, wheat, dry bean grain, Quinoa, Alfalfa, corn, bean green bean, pea dry bean, pea green bean
		CUSCO	S/. 5,006,122	S/. 530.00	71,397	S/. 39,268,350	Potato, corn starch, bean dry grain, Quinoa
		HUANUCO	S/. 4,013,329	S/. 530.00	56,837	S/. 31,260,350	Potato, corn starch, wheat, beans dry grain, barley grain, quinoa, grain dry bean, pea green bean, pea dry grain, maize corn, bean green bean, Alfalfa, forage Oats
		CAJAMARCA	S/. 4,997,208	S/. 530.00	83,422	S/. 45,882,100	Corn starch, potato, wheat, beans dry beans, dry pea bean, pea green bean, barley grain, corn, bean dry grain
		AYACUCHO	S/. 6,287,757	S/. 530.00	82,052	S/. 45,128,600	Potato, corn starch, barley grain, Quinoa, Wheat, grain dry bean, dry pea grain
		PASCO	S/. 949,810	S/. 530.00	12,819	S/. 7,050,450	Potato, corn starch, pea green bean, corn chodo
		PUNO	S/. 7,589,842	S/. 530.00	98,940	S/. 54,417,000	Potato, Quinoa, barley grain, forage oats, bean dry grain, Feed Barley
TOTAL			S/. 39,000,001		550,296	S/. 302,662,800	

Source: Technical Secretariat of FOGASA




PERÚ Ministerio de Agricultura y Riego




VI. Catastrophic Agricultural Insurance Operation

How does it work?


Example
AGRICULTURAL CAMPAIGNS 2015-2016 y 2016-2017




7



PERÚ Ministerio de Agricultura y Riego




What is the Catastrophic Agricultural Insurance – SAC?



- Support of the Ministry of Agriculture and Irrigation producers of scarce resources.
- It covers Catastrophic climate risks affecting everything or almost everything sown.
- Catastrophic loss is the same to crops insured in a statistical sector (Office of Agricultural Statistics).



Important!!!!: This insurance does not cover production cost.

Term of the policy: 01/08/15 al 31/07/17 – Two Agricultural campaigns



8


risks of climatic nature

That risks are covered?


The risks covered by the SAC are climatic and biological origin:

- ✓ **Risks of climatic nature:** 1)Drought, 2)Low temperatures, 3)high temperatures, 4)hail, 5)excess moisture, 6)flood, 7)frost, 8)strong winds, 9)avalanche, 10)lack of the floor to harvest.
- ✓ **Risks of biological nature:** 11)diseases 12)Pest and predators
- ✓ **Other risk:** 13) Fire.




9

PERÚ Ministerio de Agricultura y Riego




Sequence report a notice of loss


Paso 1: The catastrophic event occurred notify the Agency or Land Office.





Paso 2: The Agency or Land Office reports the catastrophe via email to the insurance Company chosen for the agricultural season.



Paso 3: The insurance company will send personnel to perform the evaluation and adjustment respective field.



Paso 4: If the report indicates adjustment catastrophic loss, the insurance Company will pay the farmer S/550 soles per insured crop hectare.





10


AND HOW DETERMINED catastrophic loss ?

de Agricultura y Riego

Assessment of Catastrophic Agricultural Insurance Claims



AND HOW DETERMINED CATASTROPHIC LOSS ?

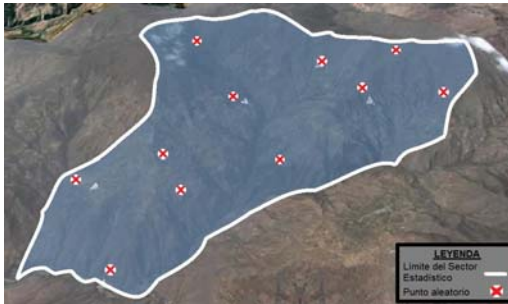


11

11 points are evaluated and the average yield is obtained; and if it is equal to or less than 45% of the historical average yield of Stat


Evaluation Methodology Catastrophic Agricultural Insurance Claims (11 random batches)

Statistical Satelite Sector and distribution of the 11 random points





11 points are evaluated and the average yield is obtained, and it if equal to o less tan 45% of the historical average yield of Statisfical Sector, it is determined that catastrophic loss of the insured crop.

Source: Image Google Earth.



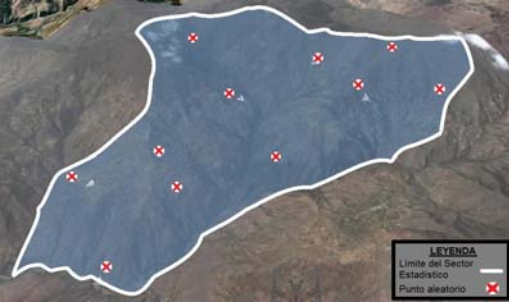
12


PERÚ Ministerio de Agricultura y Riego



Evaluation Methodology Catastrophic Agricultural Insurance Claims (11 random batches)


Statistical Satellite Sector and distribution of the 11 random points




Source: Image Google Earth


Example: Surface Insured Angasmarca Statical Sector – Department of Huánuco:

- ✓ 100 hectares of potatoes.
- ✓ Historical average potato yield **12,000 Kg/ha**
- ✓ Potato yield protected in the policy: **5,400 Kg/ha** (45%)



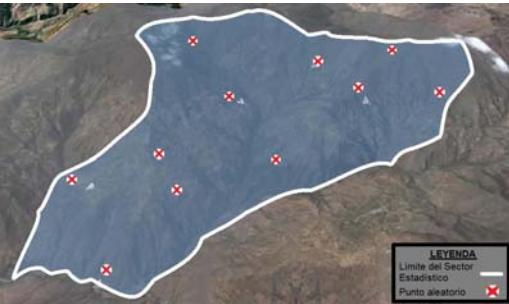
13


PERÚ Ministerio de Agricultura y Riego



Evaluation Methodology Catastrophic Agricultural Insurance Claims (11 random batches)

Statistical Satellite Sector and distribution of the 11 random points




Source: Image Google Earth


After permorming field evaluation we have:

- ✓ Estimated average potato yield (Average 11 points):

5,000 Kg/ha



14



Evaluation Methodology Catastrophic Agricultural Insurance Claims (11 random batches)


So:

- ✓ The estimated yield of potatoes is less than that protected in the policy:


 $5,000 \text{ Kg/ha} < 5,400 \text{ Kg/ha}$...**It is a catastrophic loss**
- ✓ Therefore the compensation shall be equal to:

$$\text{Indemnizaciom} = \text{S/. } 550 \times 100 \text{ ha}$$

$$= \text{55.000 Soles}$$



15




Evaluation Methodology Catastrophic Agricultural Insurance Claims (11 random batches)

...And what if the estimated yield is 5,800 Kg/Ha?


- ✓ The estimated yield is higher than that is protected in the policy:

 $5,800 \text{ Kg/ha} > 5,400 \text{ Kg/ha}$...**It is not a catastrophic loss**

Therefore no compensation.




16




PERÚ Ministerio de Agricultura y Riego

VII. Development of a Risk Transfer System

The Ministry of Agriculture and Irrigation together with GIZ Ferman Cooperation, through the climate, Agro and Risk Transfer Agreement – CAT has developed a System of Risk Transfer in Peru, which is a specialized risk management and protection instrument for different segments of farmers in our country to extreme weather events.



17



PERÚ Ministerio de Agricultura y Riego

System Components Risk Transfer

Institutionality:


Create institutional and regulatory conditions for the development of a risk transfer system – STRS.

Information System:


Create a geo-referenced system of agricultural management information is available to the responsible authorities and the sector.

Management Risk Transfer System:

Strengthen the capabilities of the technical staff of the management unit STRS and decision makers.



18



PERÚ Ministerio de Agricultura y Riego


VIII. National Agricultural Politics – DS N° 002-2016-MINAGRI

Politic axis: Financing and Agricultural Insurance.


Objective:
Strengthen and expand the credit markets and agricultural insurance for small and medium farmers nationwide.

Strategic Guideliness:
Improve and extend coverage Catastrophic Agricultural Insurance (SAC) to manage high climatic risk of farmers and most vulnerable to climate change and recurring natural phenomena areas.

Implement a public – private system of agricultural risk transfer on the basis of a specific regulatory framework, a reliable information system insurable risks for the development of agricultural insurance market, giving priority to small and medium agriculture.




19



PERÚ Ministerio de Agricultura y Riego

Plan risk management and adaptation to climate change in agriculture 2012-2021 (PLANGRACC)



PERÚ Ministerio de Agricultura y Riego

Plan de Gestión de Riesgos y Adaptación al Cambio Climático en el Sector Agrario Período 2012-2021
PLANGRACC-A


Julio 2012

EXECUTING AGENCY

- Ministry of Agriculture and Irrigation (MINAGRI), through the Directorate General of Agricultural Environmental Affairs (DGAAA).
- Technical and financial support from FAO.



OBJECTIVE

Reduce climate risk, vulnerabilities and negative effect of climate change in the agricultural sector, through strategies, policies and actions lineament agreed with the regions.




20

Health surveillance and control of pests and diseases.



STRATEGIC AXES STRATEGIS GOALS AND ACTIONS OF PLANGRAAC

- **Estrategic axis 2. Preparation and emergency response weather events.**
- **General Objective 2:** Prepare the rural populatiom to deal with emergencies in agricultura and reduce the negative impact of extreme weather events.
- **Lineament policy: Strengthen risk transfer mechanisms such as insurance.**
- **Priorities:**
 1. Early Warning System
 2. **Agricultural Insurance**
 3. Land preparation for response
 4. Health surveillance and control of pest and diseases.



21


Technical Secretariat of the Board of FOGASA

CONTACT EMAILS

MINAGRI

- Ing. Ronald Alexei Gil Ramírez, email: rgil@minagri.gob.pe
- Ing. Juan Manuel Díaz Caycho, email: jmdiaz@minagri.gob.pe
- Econ. Luis Fernando Tejada Meza, email: ltejada@minagri.gob.pe



22



PERÚ Ministerio de Agricultura y Riego

THANK YOU VERY MUCH



23