GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCING

Session 3:

Market-Based Instruments for Climate and Disaster Risk Financing for Agriculture

Disaster Risk Financing & Insurance Program
SUPPORTED BY WORLD BANK GROUP
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SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY
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Introduction

Low- and middle-income countries face challenges in managing the financial impact from disasters to agriculture. Government's agriculture related post-disaster support efforts often rely on limited domestic resources and short-term international aid. Agricultural households and firms lack access to suitable and affordable climate risk financing and insurance products. Establishing appropriate risk financing strategies can help address these challenges and build resilience for governments, agricultural households and businesses.

The third global webinar series is held in partnership with ASEAN+3 DRF Initiative, SEADRIF, ASEAN Secretariat. Building on the successes of the last two series on DRFA, this will be held with a focus on ASEAN+3 in response to request for DRFA knowledge exchange. The knowledge sharing events are enabled with generous support from the SEADRIF MDTF with financial contributions from Japan Ministry of Finance.

This knowledge exchange series on DRFA aims to (i) increase the understanding and capacity of participants to design and implement DRFA programs by filling in the knowledge gap and enhancing knowledge exchange among participants and (ii) foster collaboration among ASEAN +3 member countries and beyond through exploring potential regional and country level solutions to address DRF challenges in member countries.

What will the four webinars cover?

Webinar 1

Climate and Disaster Risk Financing for Agriculture (CDRFA):

Policy, legal and institutional considerations

Webinar 2

Climate and Disaster Risk Financing for Agriculture (CDRFA) Instruments:

Government Supported Programs

Webinar 3

Climate and Disaster Risk Financing for Agriculture (CDRFA) Instruments:

Public private partnership and market-based instruments

Webinar 4

Climate and Disaster Risk Financing for Agriculture (CDRFA):

Data analytics and technology

Structure of Webinars

Total of 4 90-105 minute Webinars in the Webinar Series

Different guest speakers

Q&A: Please share your questions via chat and during registration

Participants will have an opportunity to obtain "Certificate of Informed Policymaker" from the World Bank on successful completion of following criteria:

Completion Certificate:

Participants need to attend all 4 webinars and complete a short survey/quiz at the end of the webinar series.

Photo Credit: Bruno / Pixabay

Recap the key points in Session 2

Government-Supported Programs for Climate and Disaster Risk Financing for Agriculture (CDRFA)

With the country experience of India, Korea, and Thailand.

Government needs to support CDRFA because:

- Disaster related losses to agriculture are drivers of Governments' contingent liability
- Market inefficiencies exist

Government-supported programs for CDRFA can **take various forms** through fiscal and non-fiscal support measures. They have both limitations and benefits.

Government leadership in **balancing government support with long-term private sector involvement** is one of the keys to build sustainable programs for CDRFA.

Government can also strength its programs by **aliging various government support programs** (insurance, credit, direct compensation etc.) and **leveraging technology** to create effecive synergies .

Today's Agenda (105 minutes)

1. Opening Remarks
2. Framing Presentation
3. In-depth Presentations
   - Malaysia – Agrobank
   - Spain – AgroSeguro
   - Horn of Africa – DRIVE
   - Southeast Asia Disaster Risk Insurance Facility
4. Q&A Session
5. Closing Remarks

Photo credit Quang Nguyen Vinh / Pexels

OPENING REMARKS

Sifong Oumavong

Deputy Director General, External Finance Department, Ministry of Finance, Lao PDR

Photo Credit: Dan Meyers / Unsplash

Framing Presentation

Market-Based Instruments for Climate and Disaster Risk Financing for Agriculture

Radu Tatucu

Senior Financial Sector Specialist,
Finance, Competitiveness and
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World Bank Group

Disaster Risk Financing & Insurance Program

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Photo: Pete Linforth / Pixabay

Overview of the framing presentation:

Market-based instruments for agriculture risk financing:

WHAT

WHY

HOW

What are market-based instruments:
- Different types of market-based instruments
- How market based instruments function

Why market-based instruments are needed for agriculture risk financing:
- Limitations of conventional approach
- Benefits of market-based instruments

How to scale market-based instruments:
- Opportunities
- Challenges
- How to leverage the private sector

What Are Market-Based Instruments for Climate and Disaster Risk Financing for Agriculture?

Tools and solutions designed to manage financial impacts from climate and disaster risks in agriculture by leveraging the financial markets or private sector

Market-Based Solutions for Agriculture Risk Management

	Savings	Credit	Remittances	Insurance	Credit Guarantees	Technology	Advisory
Risk Reduction	Investment, input	Investment, input	Investment, input		Investment, input	Investment	Investment
Risk Retention	Loss absorption	Loss absorption	Loss absorption		Loss absorption	Loss mitigation	Loss mitigation
Risk Transfer		Loan for premiums		Payout proceeds		Rapid payouts	Products (risk modeling, data)

Why Are Market-Based Instruments Needed?

Complementing conventional approaches to build agricultural resilience through market solutions.

High vulnerability to risk: Agriculture is highly exposed to climate change, natural disasters, and price volatility.

Limitations of government support: Public interventions have limitations - inefficiencies, budgetary constraints, lack of sustainability, low participation rate, slow.

Efficiency: Market mechanisms enable cost-effective and timely risk management.

Innovation: These instruments foster technological and financial innovation in risk transfer.

Long-term investment: They encourage sustainable farming and resilience-building in agriculture.

Diversification of Funding Sources: Diversifying risk financing beyond public funds through broader capital market access

Scalability and Sustainability: Market-based solutions offer sustainable and scalable mechanisms when backed by strategic long-term investment, Unlike ad-hoc measures

How to scale market-based instruments:
Opportunities for Scaling Market-Based Instruments

Unlocking scale through integrated solutions and stakeholder collaboration.

Advances in technology (e.g., satellite data, remote sensing, digital platforms, AI): Improved accuracy in risk assessments and streamlined product distribution.

Public-private partnerships (PPPs): Collaborative resource pooling and risk sharing to create accessible financial tools

Innovative product design: Develop products addressing specific agricultural risks to improve relevance and uptake

Policy support and incentives: Subsidies, tax benefits, and regulatory frameworks to promote adoption.

Capacity building and education: Training stakeholders at both demand and supply sides to enhance understanding, utilization, and trust/credibility

Integration with broader risk management strategies: Ensure complementarity with other financial tools and programs, enhancing overall resilience and sustainability

How to scale market-based instruments:

Challenges in Scaling Market-Based Instruments

Addressing structural challenges is critical to expanding market-based solutions.

Scaling requires addressing barriers such as:

Data limitation: Lack of high-quality historical and real-time data for risk assessment

Affordability: High premiums limiting uptake among farmers and businesses

Low financial inclusion in rural areas: Remote rural areas often have limited access to financial services and insurance providers.

Capacity constraints: both demand side (farmer) and supply side (financial institution) lack the necessary knowledge and expertise

Insufficient regulatory and institutional frameworks: Lack of enabling policies and oversight for effective implementation

Basis risks in index-based insurance: Mismatches between index-triggered payouts and actual losses experienced

How to scale market-based instruments:
How the Private Sector Can Be Better Leveraged?

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Collaborate, innovate, and incentivize for long-term private sector investment.

1 **Public-private partnership (PPPs)**
Public-private partnerships can share risks and enhance capacity.

2 **Policy/regulatory incentives**
Tax benefits and enabling frameworks can attract private investment.

3 **Market infrastructure and information**
Establish standardized data systems for seamless service delivery

4 **Technology and innovation**
Leverage digital solutions and analytics for efficient risk assessment and response

5 **Risk pooling mechanisms**
Spread risk portfolio across countries/ regions to lower costs.

6 **Risk financing ecosystem**
Support integrated network/ framework of financial tools and stakeholders managing agricultural risks.

7 **Demand-side development**
Enhance accessibility through education and targeted support programs.

8 **Partnerships**
Strengthen multi-stakeholder collaboration to drive innovation and achieve sustainable outcomes

Reference

1. World Bank Group, Disaster Risk Financing and Insurance Program. (2023). *Knowledge Series: Disaster Risk Financing Solutions for Climate-resilient Livelihoods in the Agricultural Sector* [Factsheets]. Financial Protection Forum. https://www.financialprotectionforum.org/knowledge-series-disaster-risk f inancing-solutions-for-climate-resilient-livelihoods-in-the-agricultural-sector

2. World Bank Group, Disaster Risk Financing and Insurance Program. (2021-2022). *Strengthening Financial Resilience in Agriculture Knowledge Series* [Factsheets]. Financial Protection Forum. https://www. f inancialprotectionforum.org/knowledge-series-strengthening-financial-resilience-in-agriculture

3. United Nations University Institute for Environment and Human Security. (2021). Climate and Disaster Risk Financing Instruments: An Overview. https://www.uncdf.org/article/6767/climate-and-disaster-risk-financing-instruments

Case Study

GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Market-Based Instruments
for Climate and Disaster Risk Financing for Agriculture

Paddy Crop Takaful Scheme: Reducing the Protection Gap in Agriculture

Speaker

Mohamad Taufik Mahamad Zakaria

Chief Strategy Officer, Agrobank

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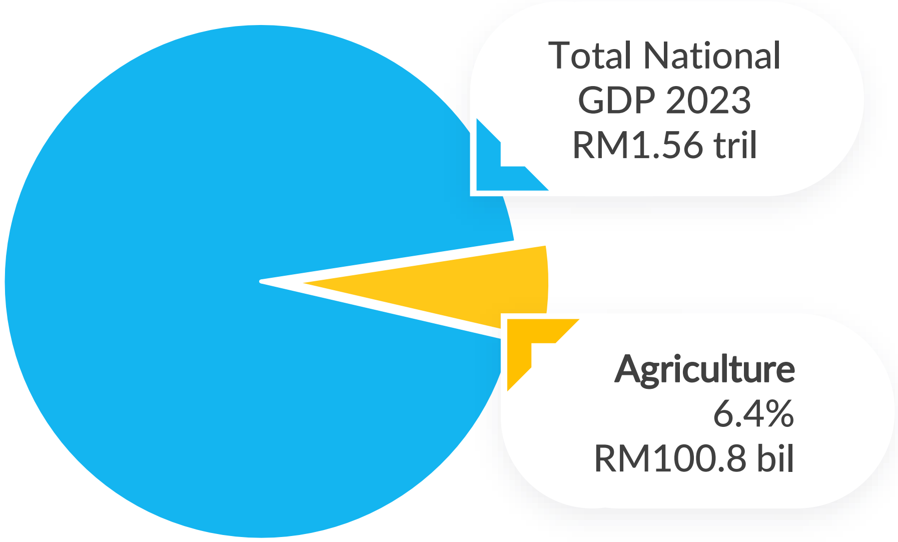
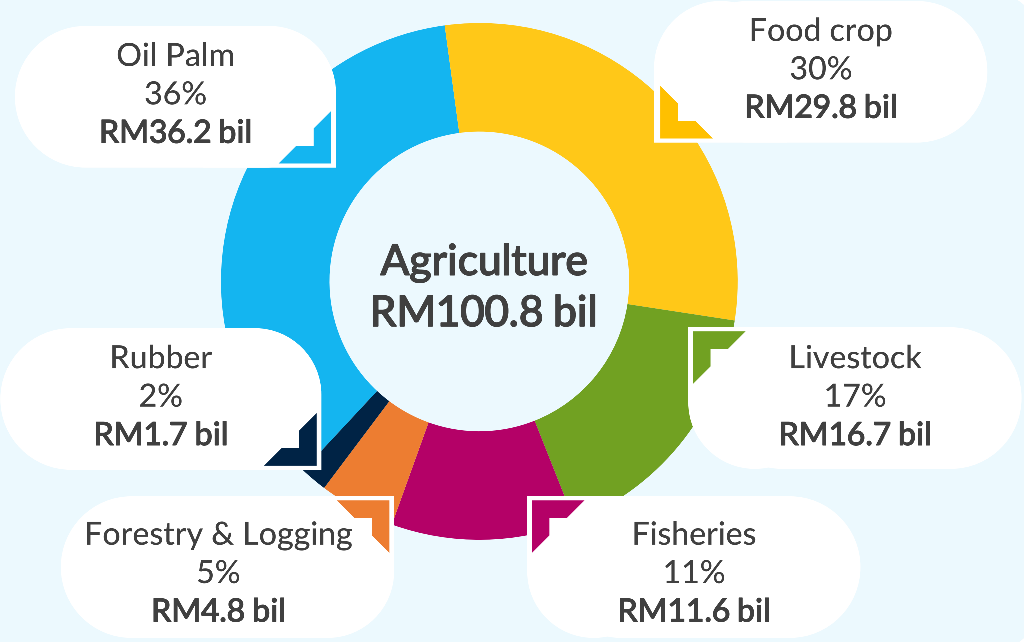
Photo credit: Pat Whelen/unsplash

Primary agriculture contributes approximately 6.4% to Malaysia's national GDP





Agriculture is the 3rd largest contributor to GDP after services and manufacturing sectors.

Agrofood sector contributes approx. 63% to national GDP.

Agriculture employs 1.5 million people (10% of total workforce).

Key features of conventional insurance vs takaful

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Insurance	Takaful
Risk transfer between policy holder and insurance company	**Risk sharing** amongst participants (members of the fund)
Buy and sell contract where the premiums become the property of the insurance company, which assumes all risks and profits or losses	**Mutual protection concept** – each participant protects each other against loss or damage and the takaful company manages the money in the pool, either as a manager for a fee or as a partner sharing profits.
Premiums in conventional insurance are paid in **exchange for coverage** by the insurance company	People who choose to contribute to a takaful fund **share common interests** (to protect themselves and other members from harm deriving from loss or damage)
Insurance companies exist to **maximise profits and shareholder value**	Takaful companies exist not solely for profit but to **promote risk-sharing.**
Insurance companies are responsible to **pay the benefit from company assets**	Takaful companies manages the scheme and **pays the benefit from takaful fund**
Insurance companies can make **unrestricted investments** of premiums	Takaful companies can only make investments in **Shariah-compliant activities**
Entire **surplus belongs to the insurance company** and is distributed among stockholders	Surplus from the takaful fund **belongs to the participants** and is to be refunded to them, the operator is permitted to charge a performance fee

Paddy as the first priority sector for takaful protection

One of the strategic subsectors identified under Malaysia's National Agrofood Policy (NAP 2021-2030) – to boost production for food security, and to provide a comprehensive agriculture insurance scheme for food producers against natural disasters and outbreaks of infectious diseases and pestilence.

Why paddy sector first?

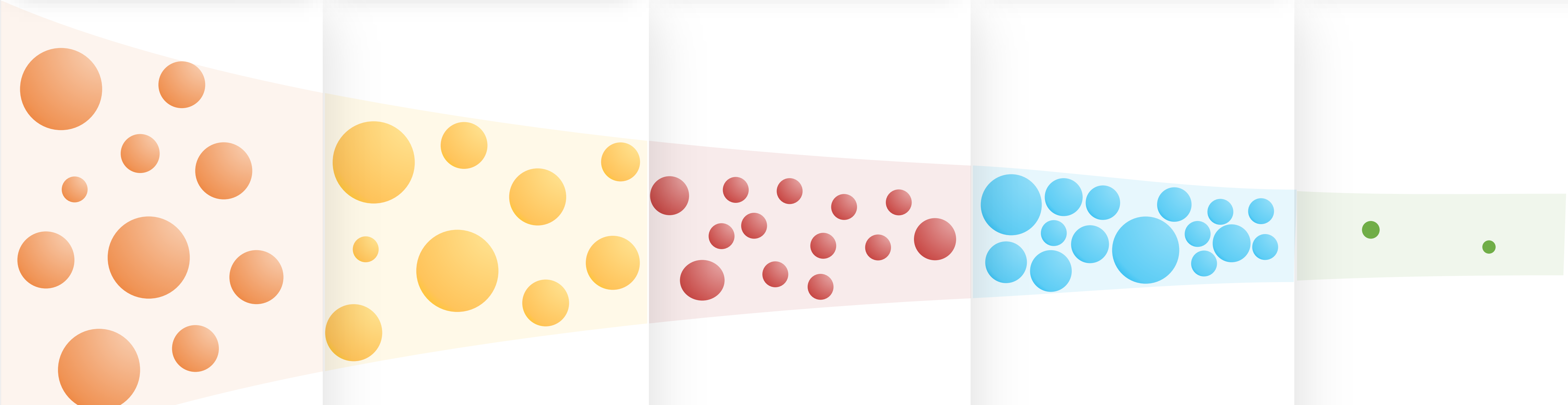
- Rice is a staple food of Malaysians (Per Capita Consumption: 76.7kg / year)
- Paddy subsector involves approx. 200k individual paddy farmers – majority of which are smallholders – biggest segment of farmers in Malaysia (out of total population of 470k farmers)
- Declining rice production – 2.18 million tonnes in 2023 (2022: 2.28 million tonnes)
- Paddy subsector has high physical risk (natural disasters such as floods, droughts) that is beyond the control of paddy farmers – approx. RM32 million in damage affecting 5,822 ha in 2024 alone
- Paddy cultivation utilizes a large land area – approx. 650k ha used for planting paddy annually
- Paddy has high dependency on government subsidies (approx. RM2,900/ha: RM1,550/ha input subsidy and RM1,440 production subsidy for 4MT)

Development of takaful for the agrofood sector in Malaysia using phased approach.

Structure of paddy farmer's financial security

RM100 million a year

Agriculture Best Practices + Government Interventions	*Irrigation Programs Flood Barrier Projects*	*1st Line of Defence –* RM15 million	*2nd Line of Defence –* RM85 million	*3rd Line of Defence –* Capital Allocation*



*Capital allocation can be used to increase the aggregate stop loss to RM250 million a year if necessary

Challenges faced by existing national disaster relief fund mechanisms

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Challenges faced by the paddy farmers

- Smaller quantum of compensation (RM1,800/ha per season, up to 3 hectares)
- Claims on damages only covers 2 stages of cultivation (<70 days, 71-120 days)
- Claims paid is dependent on fund availability

Challenges faced by the government

- Variable financial outlay by government
- Full burden on government to maintain scheme without support from private entities
- Provision of disaster relief is dependent on multiple parties (not consolidated effort)
- Uncertainty in budget planning due to unpredictable nature of claim events
- High risk of dissatisfaction from rakyat when disaster relief is not executed efficiently

STTP is Malaysia's first crop takaful scheme and is expected to protect approx. 200k paddy farmers

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Paddy Disaster Relief Fund (TBTP)		Paddy Crop Takaful Scheme (STTP)
None	Costs	**RM60 / ha / season**
Limited to 3 hectares	Hectarage	**Unlimited**
RM1,800 / ha / season	Coverage	**RM3,000 / ha / season**
2 planting phases Phase 1: ≤70 days – RM876 Phase 2: >71 days – RM1,800	Planting Phases	**3 planting phases** Phase 1: ≤50 days - RM1,500 (50%) Phase 2: 51 – 75 days - RM2,250 (75%) Phase 3: 76 – 120 days - RM3,000 (100%)

STTP covers the following natural calamities or pests & diseases:

- Flood
- Drought
- Lightning and/or thunderbolt
- Natural fire
- Natural explosion
- Hurricanes, cyclone or typhoon
- Windstorm, hailstorm, or tornado
- Storm and Tempest
- Earthquake
- Volcanic rupture
- Landslide
- Tsunami
- Diseases*
- Pest attacks*

*Note: Diseases and pest attacks are subject to the declaration of an outbreak by the Department of Agriculture or other competent authorities

The design of STTP provides a strong value proposition to the paddy farmers and the government

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Benefits to the paddy farmers

Financial safety net for farmers to continue farming crops and contribute to national food security agenda

Larger quantum of compensation provided (RM3,000/ha, no limit of hectarage)

Claims on damages covers 3 stages of cultivation (<50 days, 51-75 days, 76-120 days)

No financial commitment required in the initial stages, due to **full government subsidy**

Claims will be **paid within 14 days** of Technical Committee approval

Benefits to the government

Fixed financial outlay by government with **burden-sharing mechanism** to reduce long-term outlay

Additional annual **retakaful capacity** of up to RM100 million

Provide ample and **fast relief** to rakyat in response to emergencies

Greater certainty in budget planning for disaster relief, allowing for reutilisation of resources towards other development areas of strategic importance

Invites **greater financial investment into the sector** leading to better productivity

STTP is executed by Agrobank's first subsidiary – Agro Captive Takaful Limited (ACTL) using a captive model

Agro Captive Takaful Limited (ACTL)

Agro Captive Takaful Limited ("ACTL") is a wholly-owned Shariah Compliant Pure Captive subsidiary of Agrobank registered in Labuan, established under the following Acts:

- Section 25 of the Development and Financial Institution Act 2002; and
- Section 76 of the Labuan Islamic Financial Services and Securities Act 2010

Leverages existing capabilities of Agrobank and existing systems/processes of the government agencies to provide a seamless experience for the paddy farmers

Low operating costs using an outsourcing model allows ACTL to transfer savings to the paddy farmers in terms of reduced premiums

Why captive model?

Provides us with direct access to the retakaful market enhancing the ability to secure competitive rates

Optimised risk management - effectively manage financial risks with retakaful partners

ACTL operates using a wakalah operating model

Currently, government subsidises the contributions to the registered farmers under STTP – RM60/ha/season.

% of the PRF is deducted as a wakalah fee and transferred to the Shareholders Fund (SHF) to cover management expenses.

The strategy may evolve towards a targeted subsidy, providing subsidies to eligible participants while others contribute either partially or fully, subject to the government's direction.

% of the PRF is used for takaful operations, including claims payments, reserves, and retakaful, and the remainder is invested in Shariah-compliant investments.

ACTL acts as wakalah agent to manage the contributions, channeled to a Participant Risk Fund (PRF).

Surplus from PRF shared between eligible participants and SHF.

How We Bring The Costs Down

General willingness to pay (WTP)* : 76% of farmers expressed a willingness to pay for crop insurance/takaful

Willingness to pay among paddy farmers is influenced by affordability, regional economic conditions, and perceived value of crop insurance.

69% willing to pay

15% willing to pay

11% willing to pay

5% willing to pay

**Findings Crop Insurance to Adapt Flood Risk by Malaysian Farmers: An Empirical Investigation of Kedah International Journal of Economics and Financial Issues, 2017, 7(4), 1-9. by Rafia Afroz, Rulia Akhtar and Puteri Farhana (IIUM)*

Premium cost

RM0 | RM50 | RM100 | RM150 | RM200 | RM250

STTP premium RM60

How we reduced our costs

Through a tender process involving all Labuan-based brokers to secure the best rates for paddy crop takaful.

Shared historical loss data from the Department of Agriculture (DOA), maintained since 2007, to support the process.

Evaluated proposals based on multiple criteria, with the lowest premium and most comprehensive benefits receiving a high score.

Premium quoted by existing takaful companies:

≈RM200-250 per ha per season

Expected Challenges and Success Factors Going Forward

Challenges faced in execution of STTP

- Dependence on government subsidy to cover contribution and/or retakaful costs in early stages of implementation
- Ability to secure re-takaful coverage at affordable cost
- Excessive high claim experience
- Low-take up rates due to low awareness
- Balance between affordability and extensiveness of coverage

Key success factors

- Building trust and acceptance by paddy farmers and key stakeholders
- Wide national outreach utilizing strong network and existing connections between Agrobank and other MAFS agencies
- Efficient onboarding process utilizing local farmer's organisations (PPK) and Agrobank's branch network
- Leverage existing systems and processes for claims resolution applied by TBTP for seamless transition to STTP
- Endorsement and support from agencies and stakeholders
- Financial sustainability with robust capital management

Role and experience of Agroseguro in the Spanish agricultural insurance

Elsa Sánchez Elizo

12th December 2024

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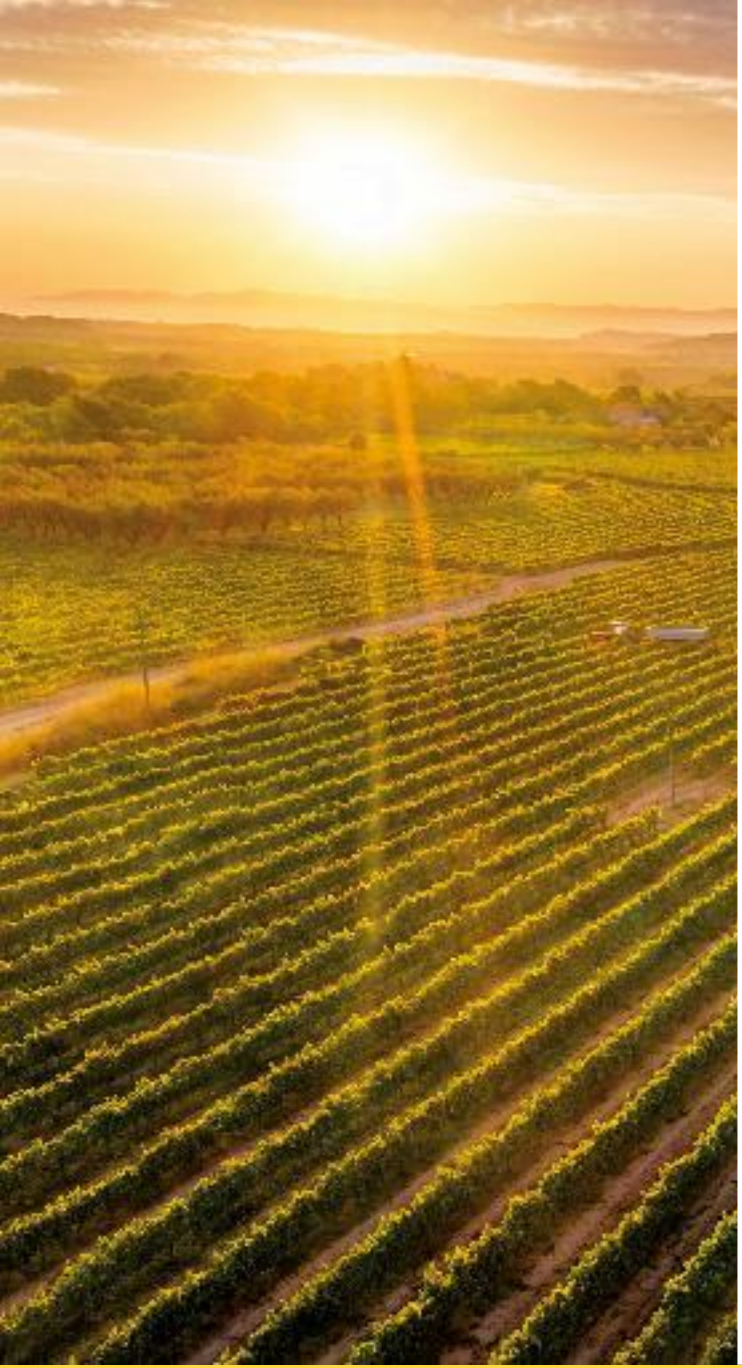
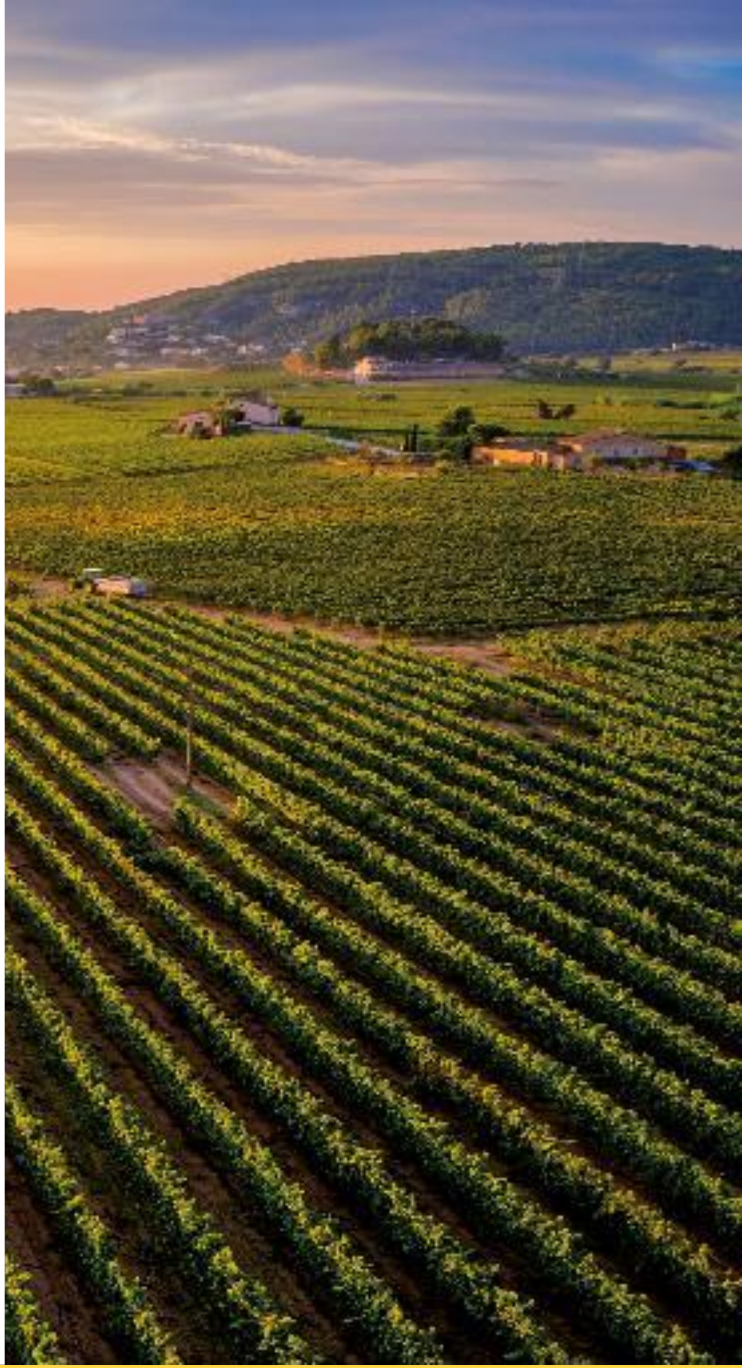


1 | Introduction and context

2 | Structure and role of Agroseguro

3 | Insurance portfolio and main figures

4 | Conclusions and final thoughts



1. Introduction and context: Non-life insurance in Spain

2023

Non-life total premiums:

43.004M€ +6,8%

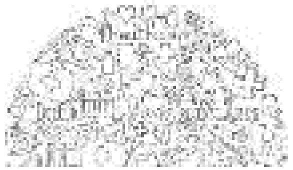
Agroinsurance
1.011M€
+16,52%

1,9%
Agroinsurance share in 2014

2,4%
in 2023

January-September 2024 - 34.660M€ +7,8%

Health **9.108M€** +7,7%



Motor **9.809M€** +8,8%

Multirisk **7.358M€** +8,7%

Other non-life **8.383M€** +6,0%

Agricultural insurance (January-September)
+6,2%

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(*) Source Evolution of insurance market. Statistics September 2024

1. Introduction and context: Spanish agricultural insurance system

- It is among the **top three agroinsurance systems in the world**. It serves as an example for the development of agricultural insurance in other countries. More than **1 billion Euros** in premiums

- Based on the **joint participation of public and private institutions**: Government, insurance sector and producer sector.

- **Specific legal framework:** Law 87/1978 on combined agricultural insurance and Regulation RD 2329/1979 on combined agricultural insurance.

- Grouping (through the voluntary membership) of **private insurers**: *Pool* **AGROSEGURO**: 16 private insurance companies

- Very important **subsidy to insurance premiums** by Central and Regional governments.

- Cover of extreme losses by a **reinsurance cover** (Consorcio de Compensación de Seguros (CCS), an entity under the auspices of the Ministry of Economy, Trade and Business).

1. Introduction and context: Spanish agricultural insurance system

Key public institutions in agricultural insurance

MINISTERIO DE ECONOMÍA, COMERCIO Y EMPRESA

DIRECCIÓN GENERAL DE SEGUROS Y FONDOS DE PENSIONES

CONSORCIO DE COMPENSACIÓN DE SEGUROS

Reinsurance

MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN

ENESA Entidad Estatal de Seguros Agrarios

Primary sector

Producers' organizations

agroseguro

44 years of history

Insured producers

(farmers and livestock breeders)

Insurance beneficiaries

agropelayo, Allianz, AXA, cajamar, caser Grupo Helvetia, FIATC Seguros, GENERALI, helvetia, MAPFRE, MGS Seguros, AGROMAS, Mussap, Occident, REALE SEGUROS, santalucía, RGA

16 private insurance companies (grouped in AGROSEGURO)

45 groups of insurance products

Significant subsidy to insurance premiums from **Central and Regional governments.**

Voluntary underwriting of insurance policies from **producers**.

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2. Structure and role of Agroseguro

Who are we?

- AGROSEGURO is the coinsurance pool management entity on behalf of all the grouped insurers.
- Legal form: Joint Stock Company.
- Shareholders: all coinsurers, who have the same proportion of stock capital and risk assumption.

Main access requirements for coinsurers

- To be authorised to operate in the corresponding insurance branches (branches No. 8 and 9 specified in the Annex to the Law 20/2015 LOSSEAR).
- To comply with Solvency regulations regarding the insurance sector.
- To formally request to take part in the pool.

Minimum initial share (0.05%) that could vary depending on the contribution to the pool turnover.

Those entities not contributing to the turnover will no longer form part of the pool.

2. Structure and role of Agroseguro

Pool advantages and keys for success

POOL SOLVENCY

Capacity to face great risk accumulation (catastrophic risks)

STANDARDIZED STATISTICAL INFORMATION

Geographic, risks, crops, varieties,…

COMMERCIAL NETWORK DISTRIBUTION

Reaching any part of the country

HOMOGENEOUS DAMAGE VALUATION

Distribution and mobility

Adjustment rules are public and part of the contract.

2. Structure and role of Agroseguro

Main functions of Agroseguro

- ✓ **Representation of each and every coinsurance company.**
- ✓ **Insurance underwriting on behalf of all coinsurance companies.**
- ✓ **Subsidies management.**
- ✓ **Claims (assessment and payment) management.**

3. Insurance portfolio and main figures

CROPS

29
INSURANCE PRODUCTS

FORESTRY

1
INSURANCE PRODUCT

LIVESTOCK

12
INSURANCE PRODUCTS

AQUACULTURE

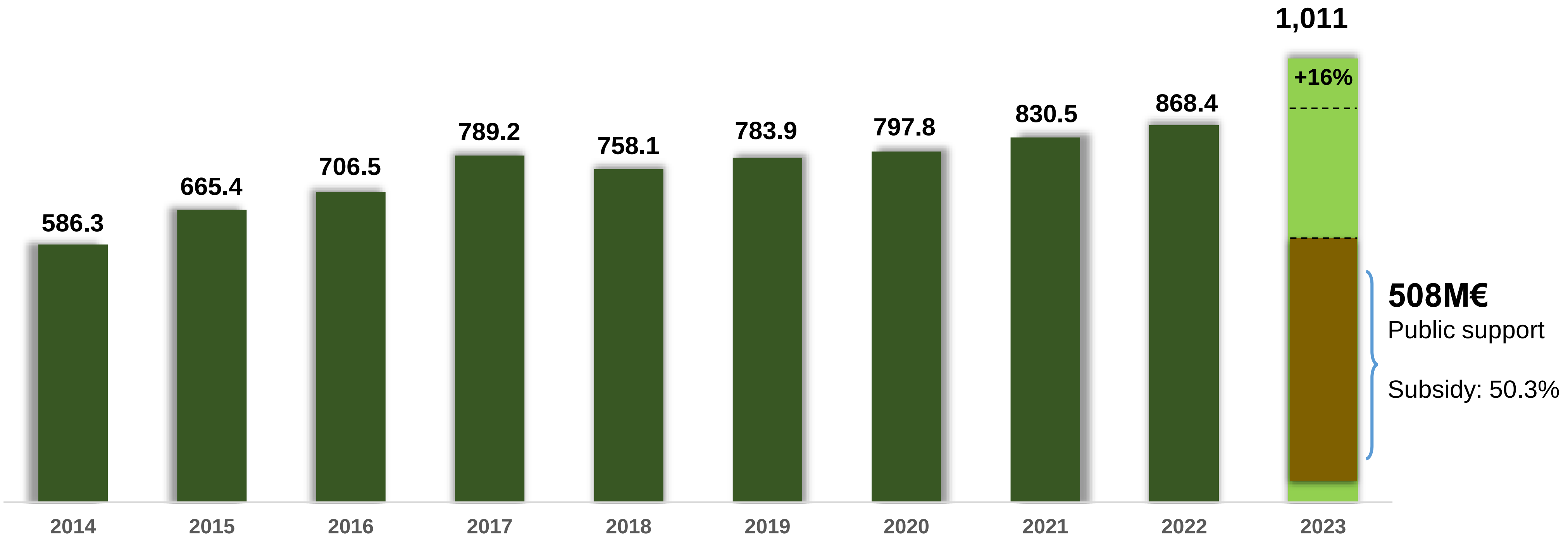
3
INSURANCE PRODUCTS

Practically every single production and risk affecting agricultural exploitations are covered

3. Insurance portfolio and main figures

1,011M€ total premiums

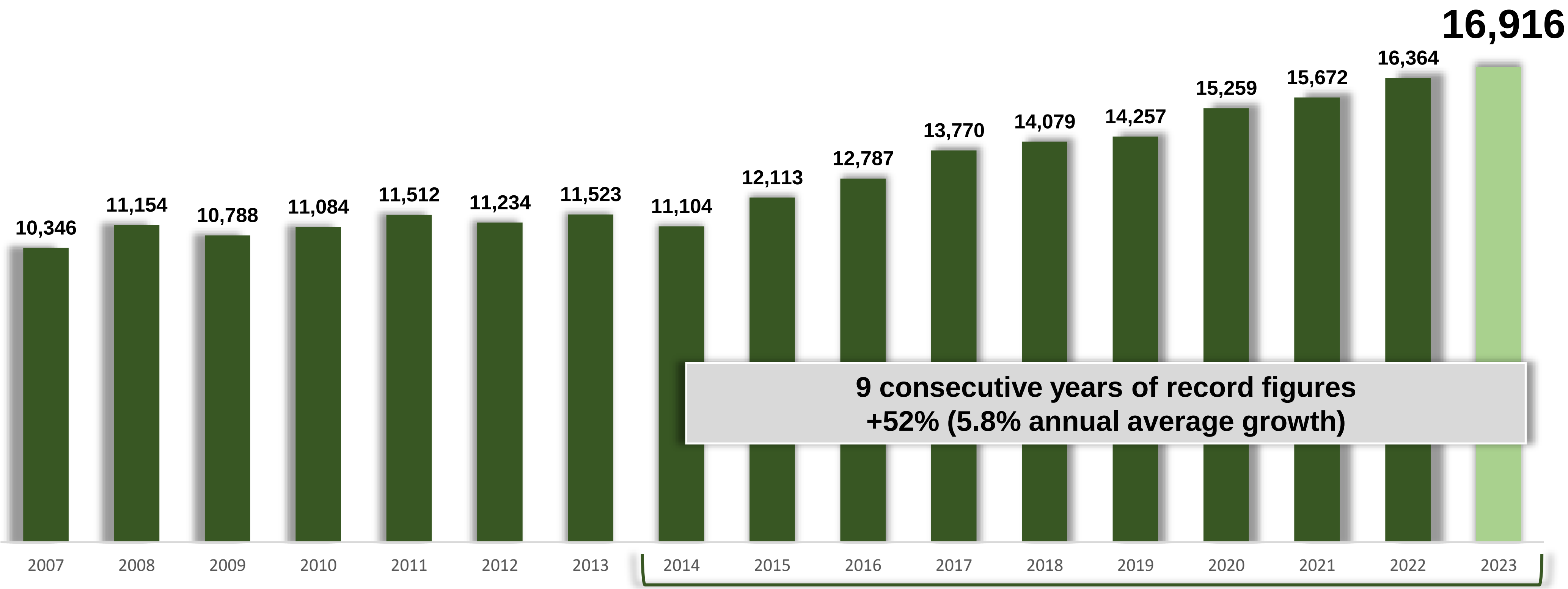
17% growth vs. 2022 and 8% average annual growth during last 10 years



2023: Record in total premiums and insured capital

3. Insurance portfolio and main figures

16,916M€ insured capital



2023: Record in total premiums and insured capital

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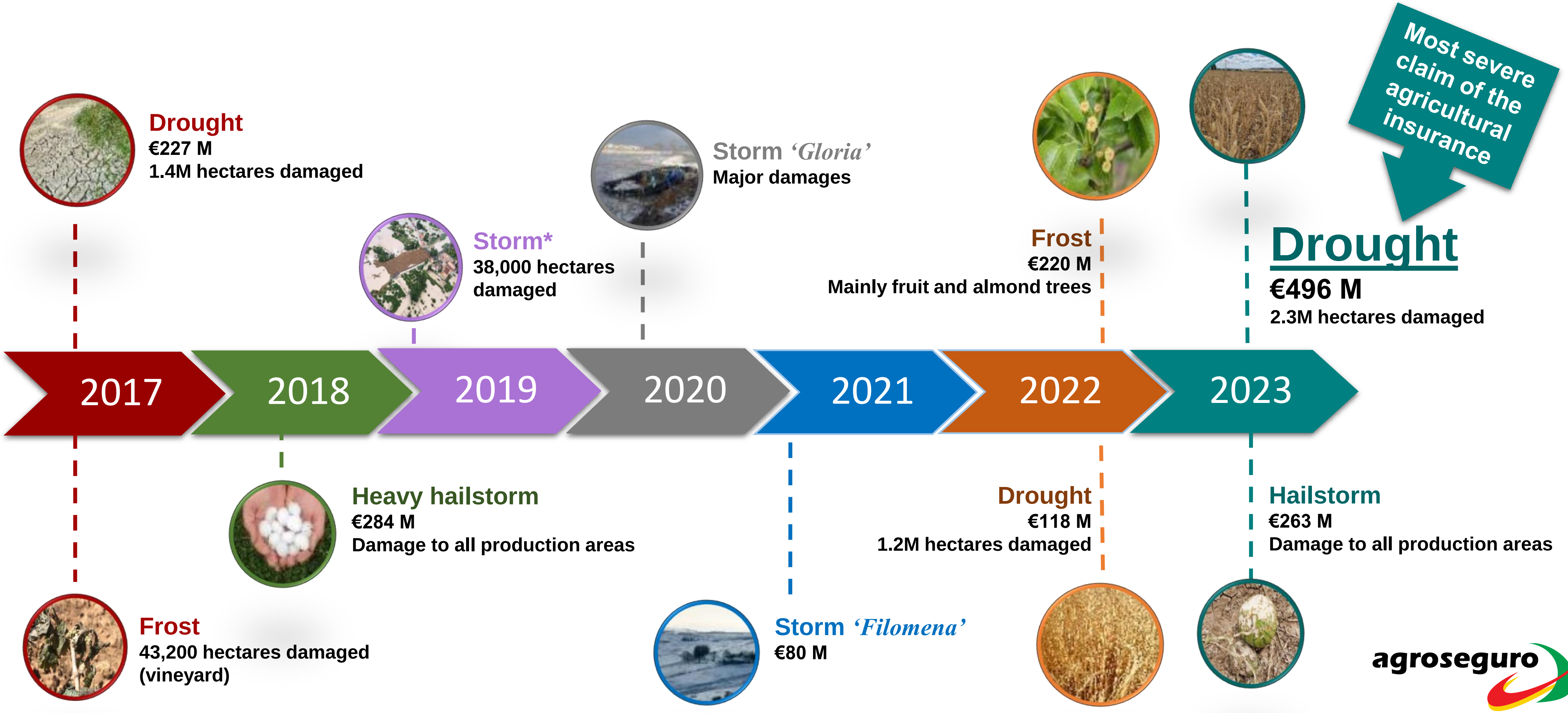
3. Insurance portfolio and main figures



* Isolated High-level Depressions

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4. Conclusions and final thoughts

Changing environment, with many challenges and threats

Need of strategies for resilience and risk management

Price volatility

Regulatory changes

Depopulation

Climate change

Catastrophic events

High adaptation capacity

R&D, training

Policies to maintain the population in rural areas

Risk management tools

AGRICULTURAL INSURANCE

Agricultural insurance contributes to **support** and **give a future** to the **primary sector and rural areas**

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4. Conclusions and final thoughts

- **Climate change effects have accelerated,** especially in the last decade. **Year 2023** has been the **most challenging** in the history of agricultural insurance in Spain.

- All the actors in the agricultural insurance system are committed to achieving its **sustainability** and that of the primary production sector. **Collaboration of all stakeholders**, by taking the necessary measures in each area, is crucial to guarantee the future viability of the system.

- **Agricultural insurance products need to be adapted,** establishing premiums and covers in accordance with the current climatic situation. Agricultural insurance can mitigate losses of viable farms but cannot make farms that are not adapted to climate change viable in the long term.

- Agroseguro is intensively working to foster the **balance and sustainability of the system**, by developing a **sustainable model** and enabling the transfer of knowledge and the generational renewal.

- Agricultural insurance is **committed with the present and future of primary sector** and society at large, promoting innovation and insurance products technically balanced and adapted to producers' needs.


Great Place To Work
Certified
JUN 2024 JUN 2025
ESP
Thank you very much!
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GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Market-Based Instruments
for Climate and Disaster Risk Financing for Agriculture

DRIVE - Regional DRFA initiative in the HoA for pastoralists

Speaker

Megerssa Miressa

Country Manager, DRIVE Ethiopia
ZEP-RE(PTA Reinsurance Company)

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SEADRIF
SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY

DRIVE is a regional project supporting pastoralists, currently implemented in four countries located in the Horn of Africa (HoA)

HORN OF AFRICA INITIATIVE

Project Objective

*To enhance pastoralists' access to **financial services** for drought risk mitigation, include them in the **value chains**, and facilitate the **livestock trade** in the Horn of Africa*

Project Financing

$360.5 million total project cost

$28 million Component 1 Global Shield *(Formerly GRiF)* grant

IDA

Global Shield against Climate Risks

Component Structure

1 **Package of financial services for climate resilience ($179 Million)**

Support the provision of an integrated package of financial services to build climate resilience

2 **Livestock Value Chains and Trade Facilitation ($181.5 Million)**

Better include pastoralists in the livestock value chain and facilitate trade in the Horn of Africa

Implemented by:

ZEP-RE

Country Ministries, Departments and Agencies

REGIONAL PROJECT RATIONALE

The regional project design is built on a platform approach for effective and scalable implementation & impact

Peace building
Reduced cross-border movements

Regional implementation
Risk pooling, economies of scale & lower operational costs

Quality trade & infrastructure
Cross-country coordination on livestock trade ecosystem

Financial package currently includes index-based livestock insurance and savings products tailored to pastoralists

FINANCIAL SERVICES DELIVERED DIGITALLY

LIVESTOCK INSURANCE

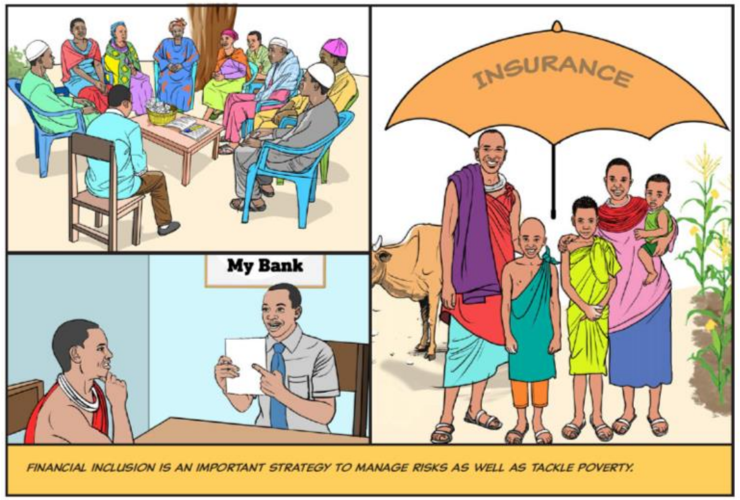
- **Index-based livestock insurance (IBLI)** coverage for Tropical Livestock Units (TLUs*)
- **Premium subsidy** to support pastoralist for up to five TLUs

SAVINGS ACCOUNT

- **Enrolment bonus** to introduce savings habits with formal financial institutions
- **Ongoing savings bonus** to incentivise continuous saving

1 TLU = 1 cow, 10 sheep, 10 goats or 0.7 of a camel

OUTREACH & DISTRIBUTION



Snippet from DRIVE Training Booklet

AWARENESS CREATION activities by ZEP-RE in pastoralist communities

DISTRIBUTION LINKAGES facilitated by ZEP-RE with regional government teams

DRIVE IBLI Product

An asset protection drought insurance cover whose aim is to keep the livestock alive and compliment pastoralists savings during drought events. DRIVE IBLI product is not a social protection scheme, as such, Insureds are expected to contribute to supplement the premium subsidy

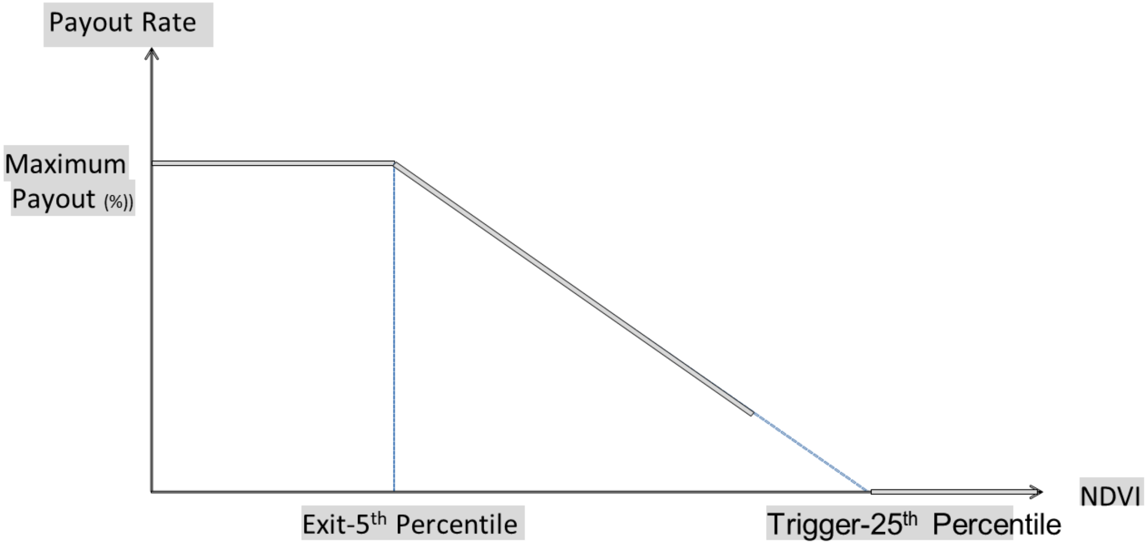
Livestock Covered:


Sheep


Cattle


Camel


Goat



Distribution approaches

Banks and Livestock Professional Association

Bigger groups – NGOs, MFIs, Banks, Cooperatives, National & Regional Govt projects.

Distribution led by Bank Agents and Village insurance Promoters (VIPs) from the cooperatives
Enabled by a strong Cooperative model in Ethiopia

DRIVE_IBLI Structure

Year 3 Structure	Ethiopia	Kenya	Somalia
Sum insured	$140	$140	$150
Av. Premium-EVIIRS	20.79%	21.14%	21.19%
Coverage	Annual: calculated over the Wet season Only LR: March – June SR – Oct - Dec	Annual: Annual: calculated over Wet season Only LR: March – June SR – Oct - Dec	Annual: calculated over Wet season Only LR: April – June SR – Oct - Dec
Subsidy Level (Up to 5 TLUs)	70% all UAIs	65% - Garissa, Samburu, Tana River, Wajir 70% - Isiolo, Mandera, Marsabit, Turkana, Kajiado, Laikipia, Lamu, Narok 80% - All new Counties	80% (90% new Regions)
UAIs covered	97 - **In Afar, Oromia, South Ethiopia, Southwest and Somali**	265 in 21 counties	57– In Gedo, Hiraan, Bakool, Galguduud, Bay, Lower Juba, Lower Shabelle and Middle Shabelle
Savings bonus			
Enrolment bonus	$50	$50	$50
Ongoing bonus	10% to a max of $50	15% to a maximum of $100	10% to a max of $50

Details of DRIVE impact to date: 3 million people have been impacted across three countries, with $254M value derisked

Total Number of Policies, Gender split and Productive Groups

Country	Year 1	Year 2	Year 3	Total Household	Total Pastoralists & their dependents**	% of Female	Productive Groups***
Kenya	74,552	64,127	48,224	186,903	1,196,179	60%	7,763
Ethiopia	52,805	84,646	25,492	162,943	1,042,989	45%	240
Somalia	44,408	68,965	10,392	123,765	792,096	59%	2,578
Total HHs	**171,765**	**217,738**	**84,132**	**473,635**	**3,031,264**	**56%**	**10,581***

Year 3 ***group data reconciliation ongoing and one sales window is remaining***

Total Number of Partners and Payments made

Country	Private sector Partners (Banks and Insurers)	Premium collected	Private Capital Employed (Sum Insured)	Bonus paid	Claims paid
Kenya	18	$17,556,496	$85,214,733	$5,459,650	$5,107,781
Ethiopia	7	$18,608,854	$91,336,741	$6,187,795	$1,313,212
Somalia	7	$15,243,881	$77,319,345	$7,076,300	-
Total	**32**	**$51,409,231**	**$253,870,819**	**$18,723,745**	**$6,420,993**

***The multiplier is 6.4 for dependents this translates to 3M pastoralists and their dependents*

DRIVE has developed a platform that can be replicated for climate resilience initiatives in the continent

Elements of the climate resilience platform

Stakeholders Engagement. Gvts, development partners and private sector	**Product Development** for resilience/ fin inclusion	**Last Mile Distribution** Channels. **Capacity Building** and Awareness	**Aggregation of beneficiaries** and linkages to markets	**Fiduciary Management** across countries

Digital infrastructure can facilitate operational processes and cross-institutional collaboration

Climate resilience platform can be leveraged to:

ROLLOUT IN EAST AFRICA, SAHEL REGION & BEYOND

Deepen uptake in Eth/Ken/Somalia for enhanced resilience e.g., cover additional livestock

Expand to additional countries in East Africa

Replicate the model to other regions like the Sahel to stabilize pastoral economies

Thank You!

THE WORLD BANK

Case Study

GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Market-Based Instruments
for Climate and Disaster Risk Financing for Agriculture

SEADRIF - Opportunities and challenges for Scaling DRFA Solutions through Regional Mechanisms

Speaker

Ellen Yong

Chief Operating and Financial Officer

Disaster Risk Financing & Insurance Program

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SEADRIF
SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY

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Photo credit:Curt Carnemark / World Ban

Topics for today

1. SEADRIF: Who we are

2. Regional cooperation in insurance – Challenges and Benefits

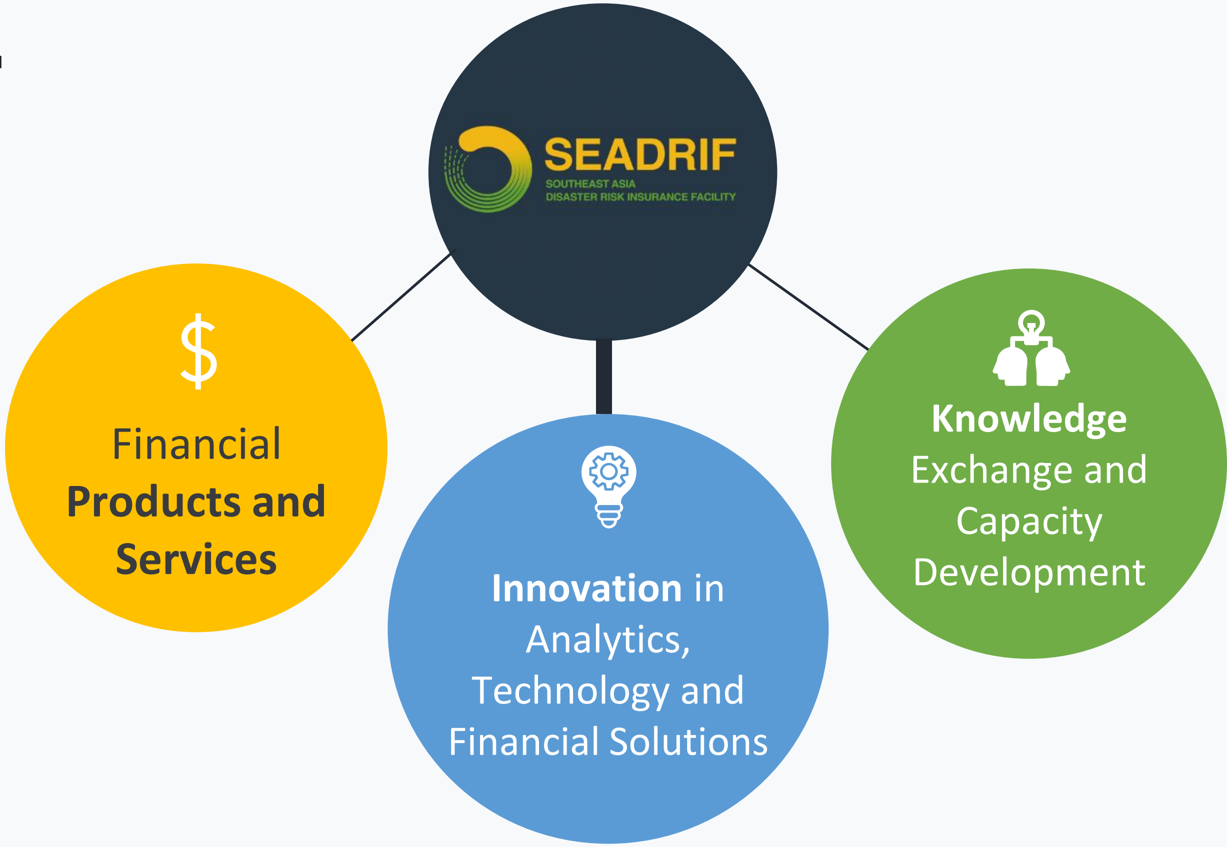
3. Opportunities for regional collaboration in agriculture risk finance

SEADRIF: Who we are

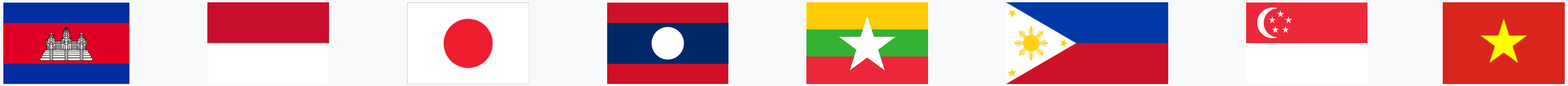
SEADRIF
SOUTHEAST ASIA
DISASTER RISK INSURANCE FACILITY

Southeast Asia Disaster Risk Insurance Facility (SEADRIF)

Provide ASEAN countries with insurance and technical solutions to strengthen financial resilience
against disaster and climate shocks



Established through a Memorandum of Understanding signed by Finance Ministries.



Cambodia | Indonesia | Japan | Lao PDR | Myanmar | Philippines | Singapore | Vietnam

Political mandate from ASEAN+3

16. We welcome the progress on the Disaster Risk Financing (DRF) after its upgrading as a regular agenda item under the ASEAN+3 finance track, with the support of the World Bank, the Southeast Asia Disaster Risk Insurance Facility (SEADRIF), and the ASEAN Cross-Sectional Coordination Committee on Disaster Risk Financing and Insurance (ACSCC-DRFI).

…

We also welcome Mr. Yoshihiro Kawai as the Secretary General of the ASEAN+3 DRF Initiative Secretariat.

Joint Statement of the 27th ASEAN+3 Finance Ministers' and Central Bank Governors' Meeting Tbilisi, Georgia, 3 May 2024

SEADRIF Insurance Company

Established to take the crisis out of disasters by developing and implementing financial solutions that arrange funds before a disaster.

Owned and overseen by SEADRIF member countries through a Trust in Singapore	Incorporated and regulated in Singapore as a licensed insurance company	Professionally managed and governed by industry experts
Established by members to co-develop solutions for members	Returning or investing any underwriting profits for members	Donor supported capital and operating costs, no commercial investors

SEADRIF: **Development Insurer.**
A new development institution for our members

- **Development Banks** provide technical support and lending products for development investments to members

EXAMPLE **Project Finance**

Government
Development program supported by MDB

Project Financing

Long term price stability; Member owned; any profit reinvested for members.

Development Bank
Member supported capital; Technical expertise; globally diversified balance sheet

Capital Management

Bond issuance

Financial Markets
Cost efficient international borrowing with AAA rating, long standing market relations; specialized global expertise.

- **SEADRIF (Development Insurer)** provides technical support and financial products for disaster and climate risks

EXAMPLE **Risk Transfer**

Government
Insurance product design and implementation supported by SEADRIF

Pre-arranged Financing

Long term price stability; Member owned; any profit reinvested for members.

SEADRIF
Member / Donor supported capital; Technical expertise; regional diversified Portfolio

Exposure Management

Pooled/ Diversified reinsurance placement

Insurance Markets
Cost efficient reinsurance access; strong market relations; specialized global expertise; economies of scale.

SEADRIF **Future Strategic Position:**

Regional Center of Expertise

We are a leading and recognized ASEAN+3 center of excellence for climate and disaster risk finance, enabling the efficient flow of international expertise, solutions, and capital to the region.

Affordable and fair insurance solutions for all members

As a development insurer, we act as an efficient conduit to take climate and disaster risk to international insurance markets, securing the best price for all our members. As a multilateral organization we can overcome current bottlenecks to efficient insurance placement.

Regional risk pooling

We are a regional risk pool that helps share risk across ASEAN countries, only paying for outside protection and private capital when it is most cost-effective to do so.

SEADRIF
SOUTHEAST ASIA
DISASTER RISK INSURANCE FACILITY

What we do

The SEADRIF Insurance Company implements the SEADRIF initiative through:

1. **Our core mandate: Financial Products.**
   Develop and provide financial product to jointly manage and transfer risk to markets.
2. **Risk finance support.**
   Value added services to help establish risk finance programs (e.g., transaction advisory).
3. **Support public goods.**
   For the benefit of members, invest in data, risk assessment, training, tools and technology.
4. **Convening and exchange.**
   Donor support and bring international good practice and insurance innovation to ASEAN.

We can support our members as:

1. **Center of expertise** on insurance and risk management services (e.g., product structuring, claims management, actuarial, risk analytics, technology).

2. **Transaction advisor** to governments or public insurers in product design and placement, including through analytics and efficiently engaging service providers and reinsurers.

3. **Direct insurer** to government, agencies or other relevant entity (e.g. utilities) to provide cover for assets (indemnity) or quick liquidity (parametric).

4. **Reinsurer to public insurers** to help bring risk to international markets efficiently and cost efficiently, operating in the public interest.

5. **Aggregator to pool risk between members** (either as insurer or reinsurer) and transfer to international markets more cost efficiently. (E.g., study estimated ~30% premium savings).

6. **Risk clearing house** to enable efficient (joint) purchase of insurance from international markets, while retaining no or very little risk directly.

Products pipeline

In place

Parametric Catastrophe Insurance

Lao PDR Since 2021

Under Discussion

Public Asset Financial protection

Philippines, first mover through public insurer

Scaling with partners

For example, in discussion with ADB, FAO, WFP

Future

Agricultural Insurance

Proposed Under ASEAN+3

Catastrophe Bond

Proposed Under ASEAN+3

Regional cooperation in insurance: Challenges and Benefits

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ASEAN: Challenges of Regional Cooperation

1. Wide diversity in country contexts : perils faced , agriculture mix, product availability
2. Different stages of public insurance programs (incl. Crop Insurance)
3. Varying levels of domestic market development
4. Complex to engage international markets, e.g., regulation, procurement, trust
5. Political difficulties of coordination and joint programs

Most countries have faced challenges in their agricultural sector and many SEADRIF member countries have identified expanding coverage as a priority

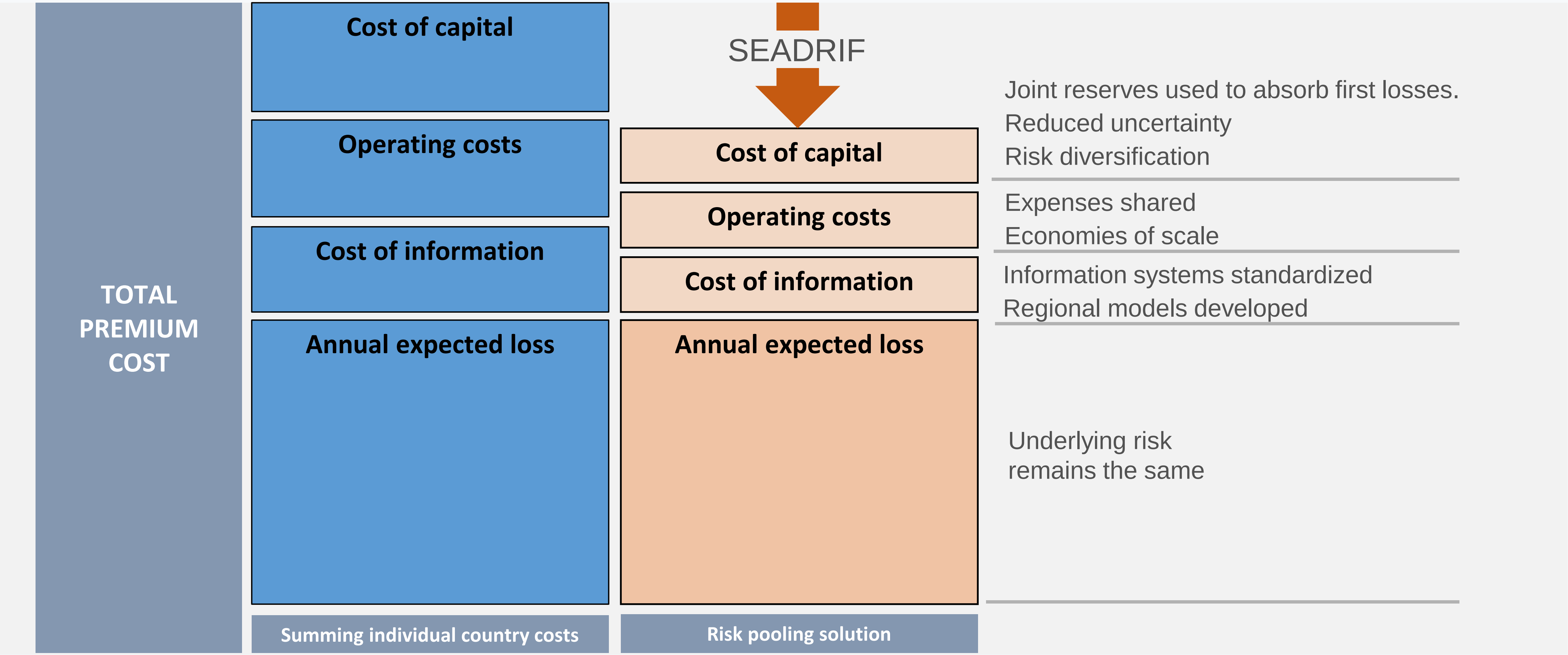
But there are common gaps and needs

1. Expanding coverage cost-effectively
2. Reduce transaction costs and streamline access to international markets, establishment of insurance programs and procurement
3. Access to data, models and specialised insurance expertise
4. Access to technology and innovation
5. Access to cost-efficient reinsurance capacity
6. Premium affordability and cost sharing between insured and public support

Benefits of Regional Collaboration in Insurance

1	More efficient insurance coverage through a regional pool (risk diversification, economies of scale, better negotiating power)	☑ Reduce cost
2	Simplify go to market for governments (reduced transaction costs)	☑ Reduce time and cost
3	Provide centralized technical expertise in placement and market negotiations	☑ Improve product and conditions
4	Support insurance of more difficult-to-insure assets and/or perils	☑ Increase protection
5	Joint access to testing and implementing new technology and products	☑ Innovative products
6	Help smooth insurance prices over insurance cycles	☑ Increase budget and price stability

The financial case: Strength through diversification



Regional collaboration in agriculture risk finance

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Opportunities for joint agriculture insurance activities

SEADRIF was set up as an ASEAN+3 regional institution to support members to strengthen their financial resilience to climate risks and natural disasters. This can provide a long-term institutional home for ASEAN wide efforts.

Knowledge and experience exchange

- Support the design and implementation of agriculture insurance policies and technical programs
- Deeper sharing to help countries learn from each other and the experience of existing programs
- As a regional institutions, SEADRIF can promote such exchange of good practices and practical experience

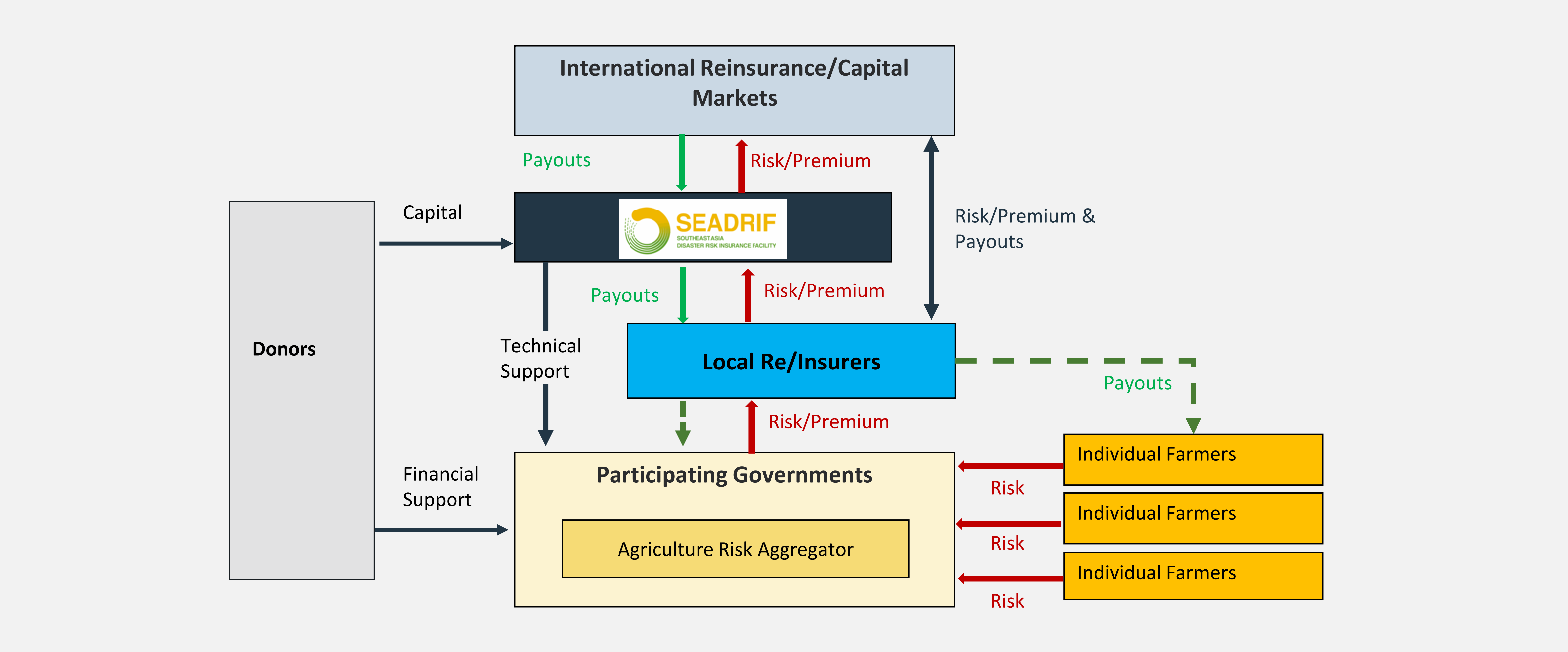
A regional platform for data, tools, and technical services

- Provide joint technical services to countries, help develop data practices and infrastructure, support risk assessment and analytics, and post-event damage or loss assessment.
- Crowd in innovative technology solutions and private sector technical expertise to support agriculture insurance.
- Ideally, numerous existing ongoing public or private services could be brought together under a single platform as a facilitator to help countries leverage these services. This could be a single-entry point for governments to access ongoing initiatives and private companies more easily.

Joint financial solutions

- Countries can enhance national program through a joint platform to provide more efficient reinsurance to members, benefiting from regional aggregation and no commercial profit margins.
- Enables more efficient use of capital from economies of scale through pooling a more diverse and larger portfolio of risk, retaining some risk and transferring to the re/insurance and capital markets, better pricing and more competitive terms and conditions than a single country acting individually.
- It could also stabilize re/insurance prices against fluctuations in market conditions or underwriting cycles.
- Reduce transaction costs through more streamlined procurement of re/insurance and centralized claims management.
- Developing countries may also benefit from significant donor financing through grants and/or (concessional) financing in earlier stages.

Illustrative outline of a regional facility



Building on a proposal in a 2021 World Bank presentation to an ASEAN+3 DRF working group

Thank you

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An ASEAN+3 Initiative
In partnership with The World Bank

Disaster Risk Financing
& Insurance Program

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Time for Questions

DRF Community of Practice & Resources

Join our Community of Practice

Join our Disaster Risk Finance and Insurance LinkedIn Group

Check out DRF resources @ Financial Protection Forum

Closing Remarks

Ilias Skamnelos

Practice Manager, Finance, Competitiveness and Investment Global Department (East Asia and the Pacific), World Bank Group


Photo Credit: Hartono Subagio / Pixabay

Photo credit: Chor Sokunthea / World Bank

Thank You

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