
CLIMATE RISK AND AGRICULTURAL INSURANCE

EXPERIENCE FROM N. MACEDONIA AND SERBIA

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Inclusive Insurance in the Central and Eastern Europe and the
Transcaucasian (CEET) region - Challenges and Potential Opportunities
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Founded in 2009 in Zug, Switzerland, Europa Re has established itself as a market leader in developing and promoting innovative and affordable catastrophe and weather risk insurance products in SEE region

In 2014, the Company was licensed by FINMA to transact reinsurance business in SEE countries and rest of the world



Its MISSION is to improve access to affordable high-quality catastrophe and weather insurance products for homeowners, SMEs and farmers in disaster prone emerging market economies

Europa Re developed in-depth expertise in managing a complex programs of technical assistance in insurance services provided by international agencies.



PENETRATION AND DENSITY OF INSURANCE

Penetration – gross written premium as a percentage of GDP

North Macedonia	1.52%
Serbia	1.55%
World	7.07%
EU	8.28%
SEE EUROPE	2.79%

Density – gross written premium per person (EUR)

North Macedonia	78
Serbia	102,5
World	442
EU	2,135
SEE EUROPE	209

N. MACEDONIA AND SERBIA – AGRICULTURE SECTOR – OVERVIEW

AGRICULTURE SECTOR IN N. MACEDONIA - FACTS

The industry that holds lots of promise...

In 2020:

8% of GDP was produced by agriculture and agribusiness.

16.6% of jobs were in agriculture.

12.25% of total country exports were from agriculture.

Main export products: fresh and processed vegetables and fruits, tobacco and wine (bulk and bottled).

AGRICULTURE SECTOR IN SERBIA - FACTS

A very important sector of economy:

In 2020:

6% of GDP was produced in agriculture and agribusiness.

15.07% of jobs were in agriculture.

19.4% of country exports were agricultural products.

Main export products: raspberries, plums, maize and wheat.

N. MACEDONIA AND SERBIA – AGRICULTURE INSURANCE

AGRICULTURE INSURANCE IN N. MACEDONIA

Agriculture is highly vulnerable to climate risks: **hail, spring frost, flood and drought.**

The interest of farmers in insurance is insignificant.

AGRICULTURE INSURANCE IN N. MACEDONIA - FIGURES

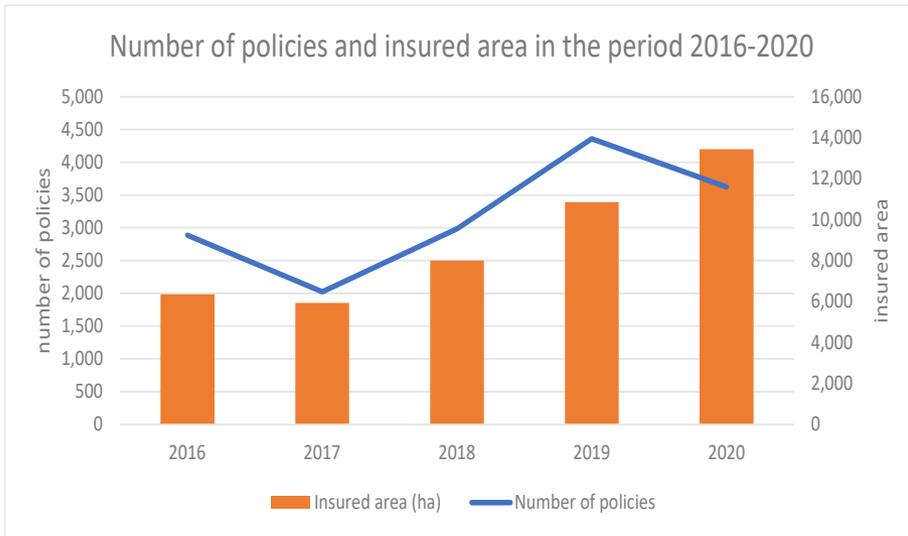
- Agriculture insurance penetration reached its pick of 3.5% of registered farmers in 2015, but evident drop was recorded in 2017. Since then, the number of insured farms remained stagnant despite a 60% premium subsidy or up to EUR 2.500 per farmer.
- 2020 – only 2% of the registered farmers were insured.

Agriculture insurance	2020	2019	2018	2017	2016
Insurance contracts	3,751	3,803	3,493	2,243	4,024
Premium (in '000 EUR)	7,846	6,287	4,244	2,557	2,857
Claims (in '000 EUR)	5,152	3,293	3,567	1,686	2,319

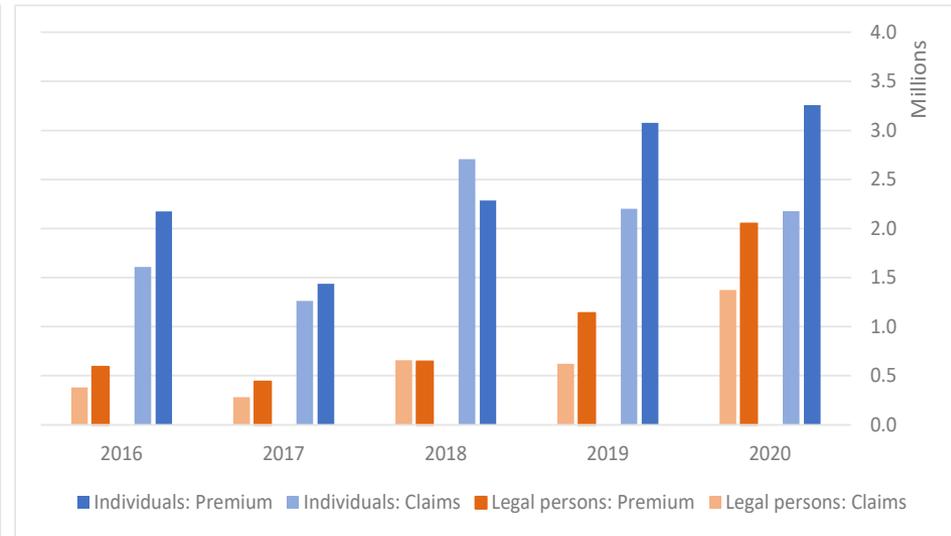
Source: ISA

Year	No of policies	Registered Farmers (source: MAFWE)	Insured farmers in %
2014	3,704	150,000	2
2015	5,021	145,000	3.5
2016	4,024	150,000	3
2017	2,243	160,000	1
2018	3,493	169,431	2
2019	3,803	170,000	2.2
2020	3,751	165,000	2

AGRICULTURE INSURANCE IN N. MACEDONIA - FIGURES



Premiums and claims on the market for period 2016-2020 (in EUR)



*Average farm size -2.8ha

AGRICULTURE INSURANCE IN N. MACEDONIA: MAIN CHALLENGES

**Government post- disaster payments of up to 100% of the loss.
Late subsidy payments.**

**Insurance companies avoid insuring farmers with high risk. (i.e. Resen area).
Do not cover all relevant risks.**

**Farmers are dissatisfied with the claim management process.
Expensive insurance with high deductibles.**

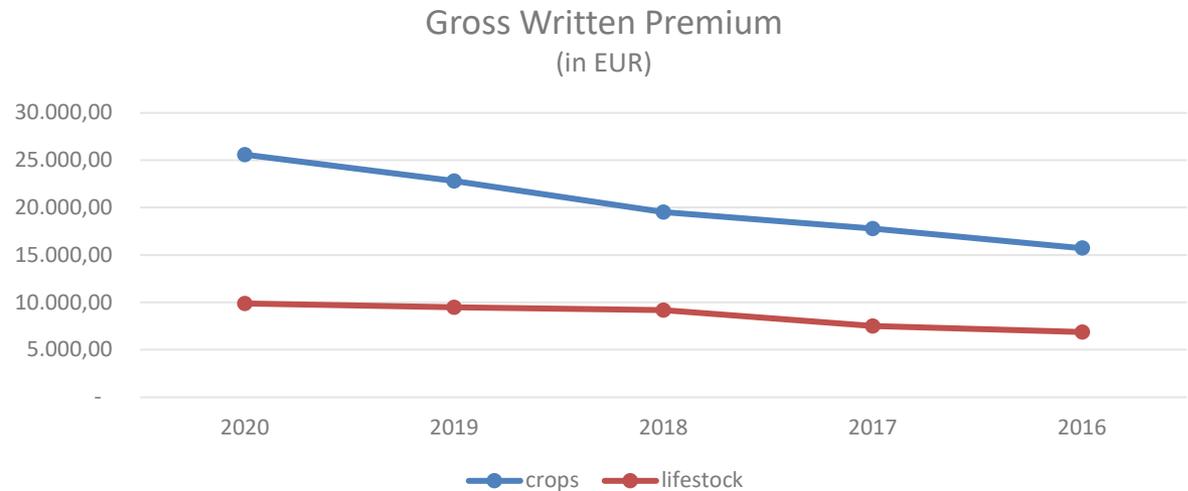
AGRICULTURE INSURANCE IN SERBIA

Agriculture is highly vulnerable to climate risks: hail, drought and flood.

2019 – only 12% of the registered farmers are insured.

The interest of farmers in insurance is insignificant.

AGRICULTURE INSURANCE IN SERBIA- FIGURES



Premium subsidies – 40-45% of premium (tax excluded), up till 70% in some more vulnerable areas: Shumadija, Zlatibor, Podunavlje, Moravica and Kolubara districts.

Maximum amounts supported per sub-sectors:

for cereals – 850 Euros

for vegetables – 4.250 Euros

for insurance of local culture, vines and hops – 8.500 Euros

for support for nursery insurance and / or young perennial plantations before planting – 4.250 Euros

for animal – 17.000 euros.

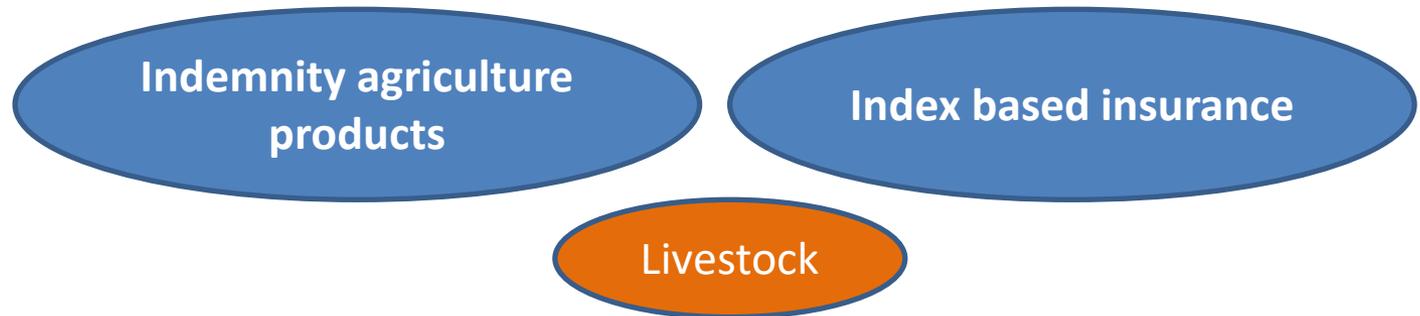
AGRICULTURE INSURANCE IN SERBIA – CHALLENGES

**Insurance companies avoid insuring farmers with high risk.
Do not cover all relevant risks (e.g., drought).**

**Farmers don't have trust in the claim management process.
Expensive insurance with high deductibles.**

Government post disaster payouts (ad hoc, based on different factors)

AGRICULTURE INSURANCE MARKET: AVAILABLE INSURANCE PRODUCTS



Characteristics	AYII (index-based insurance)	Indemnity based insurance
Risks:	all natural catastrophes, biological perils that could lead to reduction of crop yields	Basic risks + storm, spring frost + flood + draught
Coverage:	All vegetation period	Only May – October (several months)
Based on:	Index based, based on municipal average yield	Individual, based on individual farm yield
Indemnification:	Automatic, no need of loss adjustment. Payout done after harvesting of the crop	Through loss adjustors after loss is reported

AREA YIELD INDEX INSURANCE: EUROPA RE SUPPORTED PRODUCTS

- **Agriculture insurance that offers protection against all natural catastrophes and biological perils that could lead to reduction of crop yields.**
- **With AYII coverage**, a farmer insures the average municipal expected yield of the crop, not the individual crop yield in his field.
- **Losses/Benefits** are defined as the difference between the actual yields and the insured average yields in the indexed municipality.
- **Premium** is calculated using specially developed statistical model based on historical data.
- **Crops:** wine grapes, wheat, maize, barley, sunflower in MK and maize, soya, sunflower and wheat in SRB.
- **Expected yield:** 5-year average, SSO data.
- **Coverage:** 50-80% of the expected yield.

AREA YIELD INDEX INSURANCE

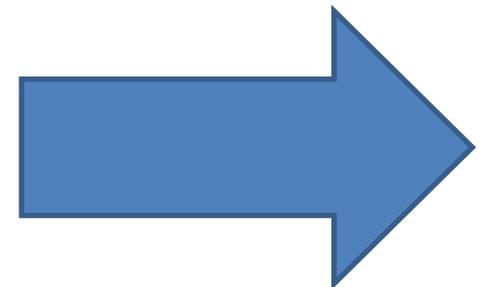
- **Cover period:** The entire vegetation period of the crop (from sowing to the harvesting).
- **Method of indemnification:** As soon as SSO publishes official crop yield data and if the real municipal yield is lower than the insured average municipal yield, the difference is paid (the farmer is compensated).
- The farmer has no obligation to prove that he/she has suffered any losses, or the level of losses incurred.

AYII SALE EXPERIENCE

- **Most farmers do not perceive insurance as financial protection against climatic and biological risks but view it as an unnecessary expense. Still believe that the government should cover their losses.**
- **The market growth potential is high, each year the awareness is increasing.**
- **Sceptic for the SSO data.**
- **Do not fully understand the product.**
- **Big farmers or farm holdings expressed more interest and better understand the product, however they do not accept the average municipal expected yields.**
- **Serbia responded better on mezzo level sales vs. N. Macedonia on micro level.**

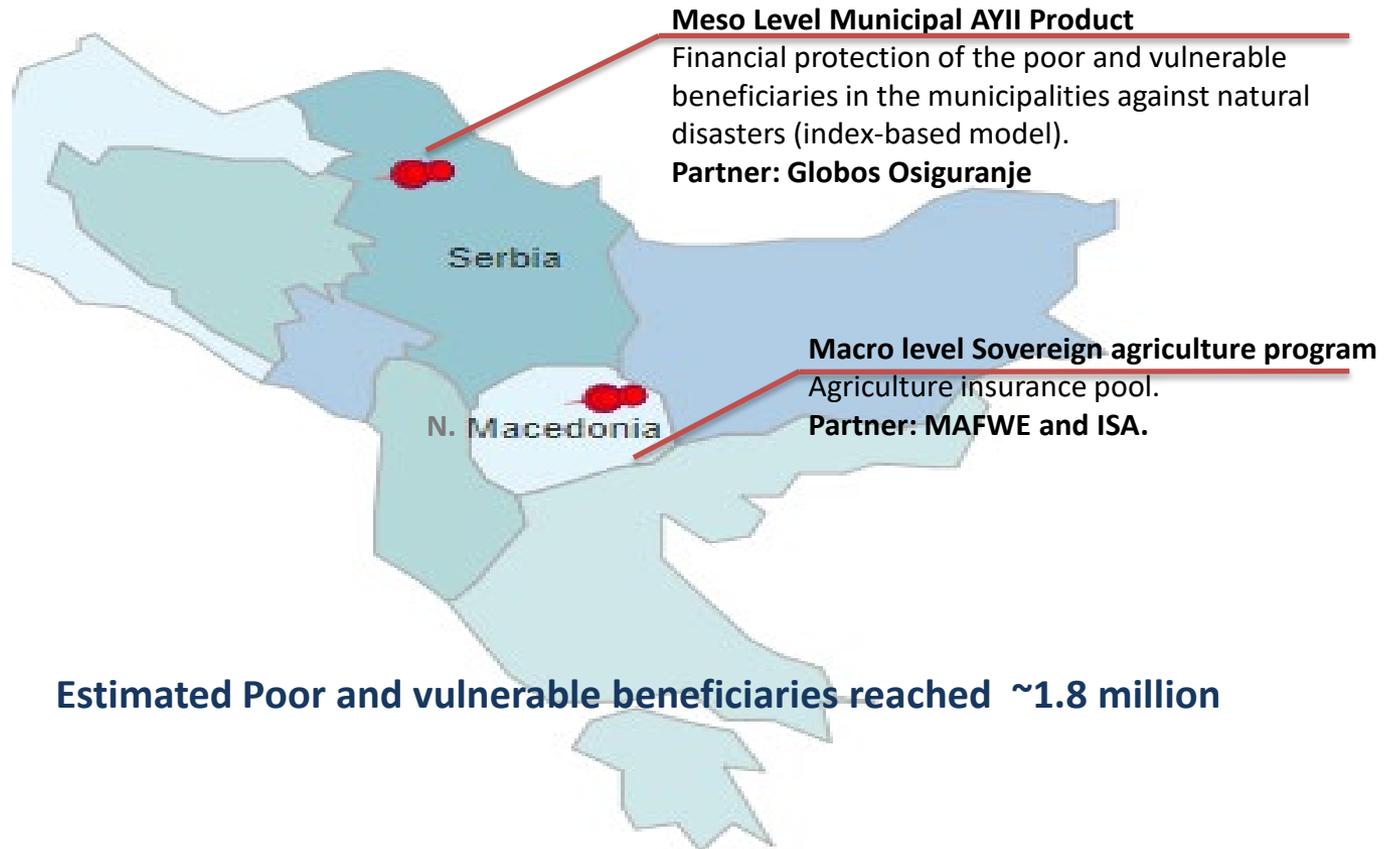
AYII SALES CHALLENGES

- ✓ **Raise awareness for agriculture insurance**
- ✓ **Limited number of crops covered with AYII**
- ✓ **Accuracy of the SSO data**
- ✓ **Swift payment of the 60% of the premium by MAFWE to IP's. (N. Macedonia)**



INCLUSIVE INSURANCE PROJECTS

Macro & Mezzo insurance programs financed by ISF  Europa Re
EUR 1 mm project financed equally



AGRICULTURE INSURANCE POOL N. MACEDONIA

Development of a comprehensive weather risk pooling solution for the Macedonian farmers, the most economically vulnerable part of the population (a model is similar to TARSIM in Turkey).

- ✓ Mandatory insurance for all registered farmers that apply for production subsidies.
- ✓ Initially crop production, then livestock will be covered.
- ✓ Government subsidy 20% of the premium.
- ✓ Insurance companies will join the pool on voluntary basis.
- ✓ Only pool issued policies will be subsidized.
- ✓ Risks covered through the pool will not be able to be covered by the insurance companies which are not part of the pool.
- ✓ Streamlined, innovative and affordable insurance products.
- ✓ Cost efficient and swift claims management.
- ✓ Pool will be a public-private partnership.

MUNICIPAL AYII INSURANCE SERBIA

A meso-level AYII program where a municipality buys AYII as a budget protection instrument in case of natural disasters in agriculture:

Municipality Authority :

- ✓ Is the policyholder and the insured
- ✓ responsible for payment of full premium
- ✓ determines who receives payouts in case of loss
- ✓ decides which crops to insure
- ✓ decides on the scope of AYII program, total area to be insured for each crop, the insured yield coverage level, total sum insured and crop replacement price.

THE ROLE OF GOVERNMENT AND DONORS

➤ **Governments:**

- **Raise the awareness of farmers for agriculture insurance.**
- **Provide affordable mandatory insurance as a form of financial safety net for all economically vulnerable farmers.**
- **Provide premium subsidies.**

➤ **Donors:**

- **Should display flexibility in assessing how project objectives are being realized.**
- **Interest in supporting SEE Region is decreasing, but donor support is still very much needed.**
- **Provide TA and work closely with both the government and the insurance companies.**
- **Provide funds for goods (IT infrastructure mainly).**



THANK YOU FOR YOUR ATTENTION
