Session 3:
Climate Finance for Agriculture Value Chains

Prepared by F. FADIKA, Senior Financial Sector Specialist
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

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

Agriculture value added

Agriculture, forestry, and fishing value added (% of GDP)
Adaptation finance to build resilience and face devastating impact of climate on agriculture value chains

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

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

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.

Impacts on Agriculture Productivity:

- 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

Significant Variation in Access To Agricultural Credit Across Africa

Credit to Agriculture, $US m. (2010-2021)
Toward a more proactive approach to climate finance to support agriculture value chains
### Understanding the scale of public and private finance needs for agriculture

<table>
<thead>
<tr>
<th>Agro- Value chains</th>
<th>Agro- Infrastructure</th>
<th>Farming and Agro- Industry/ Agro- Forestry</th>
<th>Policies and Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crops + Commodities/</td>
<td>Agriculture climate investments (irrigation systems)</td>
<td>Climate Smart Agriculture approaches and investments</td>
<td>Agri policies and priorities: Productivity/ Food security</td>
</tr>
<tr>
<td>Understand risk/ Climate risk profile / ESG considerations along the value chains</td>
<td>Farm energy systems/Integration in bio-mass energy supply chains</td>
<td>Adaptation investments at micro-level/ farming – SME level/ meso-level investments</td>
<td>NDC/ Adaptation policy and expenditure</td>
</tr>
<tr>
<td>Adaptation investments at national and sub-national levels</td>
<td>Warehouses</td>
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<td>Land use/ deforestation and linked to agricultural activities</td>
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<td>Monitoring/ verification systems</td>
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<td>Agriculture subsidies</td>
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<td>Integration in vertical / horizontal in green global and regional agriculture value chains</td>
<td>Agro-industrial parks</td>
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<td>Agriculture land management systems</td>
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Urgent need to adopt a more proactive approach to unlock private capital for climate investments in Agri-value chains

**Sub-Saharan Africa**
- **USD 15.5 Bn**
- 83% of financing in Sub-Saharan Africa unmet

**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

**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

**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

USD 74.5 Bn
Gov: Understanding the constraints to unlock the supply of finance for Agri-value chains

- Operational risks
- Market risks
- Climate risks
- Production risks
- Financial risks

Financing Agriculture 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
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

<table>
<thead>
<tr>
<th>Strategy and Coordination</th>
<th>National Climate Finance Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Finance Roadmap</td>
<td>Key line ministries (e.g., finance, environment), Central Bank</td>
</tr>
<tr>
<td>National platform/Taskforce on Green finance</td>
<td>Ministry of Finance, Central Bank, financial regulator/supervisor, Industry association</td>
</tr>
<tr>
<td>Inter National Network</td>
<td>Ministry of Finance, Central Bank, Supervisory authority, financial regulator/supervisor</td>
</tr>
<tr>
<td>Paris Alignment by FIs</td>
<td>Ministry of Finance, financial regulator/supervisor, Industry associations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Build Skills and Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate-Related Risk and Environmental Risk Assessment</td>
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<td>Climate-Related and Environmental Supervisory practice</td>
</tr>
<tr>
<td>Supervisory Guidance on Climate Related and Environmental Financial Risks</td>
</tr>
<tr>
<td>Exploring Greening of Central Bank’s Activities</td>
</tr>
</tbody>
</table>

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<thead>
<tr>
<th>Financial Regulation and Central Bank Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greening NDBs/other public FIs</td>
</tr>
<tr>
<td>National Green Finance Entity or Green Bank</td>
</tr>
<tr>
<td>Promote Blended Finance Products</td>
</tr>
<tr>
<td>Stimulate Green/Sustainability Linked Loan</td>
</tr>
</tbody>
</table>

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<th>Increasing Transparency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate-Related and Environmental Disclosure and Reporting Standards</td>
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</tbody>
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<th>Green(ing) FIS</th>
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</thead>
<tbody>
<tr>
<td>Stimulate Corporate Green Bond Issuance</td>
</tr>
<tr>
<td>Originate Green Sovereign Bonds</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Green Financial Tools and Instruments</th>
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</thead>
<tbody>
<tr>
<td>The World Bank</td>
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</table>
Trend in public financial interventions
Public intervention to stimulate the supply of private and blended climate finance for agriculture value chains

- Undeveloped market
  - No lender under any circumstance
  - Consider support for direct lending

- Proof of concept
  - Lenders first entry into segment

- First loss/PCG/blended finance
  - Few lenders with limited experience

- Market adoption
  - Some experienced lenders in segment

- Fully viable
  - Segment becomes mainstream

**Government/Donor level of engagement required**
- **High**
- **Low**
Climate Finance instruments for agriculture value chains (stimulated with the support of Governments)

**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

Leverage public/ concessional funding to attract Private Capital
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

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

It is already happening
Leverage value chain to catalyze climate finance for SMEs and farmers

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<thead>
<tr>
<th>Leverage digital payments and technology for traceability and better supply climate finance</th>
<th>Adoption of ESG and climate principles in agriculture value chains (becoming requirements for exports in EU and many countries around the world)</th>
<th>Carbon neutral commitments linages with local / regional / global value chains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage Fintech and data for green loans and sustainable linked loans across agriculture value chains</td>
<td>Technical assistance support to agriculture finance providers</td>
<td>Ensuring Financial protection across the agriculture value chain in case of extreme events</td>
</tr>
</tbody>
</table>
Carbon finance as a potential source of income for smallholders' farmers but also as a solution to unlock credit

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

1a Sustainability linked LoC
- MSME borrowers with mitigation plans and targets validated under project framework
- $400 million (IBRD) + BB own resources ($1200m PCM)

1b Climate debt fund
- Debt securities of larger firms with validated mitigation plans and targets
- $98 million (IBRD) + investors (> $196m PCM)

$498 million

Domestic and international Investors

Securitization of loans originated by FIs using project framework

Potential Carbon Credits

*IBRD International Bank for Reconstruction and Development
** PCM Private Capital Mobilization
Companies purchasing carbon credits today to support their comments.

Latest net – zero commitments from companies

- **Microsoft**: Net zero by 2050. Total footprint 120m tCO2e
- **Swiss Re**: Carbon neutral in 2020
- **Google**: Net zero by 2050. Total footprint 100m tCO2e
- **Sky**: Carbon neutral in 2020
- **Signify**: All brands net-zero by 2039. Total footprint 90m tCO2e
- **Bosch**: Carbon neutral in 2020
- **Lidl**: Carbon neutral by 2030 including supply chain
- **HSBC**: Carbon negative by 2030
- **Logitech**: Net zero by 2050. Total footprint 50m tCO2e
- **Aldo**: Net-zero by 2040
- **L’Oréal**: Net zero by 2050. Total footprint 120m tCO2e
- **Philips**: Carbon neutral in 2020
- **BP**: Net zero by 2050. Total footprint 120m tCO2e
- **Target Neutral**: Net zero by 2050. Total footprint 120m tCO2e
- **Disney**: Net zero by 2050. Total footprint 120m tCO2e
- **GM**: Net zero by 2050. Total footprint 120m tCO2e
- **Delta**: Net zero by 2050. Total footprint 120m tCO2e
- **Dpd**: Net zero by 2050. Total footprint 120m tCO2e
- **Interface**: Net zero by 2050. Total footprint 120m tCO2e
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 institutions.

**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 affecting 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**

- **Guarantees** (X % of the loans)
- **Agriculture Credit Guarantee Scheme**
  - Managed by the Cambodia Guarantee Fund
- **Ministry of Finance of Cambodia**
- **Banks & MFI**
- **SME and Farmers/borrower**
- **Loan Interest & Collateral**
- **Fees**

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