

Regional Policy Forum

5-7 September 2023

Speech of Mr. Shaji KV, Chairman, NABARD

Green and Climate Finance in Agriculture: Critical Trigger to Sustainable Food System Asia-Pacific Rural and Agricultural Credit Association (APRACA)

Good morning. On behalf of APRACA member institutions in 24 countries, I heartily welcome you all to this Regional Policy Forum on '**Green and Climate Finance in Agriculture: Critical Trigger to Sustainable Food System**' being organized in conjunction with the 76th Executive Committee meeting of APRACA and the 23rd meeting of APRACA General Assembly.

We are delighted to have with us **Mr. Qian Wenhui**, Chairman, Agricultural Development Bank of China and APRACA Vice-Chair. It is also a great privilege to meet Mr. LIN Tinali, Chairman of People's Government of Guangxi Zhuang Autonomous Region who will be delivering the Keynote address and **Mr. Ye Yanfei**, Senior Advisor to Policy Research Bureau, National Administration of financial regulation of China.

I also extend a very warm welcome to

Mr A K M Sajedur Rahman Khan, Deputy Governor, Bangladesh Bank,

Ms Bernadette Romulo Puyat, Deputy Governor, Bankgo Sentral ng Pilipinas (BSP), Philippines,

His Excellency Dr Kao Thach, Royal Government Delegate in Charge as Chief Executive Officer, Agricultural and Rural Development Bank (ARDB), Cambodia,

Mr Rath Sovannorak, Assistant Governor, National Bank of Cambodia (NBC), Cambodia,

Mr Chatchai Sirilai, President, Bank of Agricultural and Agricultural Cooperatives (BAAC), Thailand,

Mr Min Thu, Managing Director, Myanmar Agricultural Development Bank (MADB), Myanmar,

Madam Nguyen Tuyet Duong, Member of the Board of Director, Vietnam Bank for Agriculture and Rural Development (VBARD), Vietnam and other esteemed dignitaries from China, Pakistan, Indonesia, Japan, Nepal, and Uzbekistan. It's also a great privilege to have with us the representatives from the Asian Development Bank (ADB) and International Food Policy Research Institute (IFPRI).

Coming to the theme of our Regional Policy Forum, **Agriculture and Climate Change**, I would like to share a few thoughts on the subject.

- Agriculture is in the front line of climate change impact. Climate change is projected to negatively impact the four pillars of food security – availability, access, utilisation and stability – and their interactions.
- Climate change acts as a “risk multiplier” for small and marginal farmers, worsening existing social, economic, political and environmental stresses. There is emerging evidence that the productivity of crops, livestock and fish is likely to be affected with implications to food security, livelihoods, and sustainability in agriculture.
- India is ranked the fifth most vulnerable nation to the effects of climate change with nearly 35% of its GDP at risk annually. In India, several studies have projected declining crop yields, in

response to changing climate characterized by rising temperature. Impact of climate change on Indian agriculture was studied under National Innovations in Climate Resilient Agriculture (NICRA). Rainfed rice yields in India are projected to reduce marginally (<2.5%) in 2050 and 2080 and irrigated rice yields by 7% in 2050 and 10% in 2080 scenario. Further, wheat yield is projected to reduce by 6-25% in 2100 and maize yields by 18-23%.

- The agricultural sector employs over 30% of the labour force in developing countries. Disasters have a direct impact on the livelihoods of millions of small farmers and on rural communities in the Asia region.
- FAO report highlights that the agriculture sector absorbed 26% of the overall impact from medium- to large-scale disasters in low- and lower-middle-income countries from 2008 to 2018. For climate-related disasters such as floods, droughts, and tropical storms, more than 25% of all damage and losses is associated with the agriculture sector. Agriculture is the sector most affected by droughts, absorbing on average about 84% of the total economic impact.
- In addition, agriculture itself contributes significantly to the world's emissions of greenhouse gases (GHGs), both directly and indirectly. Agriculture, forestry, and other land use (AFOLU) accounts for around one-fifth (22%) of all anthropogenic greenhouse gas emissions in the world. Methane and nitrous oxide emissions from farms account for 50% of this; the remaining 50% comes from land use, land use change, and forestry (LULUCF)-related CO₂ emissions. Methane reduction is crucial for stabilising climate change by the middle of the century because it has a particularly high short-term impact on temperatures.
- Climate change is also expected to reduce the nutritional content of grains, with lower levels of grain protein and lower levels of zinc and iron.
- Lenders of agriculture sector have correlated risks because of concentration of loan in particular geographies and related agriculture business, including downstream processing sector.

Sustainable Food System

- The Paris Agreement explicitly links food production and food security to its objectives. It aims to “strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty” and its preamble recognizes “the fundamental priority of safeguarding food security and ending hunger, and the particular vulnerabilities of food production systems to the adverse impacts of climate change.”
- Comprehensive risk management is a critical means to making food systems – and agrifood production in particular – more resilient. Risk reduction can protect development investments in agriculture as well as markets and transportation, ecosystems and child and maternal health.
- Agriculture is crucial to achieving climate change resilience. However, if agriculture continues to function as usual, these cannot be accomplished. Improved climate forecasts, risk management, a range of crops and management methods, and financial mechanisms to support these activities can all aid in adaptation on farms.
- Effective mitigation tactics and suitable adaptation technologies are being applied to reduce greenhouse gas emissions from the agriculture sector and advance towards the objectives of

sustainable food systems and net zero emissions. The agriculture sector would need to undergo significant change in order for the successful scenario to materialise, including modifications to how we cultivate, consume, and waste food as well as how we manage our forests and other natural carbon sinks.

- In contrast to other industries, agriculture sometimes finds it more difficult to make these significant advancements. Agriculture might not always have access to certain technology that could significantly reduce emissions. Agriculture is also substantially less centralised than other businesses. In addition to climatic goals, the agriculture sector must take into account a wide range of goals, including biodiversity, the need for nutrition, food security, and the livelihood of farmers and rural communities.
- Climate Smart Agriculture (CSA) is an integrative approach for transforming and reorienting agricultural development under the new realities of climate change. As per FAO it sustainably increases productivity, enhances resilience, reduces greenhouse gases (GHGs) where possible and enhances achievement of national food security and development goals. Thus, CSA is essential for ensuring both global food production and food security, as well as for advancing the 17 SDGs that make up the 2030 Agenda.
- It has also been discovered that there are synergies between food security, adaptation, and mitigation that make agricultural adaptation measures economically viable. The opportunity costs of inaction can be avoided by agricultural adaptation, and expenditures can be timed properly to preserve productivity development.

Green and Climate Finance in Agriculture

- It is critical to precisely evaluate the costs and financial requirements for agricultural climate adaptation and mitigation activities, as well as to strengthen the existing financing, instruments, and procedures to support such investments.
- The financial costs of changing agriculture and food systems to achieve the SDGs and the targets set forth in the Paris Agreement are widely estimated. Between 2022 and 2030, these range from an additional expenditure increase of \$15 billion to US\$350 billion annually.
- As per a report of Climate Policy Initiative in 2022, climate finance to AFOLU represents only 2.5% of total climate finance tracked during 2019-20, indicating that AFOLU sectors are underfunded in comparison to other sectors, like renewable energy generation receiving 51% or low-carbon transport with nearly 26% of the total. The vast majority of monitored AFOLU climate money comes from public sources, with philanthropies accounting for the minor portion discovered on the private side. Multiple impediments to private investment in AFOLU sectors exist, including significant real and perceived risks, as well as absence of impact considerations that discourage private investment.
- Climate finance can act as a stimulus for the development and implementation of novel systems for leveraging additional sources of finance, particularly from private sources.
- Climate financing has the potential to alleviate fundamental restrictions in the agriculture finance landscape, such as insufficient enabling environments, insufficient capacity to handle

agricultural risks, and high transaction costs. Climate financing can act as a catalyst for unlocking additional public and private sector investments, increase relationships between financial institutions, smallholder farmers, and build the capacity of both lenders and borrowers.

Now I will share the initiatives taken by NABARD in India to support scaling up of climate resilient financial services which are flagship initiatives with national level impact.

NABARD's initiatives

- Owing to decadal long persistent efforts of NABARD in NRM sphere, NABARD has achieved a unique distinction of getting accredited as National Implementing Entity (NIE) of Adaptation Fund (AF of UNFCCC), National Adaptation Fund for Climate Change (NAFCC) and Green Climate Fund (GCF of UNFCCC); it is also the Direct Access Entity to the Green Climate Fund.
- NABARD has facilitated sanctioning of USD 274.58 million under the AF (USD 9.85 million), NAFCC (USD 130.38 million) and GCF (USD 134.35 million) funding mechanisms.
- The projects sanctioned have addressed adaptation requirements of communities vulnerable to climate change impact. The mid term evaluation conducted by us has highlighted that (a) Localised interventions fetched the best results. (b) Nature-based interventions were low risk and sustainable. (c) Including women in decision making and risk sharing ensured success. (d) Co-ownership of project interventions by beneficiary households through cost sharing motivated the beneficiaries, lending stability to the interventions. (e) Regular monitoring and evaluation led to successful execution of the projects.
- Climate Change Fund (CCF) was created in NABARD to support awareness building on Climate Change issues and to promote and demonstrate innovations.
- NABARD has also established a Centre for Climate Change which is engaged in knowledge sharing, training and capacity building of stakeholders, policy advocacy etc.

Other initiatives in Climate Resilience

- Under the aegis of Indo-German Cooperation and support of Govt of India, NABARD has instituted dedicated development funds for its flagship Natural Resources Management viz watershed and tribal development programmes.
- Watershed programme has, so far, covered 2.3 million ha with grant assistance of USD 318 million.
- The Tribal Development Programme, a family based and biodiversity enhancing approach, so far has covered 5.6 lakh tribal families stretched across 5.33 lakh acres of land with plantation coverage aided by cumulative grant assistance of USD 317 million.
- NABARD also piloted climate resilient practices like SRI, Organic Agriculture, value chain development of small holders produces, automatic weather stations as a part of promoting climate resilient agriculture.
- To provide scale advantage to small farmers, NABARD, through its dedicated funds, has enabled formation of 4000+ FPOs in the country.

Further course of action

- As climate financing is mainstreamed at scale, there is a need to bring out the taxonomy of Climate Resilient Agriculture
- Adoption of sustainable value chain approach is to be preferred rather than financing a single component in the value chain.
- Lastly, the financing needs of NRM sector are far greater than the resources available and grant based programme. As the needs of climate resilience are likely to increase in the future, climate finance would have to be significantly scaled up using both domestic and international sources.
- Development of innovative instruments such as blended financing would allow for scaling up finance without putting on excessive budgetary resources.

I am confident that the views and knowledge expressed in the Regional Policy Forum by subject experts/ eminent personalities will throw light on the support mechanism for financing Climate Smart agriculture which can be translated to national level policies for Green & Climate finance in Agriculture and lead to sustainable food systems across the region.

I wish the 98th Asia-Pacific Regional Policy Forum all success.

Thank You