DRF for Agriculture and Climate Resilient Livelihoods

5th March 2024
Muldersdrift, South Africa

Session 3:
Climate Finance for Agriculture Value Chains

Prepared by F. FADIKA , Senior Financial Sector Specialist

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

The rationale and trends on climate finance in agric value chains

- Why Climate Finance for Agriculture value chains
- Adaptation finance to build resilience and face devastating impact of climate on agriculture value chains
- Need more Private finance as Public funding to be more and more under pressure
- Moving toward a more pro-active approach to climate finance to support agriculture value chains
- Climate Finance instruments for agriculture value chains

Why Climate Finance for Agriculture value chains

Africa workforce employed in agriculture

61%

Agriculture value added

2021

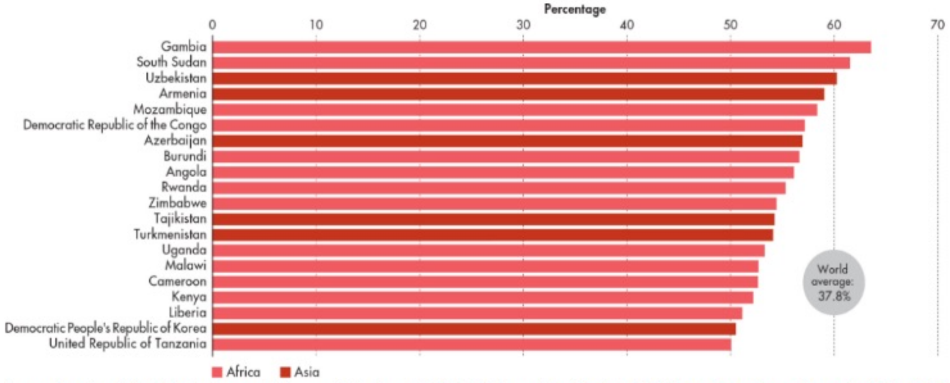
+84%

$US 3.7 Trillion

2000

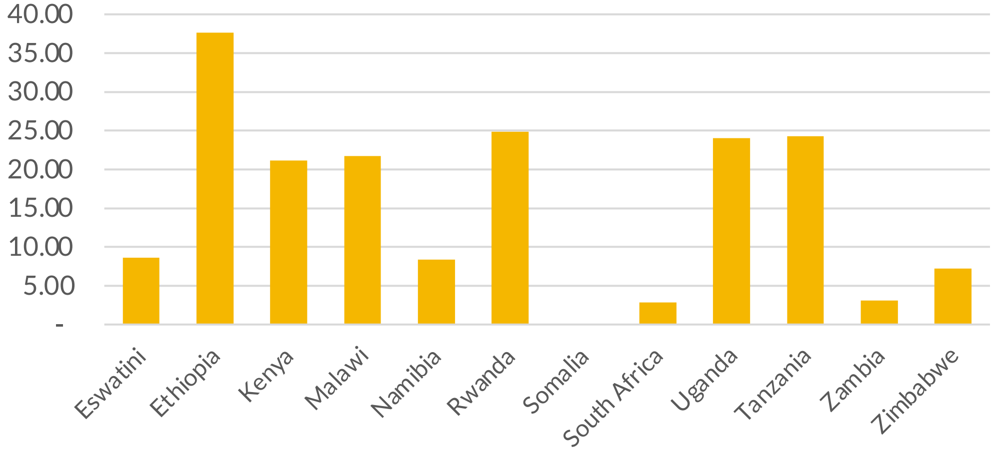
Agriculture value added went up 84% between 2000 and 2021, to $US 3.7 trillion

Share of women in agriculture and fishing employment top countries (2021)



Source: Based on FAO. 2023. Employment Indicators: Agriculture. In: *FAOSTAT*. Rome. [Cited October 2023]. https://www.fao.org/faostat/en/#data/OEA
Download: https://doi.org/10.4060/cc8166en-fig12

Agriculture, forestry, and fishing value added (% of GDP)



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Adaptation finance to build resilience and face devastating impact of climate on agriculture value chains

Greenhouse gas emissions from Agrifood systems

Farm-GAE Emissions — 2000 → 2021: **10%** GHG

Greenhouse gas emissions from agrifood systems grew by 10% between 2000 and 2021. Farm-gate emissions account for nearly half of them.

Agricultural and forest land decline

2000 → 2021: **-86 Million HA**; **-104 Million HA**

Between 2000 and 2021 , agricultural land declined by 86 million ha— roughly half the size of Iran — while forest area declined by 104 million ha — about the size of Mauritania.

IMPACT ON AGRICULTURE PRODUCTIVITY :

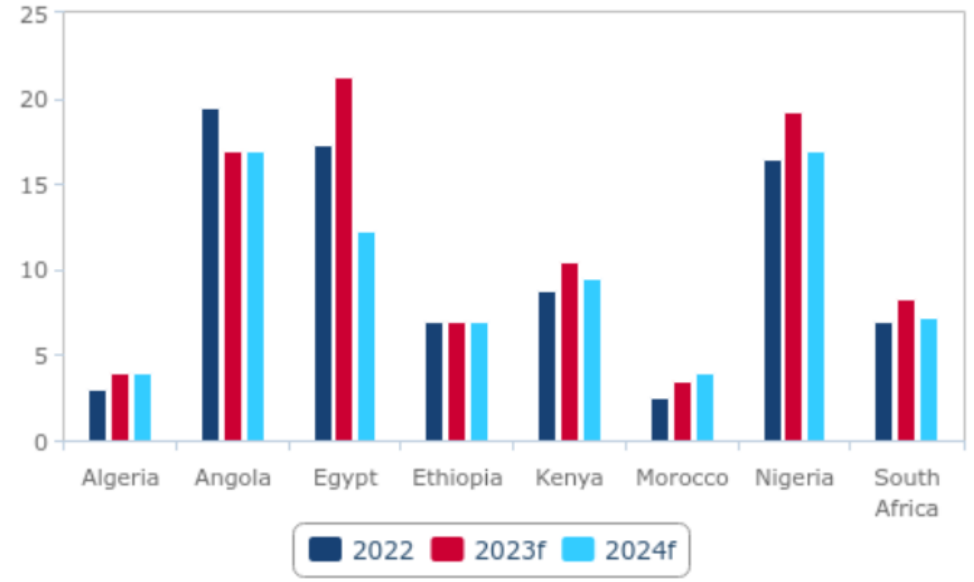
- Major staple crops in Africa expected to have 8%-22% lower yields by 2050
- **Agriculture losses** → $US 3 trillion losses (Exports)/ Food security issues
- **Pushing commercial farmers to subsistence farming**
- **Impact on budget:** Global food prices staying high, averaging 123.9 points
- **Rising risk of food insecurity:** Estimated 65.6 million people in East Africa and 49 million in West Africa

- **Increases in operating expenditure since pandemic and Ukraine invasion** for agri-businesses and farmers
- **High prices of agriculture input** squeezing farmers' capacities for investments in irrigation, technology, warehouses, machinery
- **Disruption of food and agriculture value** chains
- Higher reliance on food imports

Need more Private finance as Public funding is more and more under pressure

Financial Conditions Set To Remain Tight in 2023, Weighing on Agricultural Investment

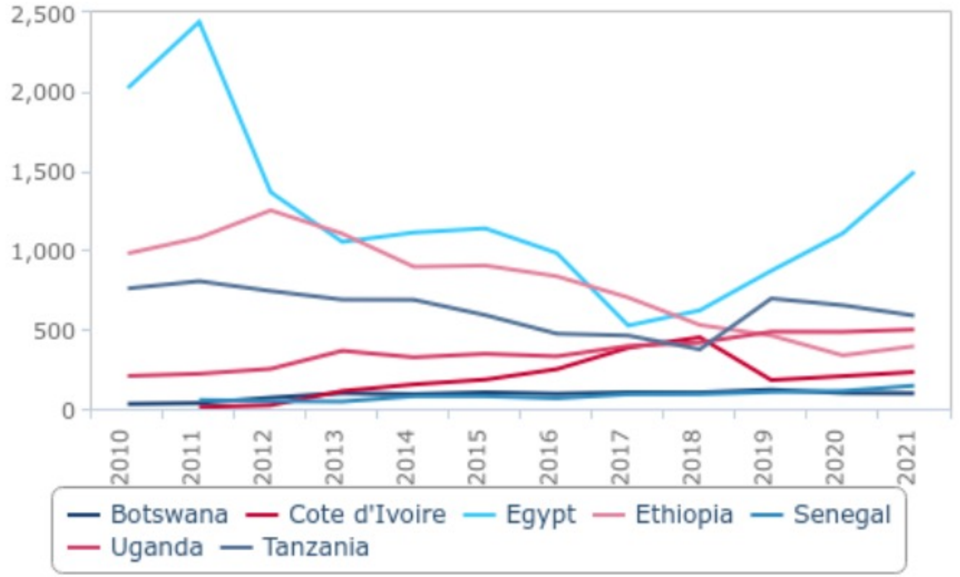
Central Bank Policy Rate, % eop



f = BMI forecast. Source: National Sources, BMI

Significant Variation in Access To Agricultural Credit Across Africa

Credit to Agriculture, $US m. (2010-2021)



Source: FAO, BMI

Toward a more proactive approach to climate finance to support agriculture value chains

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Understanding the scale of public and private finance needs for agriculture

Agro- Value chains Crops + Commodities/

- Understand risk/ Climate risk profile / ESG considerations along the value chains
- Adaptation investments at national and sub-national levels
- s
- Integration in vertical / horizontal in green global and regional agriculture value chains
- Agriculture land management systems

Agro-Infrastructure

- Agriculture climate investments (irrigation systems
- Farm energy systems/Integration in bio-mass energy supply chains
- Warehouses
- Monitoring/ verification systems
- Agro-industrial parks

Farming and Agro-Industry/ Agro-forestry

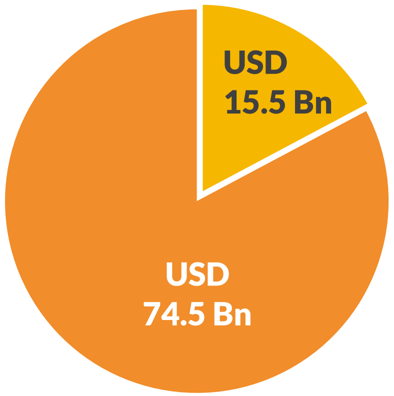
- Climate Smart Agriculture approaches and investments
- Adaptation investments at micro-level/ farming – SME level/ meso-level
- investments

Policies and Interventions

- Agri policies and priorities: Productivity/ Food security
- NDC/ Adaptation policy and expenditure
- Land use/ deforestation and linked to agricultural activities
- Agriculture subsidies

Urgent need to adopt a more proactive approach to unlock private capital for climate investments in Agri-value chains

Sub-Saharan Africa



83% of financing in Sub-Saharan Africa unmet

Adaptation Finance

Needs to move towards a more proactive approach to adaptation finance to reduce agriculture losses, improve resilience of value chains players, ensure food security

Mitigation Finance

Needs to have a proactive approach on mitigation finance to reduce emissions, soil degradation, land use, impact on environment and bio-diversity

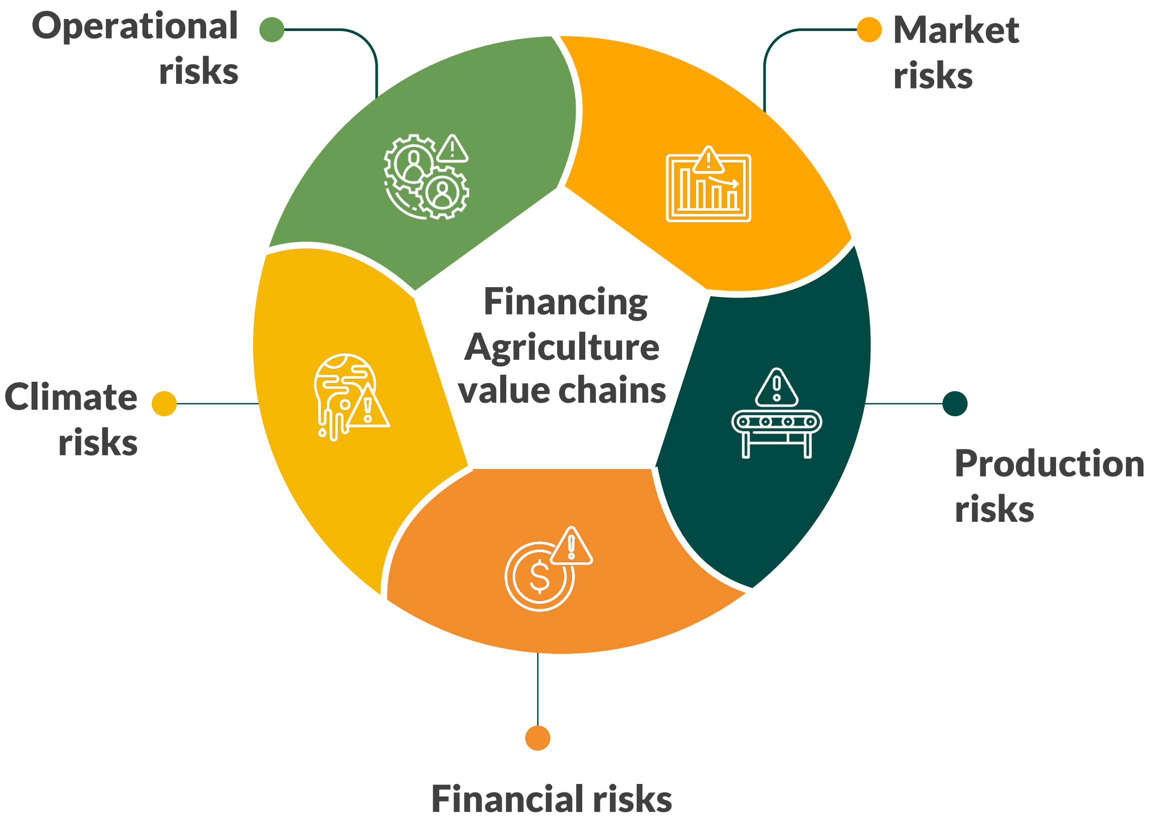
Private capital flows in agriculture value chains

Needs to move from heavy reliance on subsidies and grants in agriculture value chains towards blended finance and market-based instruments

Mainstream climate finance in public finance interventions

Governments to play a key role in planning, risk mitigation, unlocking private capital to complement public funding, and monitoring/ verification aspects

Gov: Understanding the constraints to unlock the supply of finance for Agri-value chains



- Basel capital requirements
- Financial health
- Risk Weighted assets
- Return on equity
- Capacities to absorb risks
- Capacities to manage the risk
- Capacities to transfer the risks

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

Enabling framework to mobilize climate finance for agriculture value chains

Sustainable finance framework

Building skills and capacities of financial intermediaries for agrifin

Alignment of banking, NBFI, Capital markets regulators with Agri-fin specificities

Increasing transparency and availability of agriculture and climate related data

Mainstreaming climate finance in Agri-fin

Develop agriculture climate finance tools and instruments

Ensure alignment with

Economic, Agriculture, and Financial inclusion policies

Disaster Risk Financing and risk insurance

International carbon finance market

NBFI refers to MFI , Fintech , Agtech, Venture Capital, Capital markets

Ensuring that Agri finance is included in the Climate finance landscape

Strategy and Coordination

- **Green Finance Roadmap**
  Key line ministries (e.g. finance, environment), Central Bank
- **National Climate Finance Strategy**
  Key line ministries (e.g. finance, environment, energy), Central Bank

Build Skills and Capacity

- **National platform/Taskforce on Green finance**
  Ministry of Finance, Central Bank, financial regulator/ supervisor, Industry association
- **Inter National Network**
  Ministry of Finance, Central Bank, Supervisory authority, financial regulator/ supervisor
- **Paris Alignment by FIs**
  Ministry of Finance, financial regulator/ supervisor, industry associations

Financial Regulation and Central Bank Activities

- **Climate-Related Risk and Environmental Risk Assessment**
  Ministry of finance, Central Bank, financial regulator/ supervisor, other experts /stakeholders
- **Climate- Related and Environmental Supervisory practice**
  Central Bank, financial regulator/ supervisor
- **Supervisory Guidance on Climate Related and Environmental Financial Risks**
  Central Bank, financial regulator/ supervisor
- **Exploring Greening of Central Bank's Activities**
  Central Bank

Increasing Transparency

- **Climate-Related and Environmental Disclosure and Reporting Standards**
  Ministry of Finance, Central Bank, financial regulator/ supervisor
- **Green/ Sustainable Taxonomy**
  Key line ministries(for finance and environment), Central Bank, Other experts and stakeholders

Green(ing) FIS

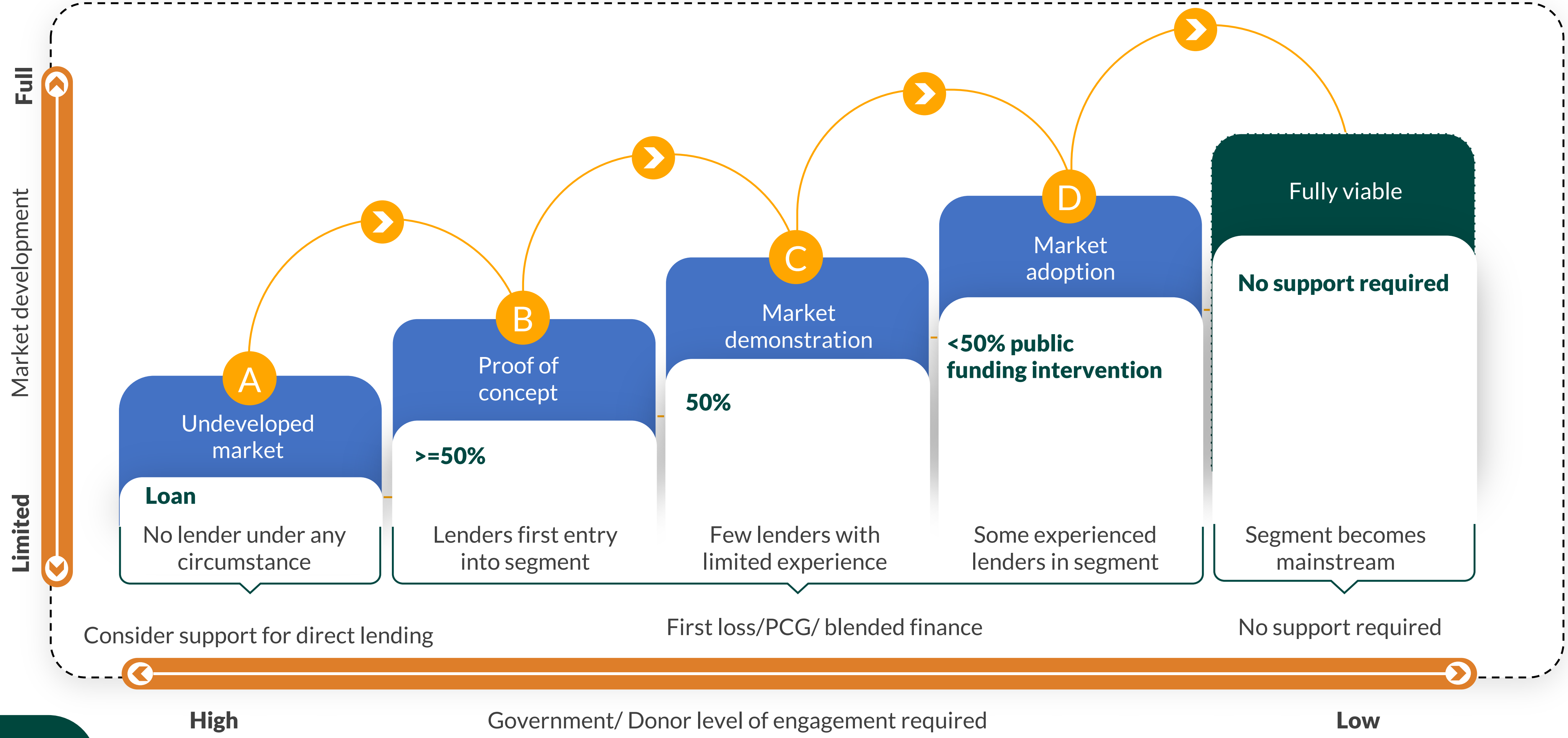
- **Greening NDBs/other public FIs**
  Key line ministries(eg., finance, development, environment), NDBs, other public Fis.
- **National Green Finance Entity or Green Bank**
  Key line ministries(eg., finance, development, environment)

Green Financial Tools and Instruments

- **Stimulate Corporate Green Bond Issuance**
  Capital market regulatory authority, Industry associations
- **Originate Green Sovereign Bonds**
  Key line ministries(eg., finance, development, environment)
- **Promote Blended Finance Products**
  Key line ministries(eg., finance, development, environment), NDBs, or other public FIs.
- **Stimulate Green/ Sustainability Linked Loan**
  Ministry of Finance, NDBs, other public FIs

Trend in public financial interventions

Public intervention to stimulate the supply of private and blended climate finance for agriculture value chains



Climate Finance instruments for agriculture value chains (stimulated with the support of Governments)

Leverage public / concessional funding to attract Private Capital

Governments

- Issuance of Green / Sustainable linked bonds
- Creation of Agriculture finance fund
- Facilitating access to Voluntary Carbon markets

Agriculture lenders

- Encouraging issuance of Green bonds by agriculture banks and development banks
- Blended finance
- Providing Long term funding for climate investments
- Risk sharing/ transfer mechanism Agriculture Portfolio guarantee

Agribusinesses/ farmers

- Green loans /Sustainable linked loans
- Grants/ SMART subsidies
- Result based finance
- Agri-value chain finance
- Capital investments for agri-businesses for green transformation
- Partial Credit Guarantee
- Insurance

Setting up Agriculture adaptation and mitigation funds

Objectives

- Long term finance to lenders
- Equity/capital to agri-businesses
- Result based finance for mitigation approaches
- Technology Adoption

Products

- Line of credit
- Equity/capital
- Co-investments/ co-lending
- Technical assistance
- Partial credit Guarantees

Principles

- Should not rely fully on public funding
- Should aim at unlocking private finance
- Sustainability at the center
- Private - public Governance

It is already happening

Prevalent in Asia and starting in Africa

Unlock Long Term Climate Finance Through Bonds Issuance

- **Sovereign sustainable linked bonds with KPI linked to Agriculture/ livestock and SMEs**
- **Green bonds for agriculture banks, MFIs, development banks**
- **Funding to facilitate green bonds issuance**

Channel to attract International investors

Ministerial coordination especially for sovereign issuance

Certification process of the green / agriculture bonds

Options to Access climate finance

Promotes green or sustainable domestic financial markets

It is already happening

Prevalent in Asia (China, Thailand, Vietnam, Cambodia, Mongolia, India etc..) and Latin America (Brazil, Chile, Peru) and starting in Africa with (Rwanda, Benin)
Support with creation of green bonds framework, issuance of agriculture lenders and sovereign issuance for agriculture

Leverage value chain to catalyze climate finance for SMEs and farmers

Leverage digital payments and technology for traceability and better supply climate finance

Adoption of ESG and climate principles in agriculture value chains

(becoming requirements for exports in EU and many countries around the world**)**

Carbon neutral commitments linages with local / regional / global value chains

Leverage Fintech and data for green loans and sustainable linked loans across agriculture value chains

Technical assistance support to agriculture finance providers

Ensuring Financial protection across the agriculture value chain in case of extreme events

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

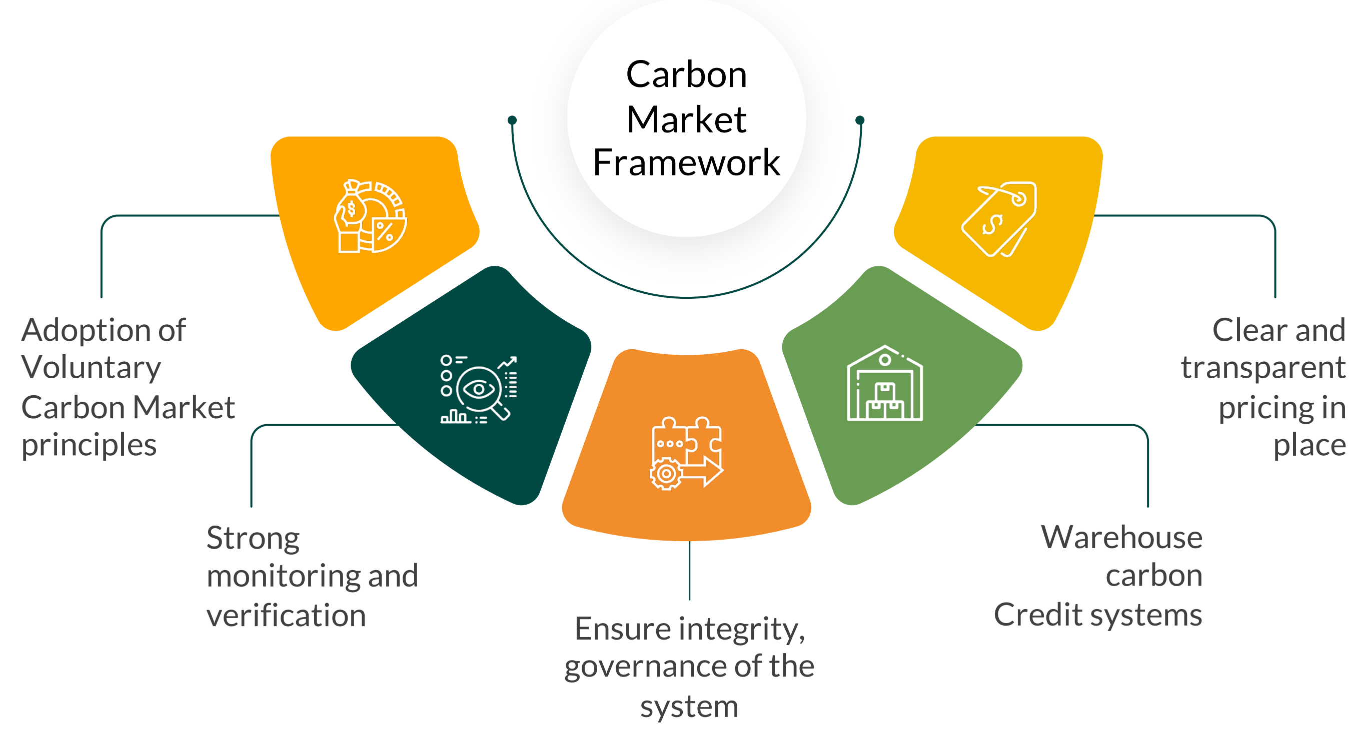
Carbon finance as a potential source of income for smallholders' farmers but also as a solution to unlock credit

Government to support an enabling framework

Environmental integrity

Financial market integrity

Access to capital to reduce emissions in the first place

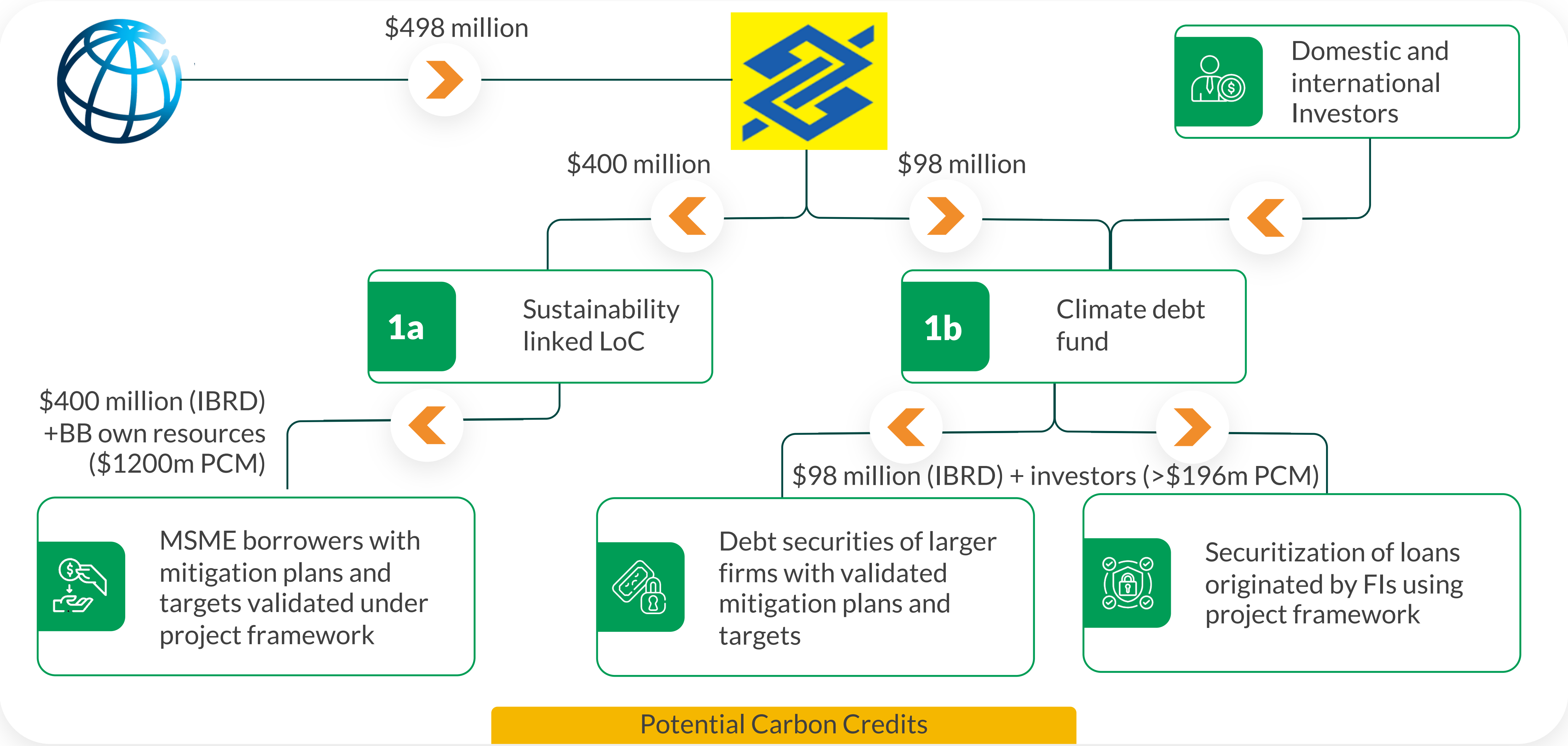


It is already happening

1. **Assist projects sponsors to create the environment for carbon credits,**
2. **Assist with regulatory framework governing carbon markets (i.e., voluntary and compliance**
3. **Assist with the identification of value chains where supporting carbon credits markets could make sense**

Currently supporting Malaysia, and Cambodia

Result based- finance for farmers and SMEs / Case of Brazil



*IBRD International Bank for Reconstruction and Development

** PCM Private Capital Mobilization

Companies purchasing carbon credits today to support their comments.

Microsoft, Swiss Re, UPS, Google, Sky, Signify, Lidl, HSBC, Logitech, NY, LM Wind Power (a GE Renewable Energy business), ALDO, L'ORÉAL, PHILIPS, Shell, bp target neutral, Disney, GM, DELTA, dpd, Interface

Latest **net – zero commitments from companies**

Nestlé	Net zero by 2050 Total footprint 120m tCO2e
BOSCH	Carbon neutral in 2020
PEPSICO	Net zero by 2050 Total footprint 100m tCO2e
Bank of America	Carbon neutral in 2020
Unilever	All brands net-zero by 2039. Total footprint 90m tCO2e
Apple	Carbon neutral by 2030 including supply chain
DANONE (ONE PLANET. ONE HEALTH)	Carbon neutral by 2050.Total footprint 50m tCO2e
Microsoft	Carbon negative by 2030
P&G	Net zero by 2050 Total footprint 120m tCO2e
amazon	Net-zero by 2040

Agriculture Credit Guarantee Schemes

- Partial credit guarantee scheme (CGS) provide credit risk mitigation to financial institutions by absorbing part of their losses on loans in case of defaults in return for a fee
- Aim to minimize financial institutions' risk in lending to underserved segments (MSMEs, agri-producers)
- Important design features make CGS an attractive instrument to crowd-in financing from private financial institution

Coverage ratio

- The share of the losses underwritten by CGS
- High enough to attract FIS but should not eliminate the risk entirely

Leverage ratio

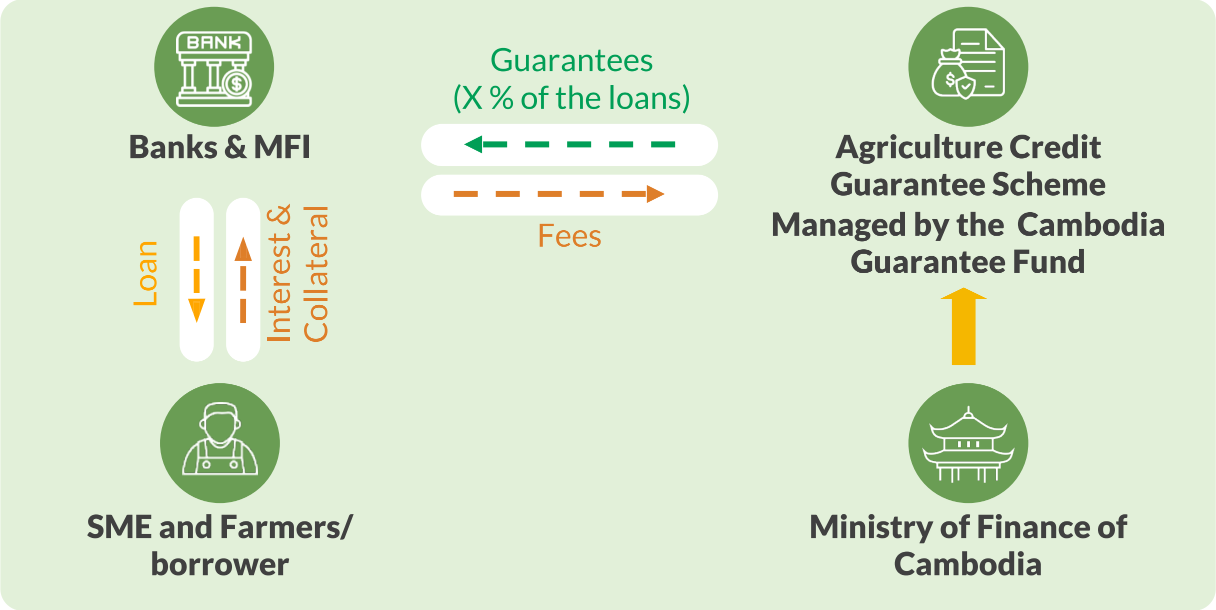
- Multiplier atffecting of CGS
- Allow to guarantee loans higher than the size of the endowment

Delivery approach

- Loan-by-loan (individual guarantee) approach
- Portfolio approach using a set of pre-agreed criteria

Special focus on Agriculture Guarantee mechanism in Cambodia

Mechanism



Partial Credit Guarantee schemes (PCGs) are a popular policy intervention to alleviate credit constraints

PCGs absorb part of the default risk of the borrower, with a view to increase credit supply to credit

Expected Impact

- **Financial Additionality on the Extensive Margin:** Induces banks to expand the risk frontier, providing loans to firms without access to loans (as opposed to subsidize bank's risk on firms that were already accessing credit)
- **Financial Additionally on the Intensive Margin:** Improves access to finance conditions (interest rates, amounts and maturities)

Main Benefits

Could lead to a Reduction of collateral requirement

Extension of debt maturity

More favorable debt amortization /repayment schedule

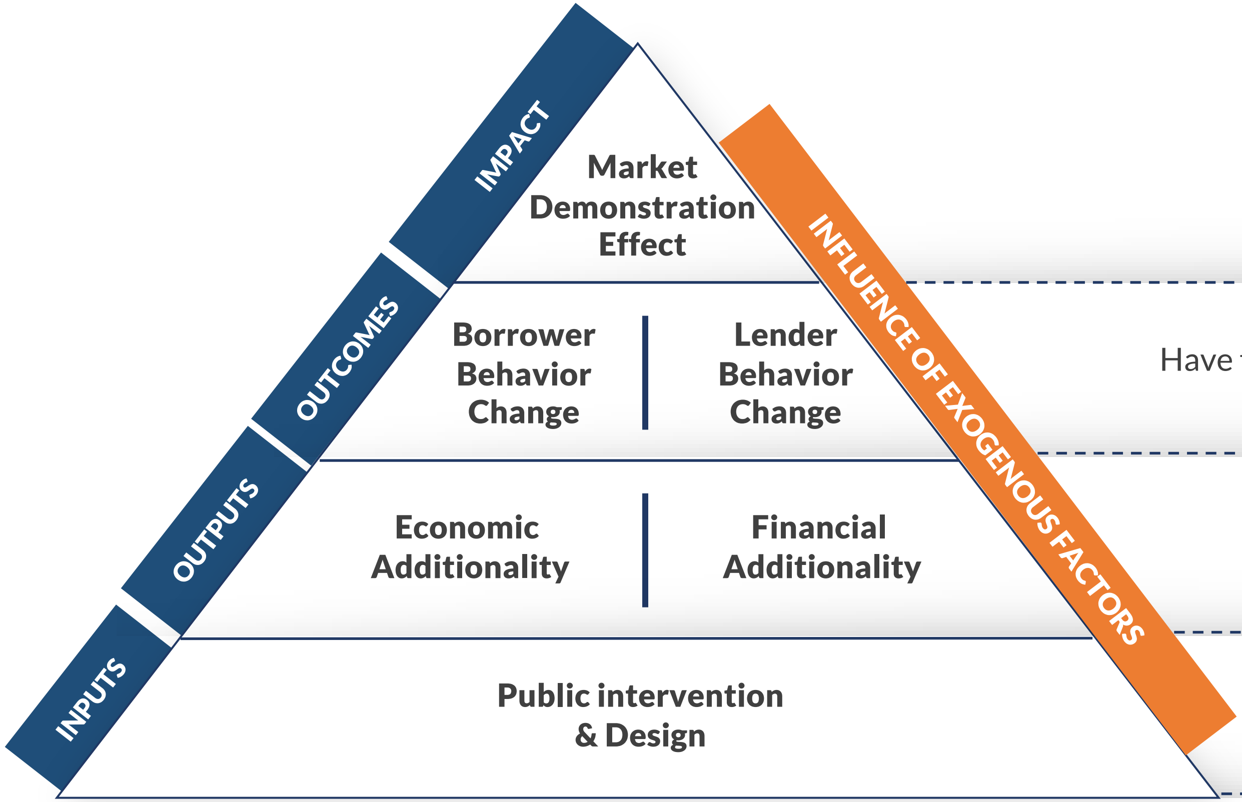
Extended list of Available climate finance lenders

Introduction of new borrowers to the market

Introduction of large-scale lending operations

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

No solution is a panacea. But a combination of right instruments and tools for clearly identified needs can make a difference



Has the market changed its behavior?

Have targeted borrowers and lenders changed their behaviors?

Has the deal worked the way it was designed?

What is the right tool for the problem at hand?

Thank You

- Eswatini
- Kenya
- Lesotho
- Namibia
- Rwanda
- Somalia
- South Africa
- Uganda
- Zambia
- Zimbabwe

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP