GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Climate and Disaster Risk Financing for Agriculture (CDRFA):

Policy, legal and institutional considerations

Disaster Risk Financing & Insurance Program















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

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.



Structure of Webinars



Total of 4 90-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.

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OPENING REMARKS

Francesco Strobbe

Practice Manager, Finance, Competitiveness and Innovation Global Practice, East Asia and Pacific, World Bank Group



OPENING REMARKS

Yoshihiro Kawai

SEADRIF Initiative Director cum Secretary General, ASEAN+3 Disaster Risk Finance Initiative



Framing Presentation

Hang Thu Vu

Senior Financial Sector Specialist, Finance, Competitiveness and Innovation Global Practice, World Bank Group







Impact of Disasters and Climate Shocks on Agriculture and Rural Livelihoods



Agriculture's role in economies

- Key source of livelihoods for over 2.5 billion people worldwide
- GDP contribution in ASEAN+3: 6.28% to total regional GDP
- Job creation in ASEAN+3: 24.55% of total employment
- Food security source of food, stabilizing force for food price and supplies
- Global value chain strategic commodities



Agriculture is highly vulnerable to disaster and climate risks

- Losses to agricultural production from disaster and climate shocks (2008-2018): US\$ 280 billion, 74% of from Asia
- Direct losses to farmers and agribusinesses: damage to crops, livestock, loss of yields, production input
- Impacts can ripple across all stages of the entire agricultural value chain: production -> processing and manufacturing -> distribution
- Employment impact: reduced hours, wage cuts, layoffs



Agriculture's vulnerabilities: a driver of contingent liabilities for governments

- Explicit contingent liabilities from prior commitments to provide postdisaster support to the affected population and economic operations
- Implicit contingent liabilities from expectations or pressure on governments to provide support post-disasters

Why Disaster Risk Finance for Agriculture (DRFA)?







What is Disaster Risk Financing for Agriculture (DRFA)?





An approach to managing financial impacts on agriculture from disasters and climate shocks through employing a mix of policy, technical and financial instruments.

Part of a country's:

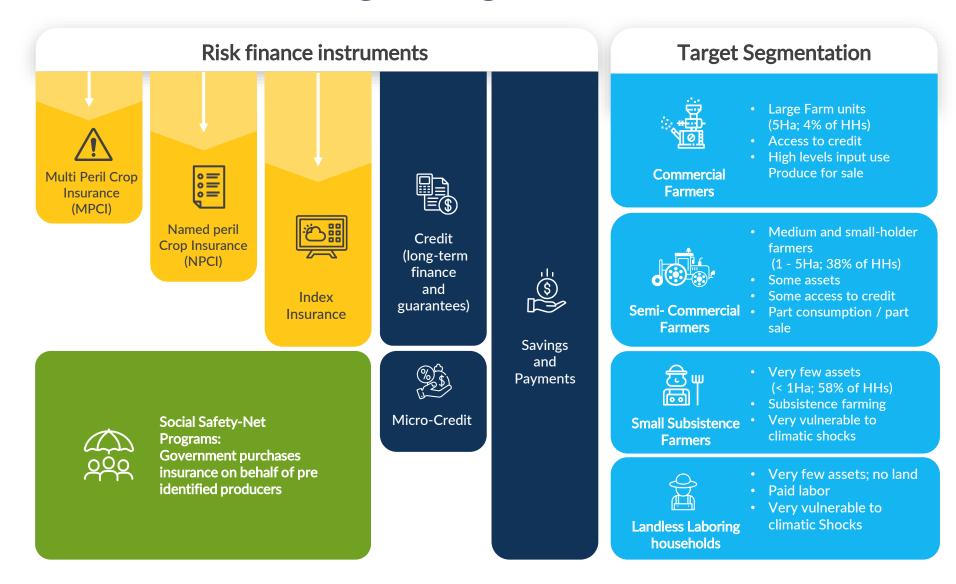
- comprehensive climate and disaster risk finance approach
- integrated agriculture risk management framework
- holistic disaster risk management
- sustainable fiscal risk management

What is Disaster Risk Financing for Agriculture (DRFA)?



One size does not fit all.
Different segments of farmers need different solutions.

The government must prioritize the target segments and design interventions to address their needs.

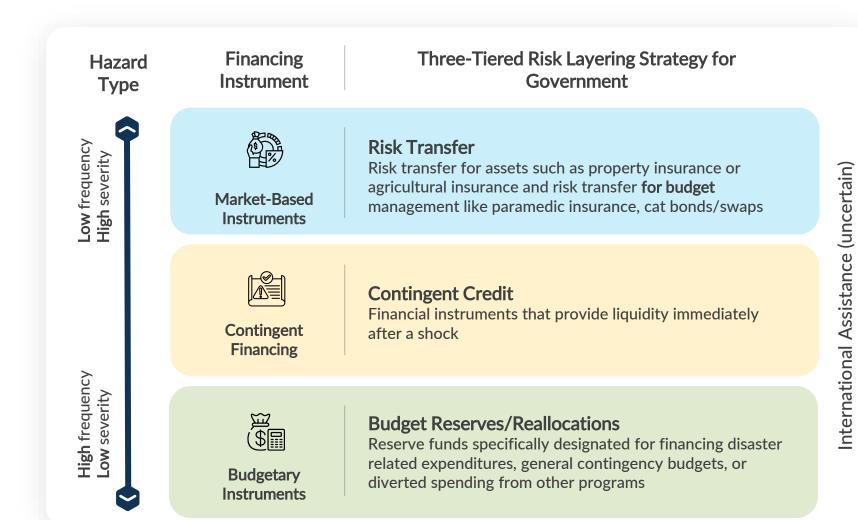




What is Disaster Risk Financing for Agriculture (DRFA)?

Disaster Risk
Layering - No single
financial instrument
can address all risks.

DRFA employs various financial instruments based on risk layering, matching them against the frequency and severity of expected disaster events.







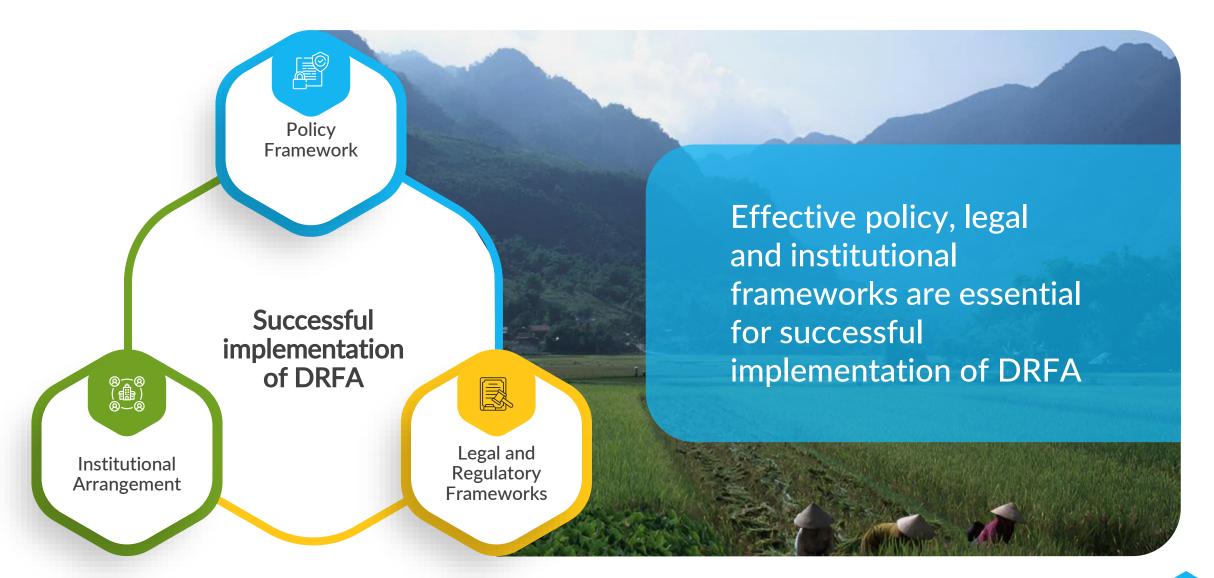


Overview of Risk Management Mechanisms in Agriculture

Degree of Risks	Household	MSME	Markets	Government
Risk Avoidance or Treatment	 Avoiding exposure to risk Sharecropping Using farmer self-help groups 	 Digital solutions and resource diversification (Limited) investments in risk reduction, adaptation or mitigation 	New technologyImproved seeds	 Irrigation infrastructure Agriculture research and extension Early warning systems Weather data system Policy, regulatory and fiscal incentive
LOW	 Household savings Self-Insurance Informal saving and lending Crop and livestock diversification 	 Business savings and cash reserves Diversification of products and services 	Formal savingsFormal credit	
MODERATE	 Savings Informal lending Risk pooling (peers, family members) Income diversification 	 Contingency funds Working capital credit Insurance & risk sharing within supply chain 	 Formal credit Risk sharing (input suppliers, wholesalers) 	 State-sponsored lending Contingent credit Credit guarantee schemes Risk sharing facilities Shock-responsive social protection
HIGH	 Reduce consumption Remove children from school Sell productive assets Default on loans Plan for migration Do nothing 	 Concessional loans Insurance Guarantee Supply chain financing Digital Other hedging strategies 	Insurance (indemnity and index)Guarantee	 State relief or compensation scheme State-sponsored lending State-sponsored insurance Catastrophe bonds Credit guarantee schemes Risk sharing facilities Shock-responsive social protection

Designing DRFA Frameworks: Key Considerations





Designing DRFA Frameworks: Key Considerations -

WORLD BANK GROUP

Disaster Risk Financing & Insurance Program

Policy Framework for DRFA



Understanding Risk

- Identification of key risks
- Sector-wide risk assessment



Defining policy objectives and priorities

- Clarification of key objectives and priorities
 - Risk financing vs. risk reduction
 - Inclusivity, gender and socioeconomic sensitivity
 - Financial Literacy and Awareness



Arranging Products and Solutions

- Breadth and depth of solutions
- Affordability and accessibility
- Design for scalability
- Flexibility of solutions



Modalities for funding

- Sustainable funding models
- Leverage private sector participation
- Incentives for participation



Stakeholder Coordination and Capacity Building

- Multi-Stakeholder engagement
- Capacity building and knowledge sharing



Monitoring, Evaluation, and Feedback

- Performance metrics
- Continuous feedback loops
- Evaluation



Policy Coordination Alignment

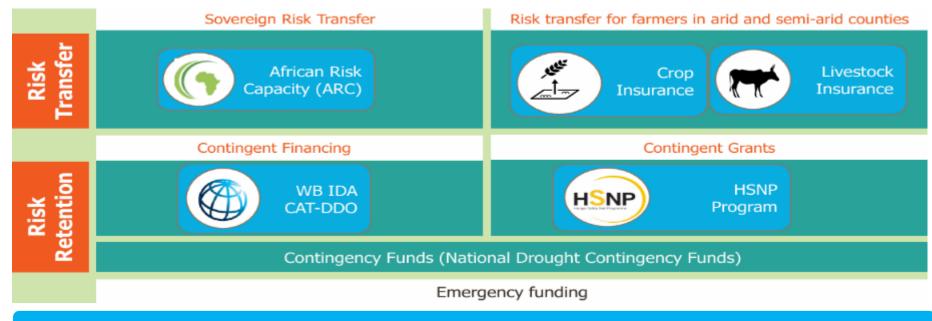
- Link to broader development goals
- Link with agricultural and disaster management policies
- Support for sustainable practices
- Alignment of policies and programme



Country Example

Kenya DRFA

Fitting different programs together to support the overall national Disaster Risk Finance Strategy



Clear Policy Priorities

• coordinated approach/ increase financing capacity/ protect vulnerable/ empower ministries and counties

Aligned with the overarching development goals

- To sustain economic growth and protect economic gains from disaster shocks
- To reduce the economic impact of disasters on the poorest and most vulnerable people

Disaster Risk Financing & Insurance Program WORLD BANK GROUP

Legal and Regulatory Frameworks



Legislation on public financial management

- Management of agriculture related disaster contingent liabilities
- Public finance related measures



Public-Private Partnership (PPPs)

- Incentives for private sector participation
- Government-supported programs



Legislation on financial sector

- Insurance regulations
- Risk-based supervision and prudential standards
- Regulations for innovative financial instruments
- Policyholder rights and education
- Awareness raising



Data Collection, Reporting, and Transparency

- Agricultural and climate data standards
- Reporting obligations

Disaster Risk Financing & Insurance Program WORLD BANK GROUP

Institutional Arrangement



Clear Definition of Institutional Roles

- Ministry of Finance
- Ministry of Agriculture (MOA)
- Local Government and Community-Based Organizations (CBOs)
- Insurance Regulatory Authority
- Public-Private Partnerships (PPPs) and Insurance Companies
- International Development Partners and Donors
- Data and Research Institutions
- Technology and Innovation Hubs



Coordination Mechanisms

Establishing inter-agency councils or committees



Oversight and Accountability Mechanisms

- Auditing and Monitoring
- Transparency and Reporting
- Feedback and Grievance Redressal



Country Example

India Pradhan Mantri Fasal Bima Yojana (PMFBY)

Key considerations were incorporated

Comprehensive risk coverage

Cover the whole cycle of cropping and localized risks

Funding

Subsidies provided by government to ensure affordability

Use of technology

• Employ technology for fast claims assessment

Public-Private Partnership

• Engage private insurance companies for service delivery, innovation and competition

State and Local Government Collaboration

Multi-level governance structure

Building Financial Literacy

Incorporate financial education and awareness raising campaigns

Alignment of Financial Support Program

Mandatory credit linked insurance

Promotion of Resilience

• Promote climate and disaster resilient cropping practice

GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Agriculture Risk Financing and Insurance: Policy and institutional experience

Country Presentation - Vietnam Experience

















Dong Phuong Mai

Deputy Head

Non-life Insurance Division, Insurance Supervisory Authority, Ministry of Finance, Vietnam

Nguyen Thi Thuy

Deputy Director

Public Finance, National Institute of Finance, Ministry of Finance, Vietnam



1st Speaker

Nguyen Thi Thuy

Deputy Director

Public Finance Policy Division, National Institute of Finance, Ministry of Finance, Vietnam





Impact from Disaster and Climate Risks



Vietnam is ranked among the five countries likely to be most affected by climate change









About 70% of the population lives in coastal communities with high exposure to storm and flooding, which climate change is intensifying



Climate change will reduce national income by up to **3.5**% by 2050



Typhoon Yagi 2024 killed **318** people, damage reaches **\$3.3** billion



Policy and Legal Frameworks for Financial Management of Disaster Management Risk





State budget law and sub-law regulations

Budgetary instruments

Tax law

Disaster tax relief

Law on Natural disaster prevention and control

Disaster prevention and control funds

Insurance Law and Decrees: Disaster risk insurance

Credit Law: Credit

Others: International Assistance/ Voluntary contributions





EXPENDITURE

- Prioritize investment resources to develop infrastructure to enhance capacity to respond to climate change and disasters
- Recurrent expenditure:
 Upgrading disaster prevention and control works; disaster prevention and control activities



CONTINGENCY BUDGET

 Arrangement of budget reserve from 2-4% of the total expenditure of all levels for natural disaster prevention, response and recovery



FINANCIAL RESERVE FUND

 Provisioning for the financial reserve fund is made gradually each year with the maximum control level is 25% of the annual estimated expenditure budget of the respective level



SUPPORT AND PROGRAM

- Decree 02 Policies to support agricultural production in areas damaged by natural disasters and epidemics detailed relief support by the State
- National Target Programme for Climate Change Response and Green Growth



Disaster Tax Relief





Tax exemption and reduction policies to reduce tax and fee burdens for those who suffer damage due to natural disasters and epidemics





EXTENSION

- Taxpayers who suffer damage that directly affects production and business due to natural disasters, fires, or unexpected accidents may have their tax payment extended.
- No more than 2 years from the date of expiration of the tax payment deadline.



EXEMPTION AND REDUCTION

Personal Income Tax
Excise tax, Import and
export tax



DECLARATION OF LOSS INTO TAX CALCULATION

 CIT: Reasonable expenses related to the value of losses due to natural disaster

Natural Disaster Prevention and Control Funds



CLASSIFICATION

Vietnam natural disaster prevention and control fund:
Central level (VNDMF)
Provincial natural disaster prevention and control fund



ORGANISATION

Non-budget financial fund One-member limited liability company, the State holds 100% of charter capital







RESOURCES

Contributions of international and domestic organisations and people

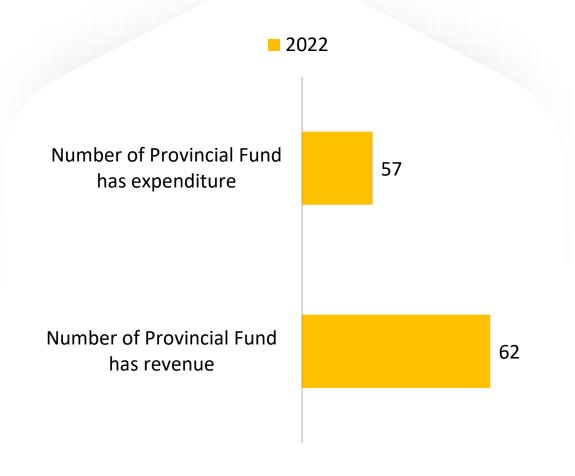


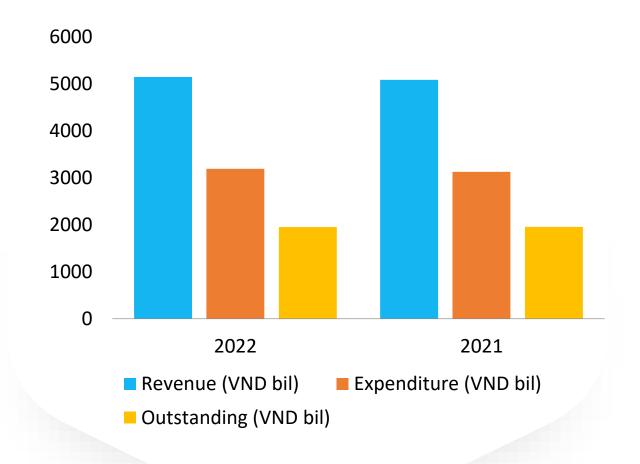
EXPENDITURE

Relief and support for disaster recovery
Support preventive activities

Natural Disaster Prevention and Control Funds









DISASTER RISK MANAGEMENT FINANCING

- Lack of comprehensive disaster risk management financing
- Lack of active financial source for natural disasters with a loss of 2-3% of GDP

SHORTAGE OF RESOURCES

- The main financial sources do not meet the demand for response and recovery
- Whenever a natural disaster occurs, most of the local budgets are not secure and must receive support from the central budget

RESOURCES STRUCTURE

- Highly dependent on state budget
- Funding from the state budget can only meet 25-35% of the annual disaster recovery spending needs

LEGAL FRAMEWORK

- The legal frameworks supporting disaster risk financing initiatives in Vietnam (including insurance) are newly developed
- Developing tools like insurance, bonds, etc. takes time, long-term roadmap

2nd Speaker

Dong Phuong Mai

Deputy Head

Non-life Insurance
Division, Insurance
Supervisory Authority,
Ministry of Finance,
Vietnam





Agriculture in Vietnam





Vietnam agriculture sector is highly vulnerable to natural disaster, such as: flood, typhoons,...



The Yagi typhoon has damaged 350,000 hectares of crops; significant livestock and aquaculture lost







Disaster Risk Finance for agriculture instruments





Vietnam
Disaster
Management
Fund
Managed by
Ministry of
Agriculture (MoA);
fund is non-state
budget



Agricultural insurance
Managed by
Ministry of
Finance
coordinating
with MoA







Insurance companies



11 insurances companies provided agricultural insurance



1.6 million dollar of revenue in 2023



Accounted for 0.06% of non-life insurance market

Government-backed Agricultural Insurance: Policies history

2018 Decree No.58/2018/ND-CP

2019 Decision No.22/2019/QD-TTg

2022 Decision No.13/2022/QD-TTg



Agricultural insurance





Government-backed Agricultural Insurance: Institutional responsibilities



Ministry of Finance

Policy development, fund allocation



Ministry of Agriculture

Coordinates policy dissemination, assists with product approvals



Provincial People's Committees

implement policies, approves beneficiaries, provide funding



Vietnam Farmers' Union

Farmer cooperation and education



Insurance companies

Product execution, claim processing



Agricultural insurance



Government-backed Agricultural Insurance: Products, Risks covered, and Government support



Products

Rice, rubber, pepper, cashew, coffee; livestock (buffalo, cows, pigs); aquaculture (shrimp, catfish)



Risks covered

19 natural disaster risks for rice; 9 for crop; 17 for livestock; 16 for aquaculture



Government subsidies

the state provide up to 90% subsidy for poor and nearpoor households; 20% for other households; and 20% for agricultural organizations.





IV

Agricultural insurance challenges



Low farmer education on insurance benefits



Limited insurance products, especially for aquaculture



Small-scaled farming complicates risk-pooling



Lack of involvement of international reinsurers



Insurance companies lack of financial capacity, skilled staff, and broad networks reaching remote areas like villages and communes



Limited participation of nonlife insurance companies



GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

Policy framework for Agriculture Risk Finance: Experience from Cambodia

Country Presentation – Cambodia Experience

Disaster Risk Financing & Insurance Program















Som Phay

Deputy Secretary General, General Secretariat of Non-Bank Financial Services Authority, Cambodia



Agriculture and Rural Livelihoods & Disaster Impact in Cambodia



Impact in Camboula Impact of floods on agriculture



About **80%** of total households engage in wet season crop production, mainly rice.

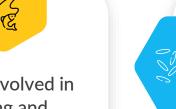


About **50%** of total households raise livestock

(Cambodia Socio-Economic Survey)



37% involved in fishing and aquaculture activities





2011 floods:

over **300,000ha** of rice paddies destroyed, estimated loss of around **250,000** metric tons of rice.



2020 floods:

around **190,000 ha** of rice paddies affected, estimated loss of **400,000** metric tons of paddy.



Significant damage to infrastructure such as irrigation systems and roads hinders the ability of farmers to recover from the floods and resume production.



Agriculture production is smallholder-driven with an average landholding size of **1.3 ha** (ADB 2021)

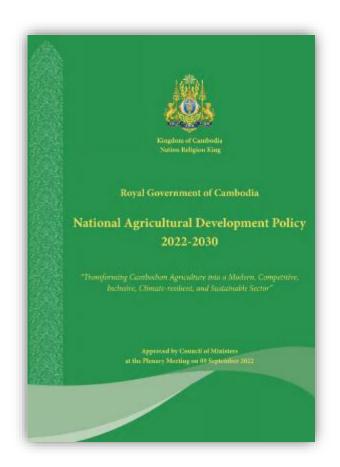
Disaster Risk Financing & Insurance Program

National Agricultural Development Policy (NADP) 2022-2030





The NADP 2022-2030 was approved by Council of Ministers in September 2022 aiming to promote the growth of the agricultural sector through increased productivity, diversification and competitive trade.





The NADP 2022-2030 defines four main areas and thematic policies for intervention:

- Modernizing and commercializing the agricultural value chain;
- Public and private investments in the agriculture sector;
- Growing sustainably and increasing resilience to climate change; and
- Institutional reforms and crosscutting issues.

Disaster Risk Financing Strategy (DRFS)



DRFA is part of holistic DRF Strategy linked to National Agriculture Development Policy and National Action Plan on Disaster Risk Reduction

Development of DRF Enabling Environment



Conductive legislation and institutional framework





Improved risk-based data and analytics

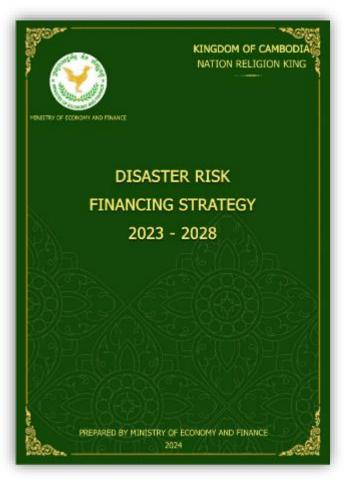




Improved financing instruments /funding sources



Strategic Priorities



Tailored DRF Solutions



Strategic priorities for vulnerable population and sector including Agriculture Sector Risk Financing Program





Shock responsive public asset & services protection program





Improve DRF capacity and capability



National Action Plan on Disaster Risk Reduction (NAP-DRR) 2024-2028





The National Action Plan on Disaster Risk Reduction (NAP-DRR) 2024-2028 was officially launched on Monday, September 2, 2024 to continue efforts in addressing disaster-related challenges.

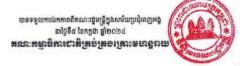


The action plan set out four strategic goals and 18 priority programs for implementation which included a disaster preparedness or emergency response plan, preparation for disaster rescue and protective equipment, and public awareness on hazards cased by disasters.



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ព៩ខ្មោតិបាល





Existing Disaster RiskFinancing Tools



Ex-ante Disaster Risk Financing Tools

Contingency Budget



Cambodia Food Reserve System



Agriculture Insurance



Ex-post Disaster Risk Financing Tools

Budget Reallocation



Donor Assistance



External Debt





Cambodia Food Reserve System (CFRS)

Stockpiles of seed, rice and vegetables



Total stock of food reserve 20,000 tons

- 3,000 tons physical stock of rice
- ♦ 15,500 tons in cash reserve



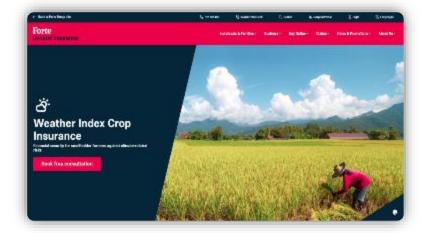
Total amount of seed stock 5,000 tons

- 2,000 tons as seeds
- 100 tons as vegetable seed and crop
- While other total amount of seed, vegetable and other crop stockpiles are reserved as cash.



Agriculture Insurance







2015-2017:

Rice insurance was first piloted in Cambodia by Forte company, along with the participation of Indian weather risk technician and a local microfinance institution (AMK).



2018-2019:

Forte Insurance has become an active member to explore the possibility and develop a national strategy



2020-2022:

Weather index crop insurance was piloted to reduce the vulnerability of farming communities to extreme weather events.



2023:

Previor microinsurance company is the first microinsurance company that started selling crop insurance in Cambodia.

To Sum up,....





Disaster Risk Financing Strategy

- Development of DRF Enabling Environment
- Tailored DRF Solutions



National Agricultural Development Policy

 Growing sustainably and increasing resilience to climate change;



National Action Plan on Disaster Risk Reduction

- The action plan is designed to enhance disaster resilience across the nation,
- Minimize the impacts of disasters on people, the economy, and society.



Budgetary Instruments



Cambodia Food Reserve System

- Total stock of food reserve (20,000 tons)
- Total amount of seed stock (5,000 tons)



Agriculture Insurance

- 2020-2022: Pilot of weather index crop insurance
- 2023: Previor microinsurance company

GLOBAL KNOWLEDGE EXCHANGE ON AGRICULTURE RISK FINANCE

TARSIM: Policy and institutional enablers for Agriculture Insurance

Country Presentation – Turkey Experience

















Ramazan Küçükolgun

Assistant Insurance Specialist, Insurance and Private Pension Regulation and Supervision Authority, Turkey

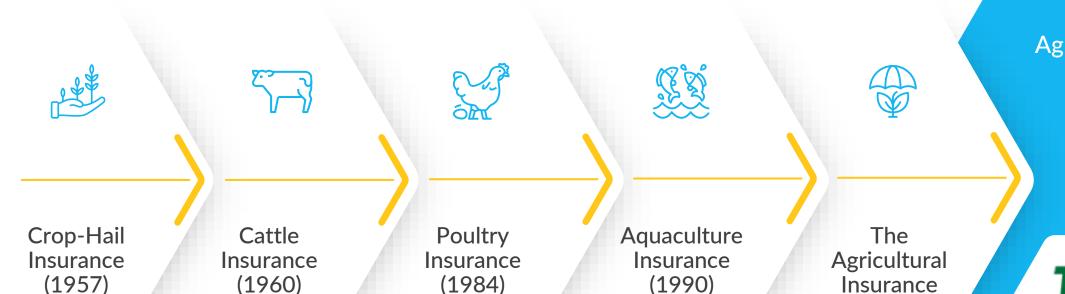






Agricultural Insurance in Türkiye





State Supported Agricultural Insurance

> The Agricultural **Insurance Pool**

Insurance Law (2005)





TARSİM's Effect to Agricultural Insurance



TARS VM ® insurance of agriculture	Crops			Animals		
	2005	2023	Ratio of Change	2005	2023	Ratio of Change
Number of Policy	128.609	2.525.426	1.863 %	24.470	506.353	1.969 %
Insured Value (Thousand TL)	1.002.683	222.858.967	22.126 %	280.111	326.543.093	116.476 %
Total Premium (Thousand TL)	28.879	9.911.693	34.221 %	13.293	6.432.585	48.290 %
Insured Area (Decare)	3.159.324	33.212.579	951%			
Number of Animals				121.971	19.736.741	16.081 %



Legal Framework







Insurance Law



The Agricultural Insurance Law



Presidential Decision



General Conditions



Tariff and Instructions



Regulation on Working Procedures and Principles of the Agricultural Insurance Pool

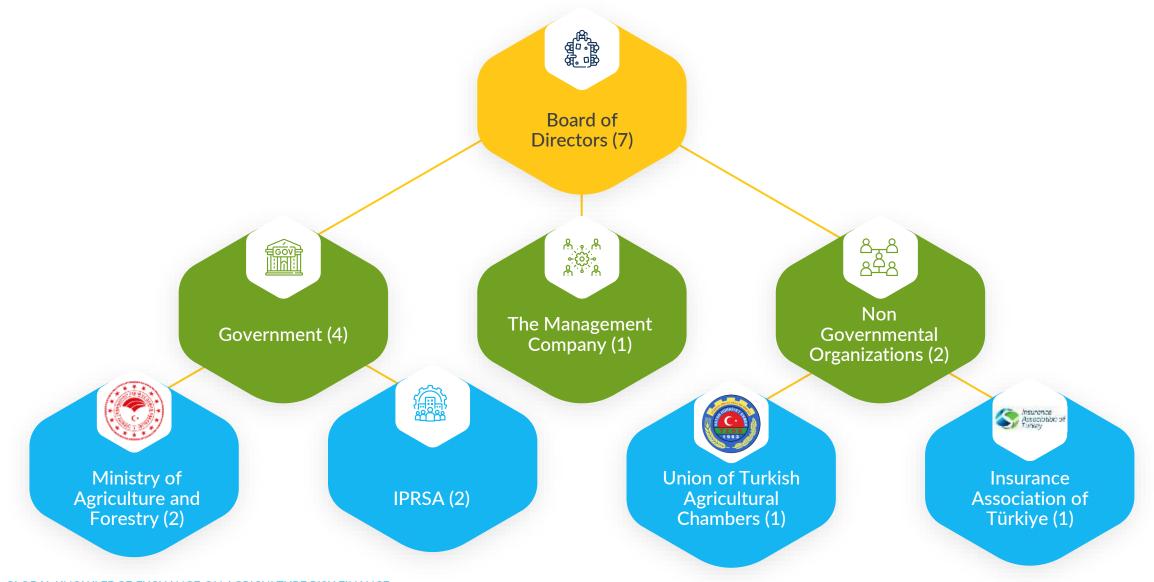


Regulation on Implementation of Agricultural Insurances



The Agricultural Insurance Pool







The Agricultural Insurance Pool





State Subsidies

- Voluntary basis
- State premium support
- State excess of loss support



Public-Private Partnership

- Board of Directors
- The Managing Company



Central Structure

- Standard policies
- Loss adjustment
- Actuarial studies
- Indemnity payments
- Reinsurance



Constant Dialogue

- Loss adjuster trainings
- Legislative draftings
- Meetings, events etc.



Pool Implementation







Covering overwhelming risks



Expanding reinsurance capacity



Effectively use of State support

Preventing unfair competition in prices



Centralised and standardised loss adjustment

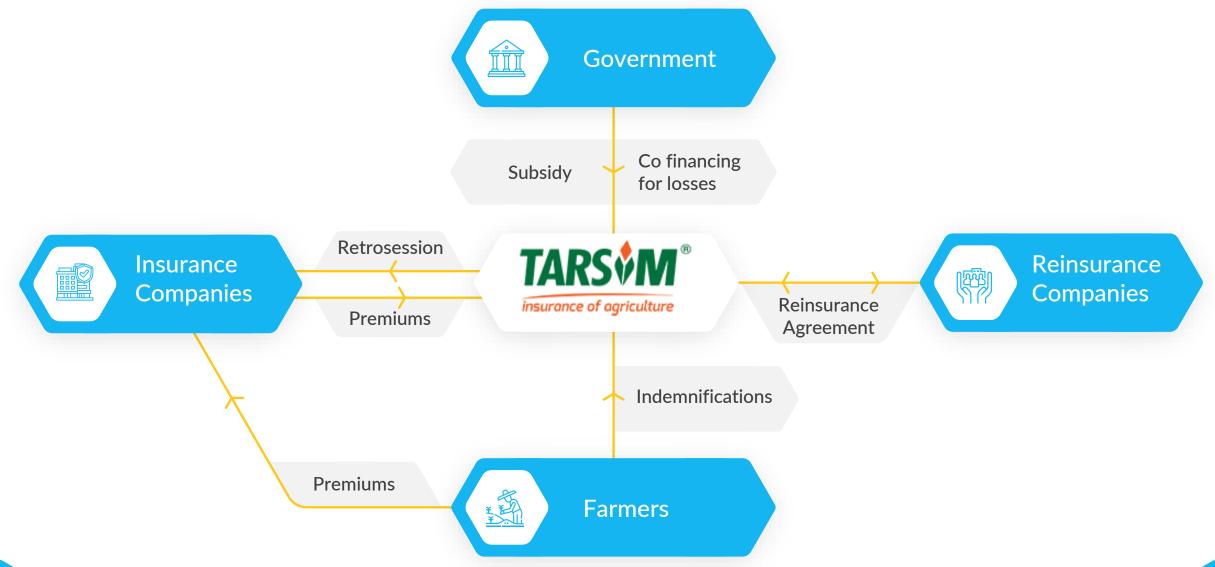


Quick process and fair paying of claims



Risk Transfer Mechanism







Insurance Lines, Damage and Indemnity



Insurance Lines



- Crop
- Village Based Yield
- Revenue Protection
- Greenhouse
- Cattle
- Sheep and Goats
- Poultry
- Aquaculture
- Bee Hives

Damages



- Transmitting claims after damage by the farmer
- Central taskings of loss adjusters

Loss Adjusters



- Constant trainings
- Number of 4146
 Agricultural
 Insurance Pool Loss
 Adjusters

Indemnity Payments



- Centralised payments
- Government supervision



The Importance of the Pool in Government Policies





Sharing the catastrophic loss



Providing sustainablity of agricultural activities





Preventing migration from villages

THANKS FOR YOUR ATTENTION







Closing Remarks

Emiko Todoroki

Acting Practice Manager, Finance, Competitiveness and Innovation Global Practice, World Bank Group





DRF Community of Practice & Resources





Join our Disaster Risk
Finance and Insurance
LinkedIn Group



resources @ Financial

Protection Forum



Thank You

Disaster Risk Financing & Insurance Program











