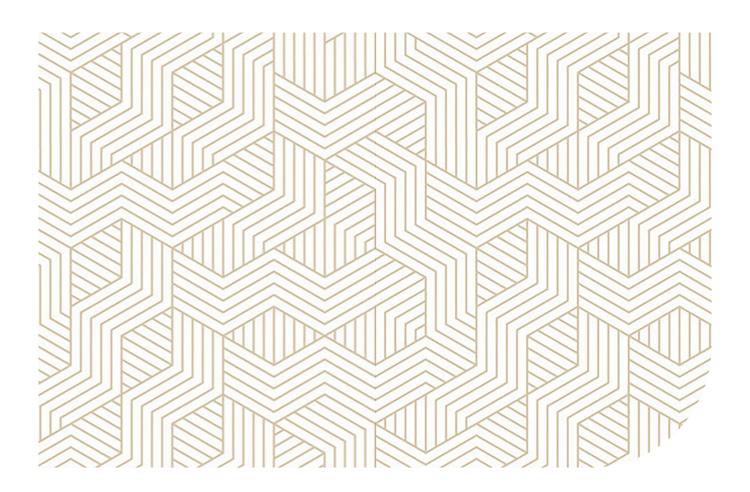


DBG ECONOMIC TRANSFORMATIONAL SERIES

Transforming Agriculture in Ghana:

Towards Innovative and Sustainable Agricultural Finance: The Role of Development Bank Ghana.



DBG ECONOMIC TRANSFORMATIONAL SERIES

Ghana, a nation of cultural richness, diverse landscapes and enduring democracy, has long been recognized as a beacon of hope in West Africa. Yet, within its borders lies a pressing challenge – the need to address poverty and ensure food security for its population. At the heart of this endeavour is the transformation of its agricultural sector. Agriculture is not just an economic sector but the nation's lifeblood.

In Ghana, agriculture contributes significantly to employment, with over 40% of the population finding their livelihood in this sector. Most of these individuals are smallholder farmers, deeply intertwined in the fabric of their land, but often constrained by subsistence farming practices. Agriculture in Ghana encompasses various sub-sectors, including crop production, livestock farming, fisheries, and forestry.

While agriculture offers immense promise, it also confronts many formidable challenges. Access to credit for farmers is limited, impeding investments in modern farming practices and technology. Inadequate infrastructure, from transportation to storage, results in substantial post-harvest losses, undermining the sector's efficiency. The spectre of climate change looms, threatening crop yields and livestock wellbeing. Moreover, the slow adoption of contemporary farming practices hampers the sector's progress.

Although efforts have been made to address these challenges, through policy reforms, capacity building, and promoting sustainable agriculture practices, the consistency and coordination of these efforts often leave much to be desired.

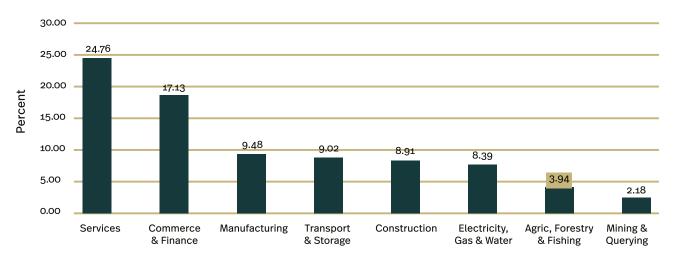
Innovative agriculture finance emerges as a linchpin in transforming Ghana's agriculture. Ghana's agricultural sector calls for strategic and well-informed financial investments to pave the way for transformation. As such, finance is not merely a component of this journey but the catalyst that can drive innovation, productivity, and sustainable practices across the agricultural landscape. The Development Bank Ghana (DBG) is at the heart of this transformation.

The Current Challenges in Agricultural Financing in Ghana

Despite its critical role in socio-economic development of our country, the sector continues to grapple with various challenges, chiefly limited access to finance. Farmers and smallholder farmers, who make up a substantial portion of Ghana's agricultural workforce, often find it difficult to access affordable loans and other financial services Data from the Bank of Ghana shows that private sector equity and debt financing in agriculture is significantly lower than almost all competing sectors.

As previously mentioned, over the last decade, agriculture has contributed an average of 20% to GDP and accounted for more than 40% of employable labour within the same period (2013-2022). Yet, agriculture received less than 5% of total commercial lending by financial institutions. Indeed, in about half of the decadal period from 2013-2022, the agriculture sector consistently received less than 4% of all credits distributed by deposit-taking banks in Ghana.

Figure 1: Average Sectoral Credit by Deposit-Taking Banks in Ghana, 2013-2022



Source: DBG Research with data from BoG

Related Agricultural Financing Challenges

Figure 2: Related Agricultural Financing Challenges



Source: DBG Research

High-Interest Rates:

Even when credit is available, interest rates are either shortterm or high, making it costly for farmers to borrow. High interest rates erode the profitability of agricultural activities and discourage farmers from seeking financial assistance.

• Seasonal Nature of Agriculture:

Agriculture in Ghana is highly seasonal, with most farming activities concentrated in specific periods of the year. This seasonality creates challenges for loan repayment, as farmers struggle to make

• Inadequate Agricultural Infrastructure:

The lack of adequate infrastructure, such as roads, storage facilities, and irrigation systems, limits the productivity and market access of farmers. Without proper infrastructure, it is challenging for farmers to transport their produce to markets, leading to post-harvest losses.

• Climate Change Vulnerability:

Ghana's climate change, including erratic rainfall patterns and droughts. Farmers need access to finance to invest in climateresilient technologies and practices, but this is often lacking.

Risk Aversion among Lenders:

Traditional financial institutions are risk-averse regarding agricultural lending. They usually perceive agriculture as a highrisk sector due to weather-related uncertainties and price fluctuations, leading to a reluctance to finance agricultural activities.

• Land Tenure Issues:

Land tenure insecurity is a significant concern for farmers because of a lack of property rights. The lack of clear land titles deters farmers from using their land as collateral to access loans.

The Current Challenges in Agricultural Financing in Ghana

Agriculture encompasses various activities, from small-scale farming to infrastructure projects to research and development. As a result, when referring to agriculture finance, the market clusters it into four groups. The groupings correspond to different approaches to addressing the needs of the sector:

- (1) the needs of farmers and entrepreneurs,
- (2) the transactions between the actors along the value chain,
- (3) infrastructure needs, and
- (4) generating knowledge to support the sector.



Farmers and Small Agricultural Entrepreneurs This category focuses on providing financial support to farmers and small entrepreneurs involved in agriculture. They require financing for various purposes such as purchasing seeds, fertilizers, machinery, equipment, and marketing efforts to expand production and diversify products



Actors Along the Value Chain

This approach concentrates on strengthening the connections and transactions between various stakeholders within the agricultural value chain. Financial instruments are designed to enhance these links, ensuring a smoother flow of resources and products from the suppliers of inputs to the consumers.



Rural Infrastructure Financing in this category is aimed at supporting the development and maintenance of critical infrastructure necessary for rural agricultural activities. This includes rural transport systems, irrigation, water supply, sanitation, electricity, storage, and telecommunications facilities. Due to their high costs, these projects require significant financial investments



Research and Development (R&D) The R&D approach focuses on providing financial support for knowledge generation within the agricultural sector. This encompasses the development of new agricultural technologies and the creation of technical knowledge related to products, processes, and services. R&D benefits producers in terms of business planning and also assists financial institutions and government agencies in making informed decisions regarding agricultural financing and planning.

Agricultural Financing Institutions

The Agricultural Development Bank (ADB) and the Ghana Agricultural Insurance Pool (GAIP) are some of the key specialised institutions established to facilitate agricultural financing and risk mitigation for the agricultural sector. Though ADB still provides agricultural financial services to farmers and agribusinesses, since 2004, it has become a universal commercial bank like many of the retail banks in Ghana.

Similarly, the GAIP has not been as effective as expected in providing insurance coverage for agricultural activities by safeguarding farmers against crop failures and other risks. These institutions have not fully met the expected threshold of improving access to credit and reducing the financial

vulnerabilities faced by farmers. Ghana has implemented various programs and reforms to enhance access to credit further. The Ghana Incentive-Based Risk Sharing System for Agricultural Lending (GIRSAL) has been a notable initiative promoting agricultural lending since 2018. GIRSAL provides guarantees and risk-sharing services to financial institutions, encouraging them to increase lending to farmers.

Additionally, establishing the Ghana Commodity Exchange and implementing the Warehouse Receipts System (WRS) enables farmers to use stored produce as collateral for loans, enhancing their creditworthiness. These efforts are attempts to expand farmers access to credit and improve their ability to invest in productive agricultural activities.

These efforts notwithstanding, the vast agricultural financial gap of over a decade, as shown in Figure 1, has not been fully addressed. For this reason, and primarily to address the lingering constraint of lack of medium-long term credit facilities for agriculture investment, (and other sectors), the Development Bank Ghana (DBG) Limited was established and launched in June 2022. Given its highest multiplier effect (750 jobs per each \$1 million invested) on job creation and economic impact, agribusiness is one of the main drivers, and, therefore, the focus of the GIRSAL-DBG emerging partnership for economic transformation.

Innovative Agricultural Finance Solutions

Innovative and sustainable agricultural finance is crucial for ensuring food security, promoting rural development, and mitigating the environmental impact of farming. It involves creating financial solutions that support farmers and agribusinesses and address the agricultural sector's long-term challenges.

DBG, through its Participating Financial Institutions (PFIs) and other stakeholders, can introduce innovative financing solutions that align with the needs of the agriculture sector:

Access to Finance

DBG through its **Participating Financial** Institutions (PFIs) can design tailored financial products that cater to the specific needs of farmers, agribusinesses, and cooperatives. These financial products should have flexible terms, low-interest rates, and extended repayment periods.

Climate-Smart Agriculture

DBG through its
PFIs can
encourage and
finance
climate-smart
agriculture
practices,
including the
adoption of
drought- resistant
crop varieties,
efficient irrigation
systems, and
renewable energy
solutions.

Value Chain Financing

DBG through its PFIs can work closely with various stakeholders along the agricultural value chain, from input suppliers to agro-processors. This approach ensures that funding is not only available for value addition activities, such as agro-processing and packaging. By financing the entire value chain, DBG can create a more holistic and sustainable impact on the sector.

Credit Guarantee Schemes

DBG in partnership with its stakeholders can provide credit guarantee schemes for various actors in the agriculture value chain. This instrument improves the chances for access to finance. These schemes provide guarantees to groups that do not have access to credit by covering a share of the default risk of the loan. In case of default, the lender recovers the value of the guarantee

Weather-based insurance

Weather-based insurance responds to objective parameters like rainfall or temperatures. Farmers who can obtain weatherbased insurance have better access to other forms of financing as well. Ghana is susceptible to climate change-related challenges, DBG can partner with insurance companies to provide weather-indexed insurance products that protect farmers from the vagaries of weather and natural disasters

Development Bank Ghana: A Catalyst for Change

Development Bank Ghana (DBG) emerges as a beacon of hope for the agricultural sector at this critical juncture in the country's development. Established to provide longterm financing solutions for priority sectors, including agriculture, DBG has the potential to transform the way farmers and various actors in agriculture access finance in Ghana.

DBG's unique mandate is to address the specific financial needs of various sectors in Ghana, including the agriculture sector. favourable terms, such as low-interest rates,

longer repayment periods, and reduced collateral requirements, DBG, through its Participating Financial Institutions (PFIs), can empower smallholder farmers to modernize their farming practices, enhance productivity, and improve their livelihoods.

DBG Focus Sectors

DBG has its sector focused on development sectors such as Agribusiness, Information and Communication Technology (ICT), Manufacturing and High Valued Services. By providing financial support and expertise in these sectors through participating financial institutions (PFIs), the Bank aims to fuel prosperity and unlock the potential of Ghana's private sector.

Table 1: DBG Focus Sectors

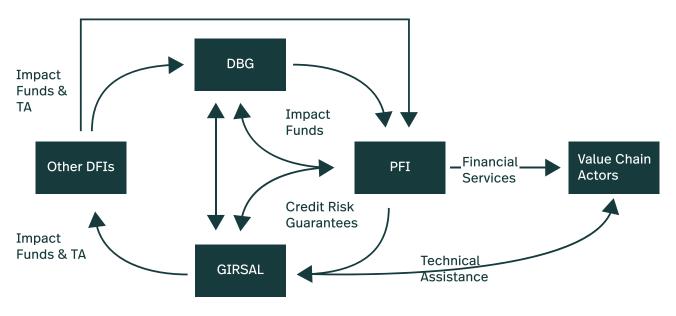
Focus Sectors	Priority Area
Agribusiness	Maize, Soya, Rice and Poultry
Information and Communication Technology (ICT)	ICT Infrastructure
Manufacturing	Light manufacturing and Pharmaceutical
High Valued Services	Tourism

DBG Financing Approach

DBG has uniquely adopted a value-chain approach to its financing of the priority agriculture products, ensuring challenges along the entire value chain are systematically and holistically addressed. DBG provides loans and alternative financial products, all of which, at least in the medium term, are

are directed through financial services intermediaries or PFIs. While loans constitute the base of the portfolio, Partial Credit Guarantees and Equity investments will play a critical role in ensuring that DBG can direct its interventions to target businesses. The financing approach to value-chain actors is schematically shown below.

Figure 3: DBG Value-Chain Approach to Agriculture Financing



DBG Project Financing Strategy

DBG has proposed various financing arrangements to help improve the identified value chain activities.

Table 2: DBG Project Financing Strategy

Value Chain Activities	Type of Financing
Inputs (seeds, Agro-inputs)	Short term finance
Land acquisition	Long-term finance/Asset finance
Land and infrastructure development	Long-term finance/Asset finance/Lease
Irrigation	Working capital finance
Haulage/Transport	Supplier finance/Working capital
Machinery and equipment	Trade finance - Letters of Credit
Spare parts and maintenance	FX Purchase/ working capital
Labour cost	Working capital
Other operational expenses including fuel	Working capital

DBG's Journey Towards Innovative and Sustainable Agricultural Finance

The first step towards addressing the agricultural finance situation was for the Bank to comprehensively understand the issues facing the various stakeholders in the agricultural value chain. To this end, the Bank organized a multi- stakeholder value chain study from March-May 2023, to

- (i) explore opportunities for financing of private enterprises,;
- (ii) identify policy and regulatory bottlenecks to de-risk private sector environment.;
- (iii) determine areas of capacity building and training in support of targeted capacity building for actors in the value chain; and
- (iv) explore possible collaboration, opportunities and partnerships for foreign direct investment.

Figure 4: DBG journey to understand issues facing stakeholders in the agricultural value chain.









Agriculture is not just an economic sector but the nation's lifeblood.

Mr. K. Duker CEO, DBG













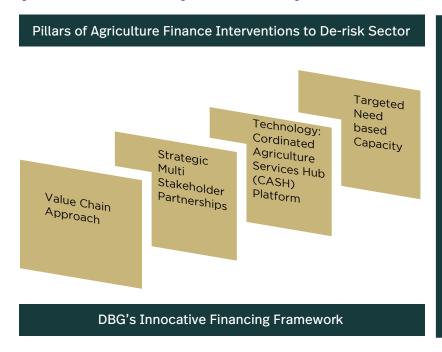


A comprehensive mapping of the value chains was undertaken as part of the study. The mapping identified key stakeholders in each value chain to determine their roles and in what specific areas their interventions are. This analysis helped DBG to identify gaps within the value chain to determine possible and future interventions.

Notably, the outcome of the multi-stakeholder workshops was positive. First, about 29 enterprises were identified for possible financing by DBG and its PFIs, subject to further due diligence. Second, policy and regulatory issues and recommendations were provided to address them. Further analysis helped the Bank to group these issues and recommendations into two broad areas: cross-cutting issues and recommendations; and specific issues germane to the particular value chain.

- Among the important policy and regulatory recommendations that were proposed include
- (i) aligning government input credit facility to continuous marginal increases in farm size;
- (ii) standardizing seeds across the agro-ecological zones while taking account of its soil and tolerance for fertilizer;
- (iii) investing in research and development in generating high yielding seeds for farmers;
- (iv) reforming and expanding the role of Ghana Commodity Exchange (GCX) in the distribution of farm inputs and the aggregation, purchasing, storage, warehousing and trading of cereals;
- (iv) utilizing technology through the DBG digital platform to increase the reach of capacity building, training, and information sharing with actors within the value chain; (v) undertaking sample surveys within the value chains to improve data as a basis of sound decision making; and
- (vi) addressing value chain specific recommendations.

Figure 5: DBG's Innovative Agricultural Financing Framework



- 1. Value Chain Finance: Offer financial interventions for all players in Food & Agriculture Sector End to End
- 2. Strategic Partnerships: Enhance synergy while spreading risks among partners.
- 3. Technology: Offer financial services beyond traditional brick and mortar last mile approach
- **4. Capacity Building:** Training farmers, FBOs, PFIs and SMEs

In addition, the financing requirements for 4-value chains (i.e., maize, soya, poultry, and rice) were undertaken to identify available financing and financing gaps. A combination of the value chain mapping and the financing gaps were to inform financial institutions and donors, including DBG, PFIs, multilateral institutions and others, in coordinating resources to meet the value chain objectives. In line with this, total financing over five years was projected at US\$1.04 billion, of which US\$936.4 has been identified.

This is predicated on reforms in the input system, which will be granted to farmers on a credit basis. Repayment of this financing creates a revolving system, making the new initiative sustainable. Thus, future budgetary allocations from the Government are based on increased production from yields and extensification, which would require more research and supply of farm inputs. Other financing, such as Mastercard and OVF, are also assumed to remain constant over the projection period. The financing gap of over US\$110 million may be filled by actors in the value chain through their own funds, equity or borrowing from the financial sector.

DBG Financing Thus Far

Over the medium term, DBG has earmarked GHS 1.7 billion for Agriculture. This allocation is likely to lead to create about 100,000 jobs in farming, processing, and distribution within the agricultural value chain. In a phase-in approach and to support the government's agenda and build the economy's resilience, DBG has established a special credit program, Economic Recovery Programme ("DEEP"), with a seed fund of GH¢500m. In line with the GhanaCare programme, DEEP is geared towards supporting businesses in the Agribusiness value chain at preferential rates over the next five years to improve food security, reduce imports through acceleration of the import substitution agenda, increase productive exports and generate sustainable jobs in the agricultural value chain.

DEEP was set up to focus on four key agribusiness segments, namely Rice, Maize, Soya and Poultry. The success of DEEP is expected to result in a reduction in imports of the above-named products and translate into foreign exchange savings. The significance of DEEP was therefore recognised in the 2023 Budget Statement and Economic Policy of the Government.

Challenges and Opportunities

Risk Management:

Agriculture is inherently risky due to weather, pests, must develop effective risk mangement and market fluctuations. DBG and its PFIs strategies and products to protect farmers and investors. This can include insurance schemes and risk-sharing mechanisms.

• Infrastructure Development:

Access to markets, storage facilities and transportation is essential for a thriving agricultural sector. DBG can collaborate with the Government and private sector to invest in competitive infrastructure projects that facilitate the movement of agricultural produce from farms to markets.

• Financial Inclusion:

DBG should work towards expanding financial inclusion in rural areas. This involves providing credit, promoting financial literacy, and using digital financial services among rural communities.

Policy and Regulatory Support:

The Government plays a crucial role in creating an enabling environment for agricultural finance. DBG can advocate for policies that agricultural support development, including land tenure reforms, tax incentives, and investment-friendly regulations.

• Monitoring and Evaluation:

DBG and its PFIs must establish robust monitoring and evaluation systems to track the impact of its agricultural finance initiatives. Regular assessments will help for identify key learnings, areas improvement ensure that the and intended benefits reach farmers and agribusinesses.

Conclusion: Towards a Sustainable Future

Innovative and sustainable agricultural finance is about increasing access to credit and fostering economic growth and food security. The Development Bank Ghana, with its focus on agriculture, can play a pivotal role in this transformation. However, DBG cannot do this alone. It must collaborate with various stakeholders, including government agencies, agricultural associations, international partners, and financial institutions to ensure the success of its initiatives.

As we look towards the future, we must recognize that the development of Ghana's agricultural sector is not just a matter of economic progress but also a question of national pride. It is about preserving our heritage, ensuring food security, and improving the lives of the countless Ghanaians who rely on agriculture for their livelihoods.

In conclusion, DBG has the potential to be a game-changer in the agricultural sector. DBG can empower farmers, drive economic growth, and contribute significantly to Ghana's development agenda by providing innovative and sustainable financial solutions. The time is now for Ghana to harness the full potential of its agriculture sector and propel the nation towards a prosperous and sustainable future.







in (f) Development Bank Ghana

Together we grow. We do it different.