

# Land and Agriculture Development Bank of South Africa

## Climate Services for Credit Decision Making

- Nehru Pillay 9 Dec 2020



# Structure



- Land Bank – who we are
- Climate Change, Agriculture & Financial Institutions
- Climate Change and Land Bank
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- Benefits to Land Bank and Agri-Community

*The Mandate of the Land Bank and the National Development Plan highlights the importance of the Agriculture sector to the country's Development and Transformation agenda...*

## Mandate

*The objects, as per the Land Bank Act, No. 15 of 2002, are the promotion, facilitation and support of:*

- **Equitable ownership** of agricultural land, in particular increasing ownership of agricultural land by HDI's **Agrarian reform**, land redistribution or development programmes aimed at HDI persons
- **Land access** for agricultural purposes
- **Agricultural entrepreneurship**
- Removal of the legacy of **racial and gender discrimination** in agriculture
- **Enhancing productivity**, profitability, investment and innovation
- **Growth** of the agricultural sector and better use of land
- **Environmental sustainability** of land and related natural resources
- **Rural development and job creation**
- Commercial agriculture
- **Food security**



The NDP views agriculture as central in achieving its inclusiveness and socio-economic goals

“Better land use in communal areas has the potential to **improve the livelihoods<sup>1</sup> of at least 370 000 people.**”

“A further **70 000 livelihood opportunities** are created if land reform beneficiaries are properly supported.”

“**Agriculture has the potential to create close to 1 million new jobs by 2030**, a significant contribution to the overall employment target.”

National Development Plan; Vision 2030

## Who we are

We are a wholly government owned DFI promoting inclusive agricultural and rural development for improved food security and economic growth.

Our wholly owned insurance subsidiaries, Land Bank Insurance Company SOC Ltd (LBIC) and Land Bank Life Insurance Company SOC Ltd (LBLIC) complement our other financial services by providing insurance and risk management solutions to the agricultural community.

## Our Mission

To collaborate with all stakeholders to build an adaptive and competitive agricultural sector that drives environmental, social and economic development and contributes to food security.



## Our Vision

To be a world-class agricultural development bank that stimulates growth, drives solid performance, and spurs innovation.



## Our Values

Meaningful contribution  
Empowerment  
Organisational synergy  
Accountability  
Pro-activity



- Agriculture is a **“front-line sector”** in terms of both its dependence and impacts on natural resources, i.e. the economic and environmental challenges facing farmers and the agricultural system are **closely connected**.
- Agriculture - one of the **most vulnerable economic sectors to the impacts of climate change**,
- **Crop losses** due to severe floods, extended droughts, emergence of diseases and proliferation of insect pests, all of which are closely related to the impacts of climate change, have been **increasing both in coverage and frequency** in recent years
- Climate change negatively impacts the financing of agriculture –**exacerbates an already risky environment, changes and introduces greater uncertainty in the ability of farmers to repay loans, farm values change due to climate change impacting collateral**, etc.

# Climate Change, Agriculture & Financial Institutions

- The financial **institutions need to adapt its internal processes** and policies and its products and services to meet the challenges its clients face as well as to safeguard its own viability.
- Some recommendations from a International Institute for Sustainable Development report for agri-banks
- First, banks should explicitly **integrate climate risk** in their risk management strategies.
- Second, they should **incentivize adaptation** and climate-proof their financial instruments to support climate adaptation (or at a minimum to prevent maladaptation) along agro-value chains.
- Third, banks should explore any potential new opportunities from climate change by **developing new products and services** in collaboration with other actors (e.g., research organizations, telecommunication and software companies).
- Finally, a more **proactive approach** to supporting climate adaptation also calls for greater financial inclusion, including **financial services that explicitly target women** with a framework in place to monitor and evaluate progress and impacts.



- Rising NPLs – this has been rising over the past 4 years
- Ratings downgrades – already happened 4 times in 2020- Moodys
- Liquidity Problems – experienced throughout 2020
- Loss of Funding – already experienced in 2020
- Increase in risks – significant increase in reputational, credit risk in 2020
- Loss of clients
- Loss of business
  
- All these impact on Land Bank’s ability to execute its mandate to support and grow the agri sector

# Case Study I

- The problem:
- **Climate variability in the region** exposes agricultural activities to periodic occurrence of multi-year droughts that **leads to severe losses to farmers** and bankruptcy of investors. In the recent years (e.g. 2015, 2016 and 2018) very hot conditions during summer and sporadic rainfall resulted in significant negative impacts to crop production.
- The region will continue to experience relatively large impacts through the 21st century under both high and low mitigation scenarios.
- The Land Bank is a Development Finance Institution providing financial services to the commercial farming sector and agribusiness in South Africa. To a large degree, **anticipating climate variability and extremes are key to the success of long-term investments in farming operations of the Bank.** Current key performance indicators of the bank include the number of employees that will be retained as a consequence of mitigating climate change impacts as well as the number of new employees absorbed for mitigating climate change impacts.
- For these reasons, the **Land Bank is interested in a climate product that provides information on investments exposures to climate-related risks in order to adjust the credit model to compensate for potential climate change impacts.**



# Case Study I



- The Methodology
- Land Bank will select the specific area of interest (a district) in the North West of the country and will provide historical production data, historical information on pests and diseases, agro-management practices and soil information.
- **Crop model simulations (Decision-Support System for Agro-technology Transfer DSSAT27) will be generated using: Stochastic weather simulator; Coarse climate model simulation; High-resolution climate simulation; Blending a stochastic model with coarse and high-resolution climate simulations**
- **The results combined with simulated stress indices will support decision not only on potential options for crops, but also for livestock. The team will identify adaptation measures and investigate underlying opportunities. This will feed the co-development of an adaptation strategy for the credit model.**

# Benefits to Land Bank and Agri Community



- **Improve and mature our risk assessment and credit decision making** – this will contribute to ensuring our portfolio is more climate resilient – a more sustainable bank.
- Develop **new products** aimed at making clients more climate
- Coerce us into constantly improving our environmental management
- Enable us to **engage with clients/farmers/stakeholders** on climate change challenges and opportunities
- Contribute to a better managed agric sector



## Address concerns of **stakeholders**:

- National Treasury/Govt of SA – reduce the need for fiscal support by reducing losses/guarantees
- **Investors in LB financial instruments** – better performance means better payment ability by Land Bank
- Ratings agencies – Nov 2019 Moody’s review for downgrade:
  - **Land Bank faces elevated credit risks**
  - **We assign a weighted average asset risk score of Caa1, six notches below its initial score, capturing 1) the significant proportion of loans classified as “underperforming” and an increasingly challenging operating environment, and 2) rising physical environmental risks from climate change and sustained drought, which have the potential to disrupt the ability of the bank's customers to repay their loans.**
- Farmers/Farmer Associations – access to finance on the back of a more robust due diligence
- **International institutions, UNEP FI commitment to Principles for Responsible Banking being more proactive with climate related matters; Multilateral funding WB, EIB, KfW**

# THANK YOU!

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[www.landbank.co.za](http://www.landbank.co.za)