



Harvesting resilience

Leveraging finance for food security
and climate resilience

Foreword

As we approach the United Nation's (UN) 28th Conference of the Parties (COP) in the United Arab Emirates (UAE), First Abu Dhabi Bank (FAB), International Islamic Trade Finance Corporation (ITFC) and KPMG are delighted to unveil a strategic paper highlighting the pivotal role of financial institutions in advancing food security and addressing the pressing challenge of climate change in the Gulf Cooperation Council (GCC) countries.

Banks, investors, regulators, and multilateral institutions emerge as indispensable partners in our shared mission to achieve global climate and food security objectives. With the world's population projected to reach 9.7 billion by 2050, the choices we make today will exert a profound influence on our capacity to ensure food availability and safeguard the environment for generations to come.

The challenges of food security and climate change necessitate a unified approach spanning all sectors of society. Financial institutions are at the heart of this collective endeavor, providing vital support for the technologies and projects essential to shaping our planet's future and preserving the integrity of our food systems.

The landscape of food security is one underpinned by complex interactions between food, water, and energy systems and closely intertwined with climate change. GCC countries operating in a context of high food import, oil dependence, and water scarcity are on a path to build resilience and explore solutions for more sustainable food systems that meet the growing population's needs.

Leveraging finance can be a catalyst for a menu of possible solutions. Targeted sustainable finance instruments can unlock the widespread adoption of state-of-the-art agricultural technologies, innovative value chain processes, and eco-inclusive farming methodologies in the GCC and across global value chains.

Our research explores these solutions through the lens of financial institutions, offering recommendations on policy, finance, and agribusiness levels to enhance food security, address climate change, and promote water sustainability. By harnessing the expertise and resources of financial institutions, we lay the groundwork for a sustainable and resilient future that yields benefits for a variety of stakeholders as we work towards building a more secure and environmentally responsible world.

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Food security and climate change at the center of the agriculture value chain

Food security is central to the United Nations Sustainable Development Goals (SDGs) Agenda. SDG 2: Zero Hunger, is pivotal in the global context, especially given the concerning increase in global hunger from 7.9% (the proportion of the global population facing chronic hunger as measured by the Percentage of Undernourishment) in 2019 to 9.2% as per the most recent data. This underscores the pressing imperative to enhance food access and nutrition worldwide, especially in the face of challenges such as climate change. The figure was 22% for those exposed to high levels of acute food insecurity in 2022. This challenging context is driven by a variety of factors, including economic shocks, climate change, and shifting population trends.

It is useful to look at food security from a food-water-energy nexus perspective. This concept suggests complex interactions, trade-offs, and interdependencies between resource systems on which agriculture is reliant. This holistic view can support sustainable resource management that fosters food security, addressing various challenges facing agricultural systems.

Economic shocks

Economic shocks are a key driver of food insecurity in most affected territories. The Covid-19 pandemic caused severe delays and disruptions in supply chains, including key commodities. An additional 148 million people faced severe food insecurity in 2020 compared to 2019, largely attributed to the pandemic. Although regional inequalities are stark, these effects are evident across geographies. Global food supply chains did not get a chance to recover fully from the effects of the pandemic when the existing crisis was exacerbated by the war in Ukraine. With Russia and Ukraine being key exporters of crops key to food security, port closures, and trade restrictions squeezed the global food supply. This further aggravated market uncertainties created by the pandemic and inflicted record-breaking price hikes, primarily impacting countries depending on food imports.

Some projections show that due to the combined effects of Covid-19 and the war in Ukraine, 119 million more people are at risk of being chronically undernourished in 2030.

Climate change

Alongside its powerful role in the global economic context, agriculture is one of the most carbon-intensive sectors, making up around a third of global emissions,

split between the farm gate (44%), land use (21%), and supply chain processes (35%). At the same time, global food systems are also severely exposed to the effects of climate change. Climate change is linked to diminishing water supplies, increases in extreme events like floods and severe storms, heat stress, and increased prevalence of pests and diseases—all of which increase risks of crop failure.

In 2020, around 77 million people needed emergency food assistance, in part due to natural disasters. This has immediate and long-lasting implications. The effects of climate change may lead to a 30% reduction in global yields of staple food crops by 2050.

Population dynamics

The global population is growing, with changing dynamics of increasing incomes and expanding middle-class living in urban areas. To sustain the food needs during these population shifts, the world may need to boost food production by as much as 68% by 2050.

With the majority of the population expected to be living in urban areas by that time, this creates a need for adaptation of food production and distribution systems. At the same time, rural communities are most affected by food insecurity, so the challenge is also in ensuring that these adaptations result in equitable outcomes across the population.

These disparities can also be intensified by the imbalance in access to capital for climate finance between the Global North and Global South. Additionally, variations in the magnitude of capabilities and readiness to develop climate change mitigation solutions can further intensify the pressures on the agricultural value chain.

The GCC perspective

GCC countries are not currently faced with significant food insecurity relative to other regions where it is a critical issue in terms of availability, affordability, quality, and food safety. However, given the pervasive and long-term nature of the food security challenge, the region needs to build resilience and preparedness. GCC countries are relatively oil-driven economies, with prevalent water scarcity and high dependence on food imports, making the region particularly vulnerable to the adaptive capacity of water. Increasing consumption by the growing local and expat population, combined with limited renewable water resources, creates precarious conditions. Additionally,

other geographic and environmental factors lead GCC countries to import around 85% of their food items. This dependence leaves them exposed to a variety of global shocks.

Country leaders have started introducing measures to address these challenges while creating opportunities for long-term growth. GCC states are building initiatives guided by nationwide food security plans. For example, the UAE Food Security Strategy 2051 aims to make the country one of the most food secure in the world, through 38 initiatives focused on facilitating global food trade, diversifying food import sources, and identifying alternative supply schemes. The Strategy's focus is to implement climate-resilient agricultural practices and embrace innovative technologies for sustainable food production. This will be accompanied by legislation and policies that reduce food waste and improve nutrition.

Similarly, KSA allocated USD 10 billion towards its newly launched Food Security Action Plan, among others, focusing on reducing food and water waste and creating early warning systems. Qatar is currently updating its plans, considering the importance of diversifying trade routes, building reserve capacities, and cultivating local production.

The way forward

The need for sustainable food systems to meet the growing population's demands, while addressing climate change, requires substantial financing estimated at around USD 350 billion annually over the next decade.

Agriculture was high on the agenda at COP27, resulting in initiatives like the Food and Agriculture for Sustainable Transformation (FAST), which aims to enhance climate finance for agriculture by 2030, whilst supporting food and economic security. Maintaining this focus through multistakeholder collaboration is crucial as we journey towards COP28.

While financing this transformation will be challenging, it is an opportunity to leverage public-private synergies and innovative financing tools. Around 50% of lenders and banks in the agricultural sector have significant loan portfolio exposures to farming-related risks. This risk exposure reinforces the critical role financial institutions can play as enablers of a more climate-resilient, future-proof agriculture.

Facilitate global agri-business trade and diversify international food sources

01

Enhance sustainable technology-enabled domestic food supply across the value chain

02

Reduce food loss and waste

03

Sustain food safety and improve nutritional intake

04

Enhance capacity to respond to food security risks and crises

05

UAE National Food Security Strategy

Building resilient food systems

The global agricultural industry is already undergoing a shift towards greater resilience with implications for water and energy use associated with food production. We explore some examples of emerging solutions that exhibit key industry trends, acknowledging this is far from an exhaustive list.

01

Technological advancements

- Vertical farming:** growing produce in vertically stacked layers, contributing to greater local production
- Precision agriculture:** leveraging data analytics and GPS technology to support savings in farm inputs

02

Nature-inclusive farming solutions

- Regenerative agriculture:** a range of practices that prioritize soil health, working towards agriculture that is more in sync with natural systems

03

Value chain processes

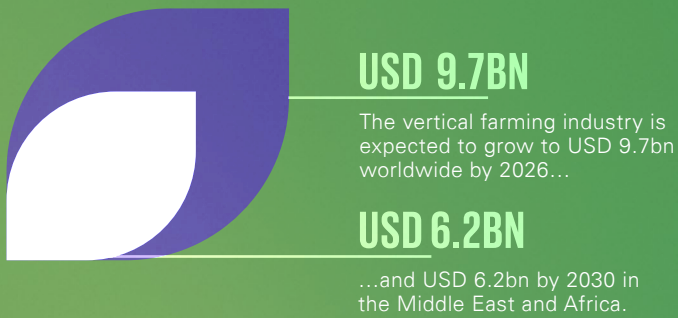
- Optimizing contract length and execution:** ensuring contracts enable transparency, efficiency, and foster a long-term commitment to sustainable practices
- Optimizing sourcing practices:** boosting local food production, diversifying food imports and ensuring sustainable sourcing criteria in the value chain

Technological advancements

One element of this is the profound technological changes that can enable greater climate adaptation, mitigation, and food security outcomes. Some refer to this as ‘Agriculture 4.0’ or the ‘Fourth Agricultural Revolution’, comprised of the rise of technologies designed to help boost productivity through more efficient farming practices.

Vertical farming

Referred to by some as ‘farming of the future’, vertical farming entails growing produce in a controlled environment in vertically stacked layers. It enables more crops to grow in less space, shortening distribution chains, providing higher-nutrient produce, and reducing water usage. In the GCC, this technology can provide local produce and save water without being constrained by arid soils. Dubai opened the world’s largest vertical farm, set to produce more than 900 tons of leafy greens per year. The potential of vertical farming can be further leveraged by diversifying its capabilities to produce a wider range of crops necessary for a nutritious diet. It is also worth emphasizing that for these farms to actively contribute to energy sustainability, they should transition to renewable energy sources, as some still rely on fossil fuels.



Precision agriculture

The rise of artificial intelligence (AI) and robotics has enabled autonomous and targeted application of inputs and collection of farm outputs. Precision agriculture focuses on applying high-technology sensor tools to support the temporal and spatial allocation of farm inputs. The unprecedentedly large

amount of data collected and analyzed can lead to increased crop efficiency and reduced use of pesticides and fertilizers, enhancing sustainable outcomes. Precision agriculture has substantial potential for the GCC as it can also enable water efficiency considering the limited available water resources.

With GCC countries already embracing these technologies, there is a large potential to continue fostering both adoption and innovation in this space. We see momentum, for instance, through the UAE’s FoodTech Challenge, with entrepreneurs competing to come up with solutions to help address the country’s food security challenges. Beyond promoting these solutions locally, the GCC can leverage its role as a leader in global trade to scale agricultural technologies through global value chains.

Nature-inclusive farming solutions

Although technology-driven solutions form an important piece of the puzzle, the scale of the food security and climate resilience challenge demands systemic changes to the way we approach agricultural production. The aim should be to avoid over-reliance on technology as a ‘be-all and end-all’ solution, and instead use it as complementary to some nature-inclusive solutions outlined below.

Regenerative agriculture

With around 52% of agricultural soils already degraded, this outcome-based approach could not be more relevant. It puts soil health at the center, encompassing practices like agroforestry, reducing the use of synthetic inputs, using cover crops, and minimizing soil tillage. It works towards a vision where agriculture more closely resembles natural ecosystems.

GCC countries have started several programs that support practices that fall under the regenerative agriculture umbrella, such as Saudi Arabia’s Organic Farming Action Plan backed by SAR750 million in funding. Regenerative approaches are especially relevant in the GCC context due to their potential to improve the drought resistance of crops and enhance soil resilience.

Value chain processes

For any solutions that foster food security and positive climate outcomes to materialize, the value chain processes should also be adapted to create an enabling environment. Food

security and climate considerations should be reflected in aspects like contractual agreements and sourcing strategies.

Optimizing contract length and execution

Long-term contracts, which span multiple years of commodity production, can enable consistent partnerships toward climate and food security outcomes. They can be tied to long-term sustainability goals and expectations, while also increasing the certainty of returns on investment in more sustainable techniques and technologies.

Smart contracts can also be a good alternative to the status quo. Rooted in blockchain, they can provide the level of traceability necessary to verify sustainability claims. Importantly, they can also facilitate peer-to-peer lending, enabling smallholder farmers to access capital for investments in sustainable technologies and practices.

Optimizing sourcing practices

Sourcing determines what food products reach our plates and where they originate from. Boosting the localization has the potential to reduce food miles, allow greater control for sustainability credentials, and reduce exposure to supply shocks. With a high reliance on imports in the GCC, there are efforts to boost local farms and increase investment in proximate areas like East Africa.

Yet, reliance on local food supply chains alone cannot ensure food security given the agroecological conditions of the GCC. An optimal approach would be diversifying food import sources and working with value chain partners to ensure more sustainable sourcing. This is in alignment with the UAE’s efforts towards self-sufficiency of strategically selected food items without compromising trade facilitation in others.

All value chain solutions are supported by functional storage and distribution systems for agricultural commodities. They can minimize food loss and waste, as well as increase food accessibility, stabilizing food prices in cases of global market shocks.

For this transformation of agriculture to improve food security and ensure the longevity of food systems through climate mitigation and adaption, these solutions, among others, need to be significantly scaled up at a rapid pace. There is a clear need for financial institutions and players across the agricultural value chain to bring this to life.

Case study

Islamic finance solutions to promote food security

The International Islamic Trade Finance Corporation (ITFC) has identified significant demand for pre-harvest and pre-production financing within its member countries, extending its reach to both domestic and international trade landscapes.

In response to this demand, ITFC has added the SALAM Islamic financing product, structured around a Master Salam Agreement (MSA). The MSA enables ITFC to engage in both single and multiple forward purchases of commodities.

These commodities are sourced from agricultural and commodity producers, strategically aimed at fostering economic development and fortifying trade activities within member countries.

The Salam product is an Islamic finance tool that provides customized pre-harvest and pre-production financing

solutions that aim to address the needs of farmers and SMEs. The MSA, acting as a standardized yet flexible framework for executing forward commodity purchases, serves as a versatile instrument for ITFC to support various sectors within member countries.

Its dual capability to facilitate both single and multiple forward purchases allows the Salam product to be tailored to the specific requirements of different producers and member countries. Furthermore, the product covers a wide spectrum of agricultural and commodity products, ranging from raw materials to processed goods, thereby facilitating diverse trade activities.

Additionally, contracts based on forward purchasing can support countries in meeting their food security needs through pre-harvest and pre-production finance.

Accelerating investment in agricultural resilience

Financial backing, though not an all-encompassing solution, stands as the foundation for translating innovative sustainable agricultural endeavors into tangible realities. Many state-of-the-art technologies and eco-inclusive farming methodologies demand substantial upfront capital, presenting obstacles to widespread adoption.

In this landscape, targeted investments channeled through financial institutions, reinforced by government support via strategic policy mechanisms, emerge as pivotal instruments for achieving scalability. These investments have great potential to support transformation throughout the agricultural value chain by streamlining access to capital. Moreover, financial institutions provide invaluable technical acumen and risk mitigation tools, playing a pivotal role in bolstering the long-term sustainability of the food system and nurturing climate-resilient agriculture.

The financial sector continues to play a crucial role in advancing climate resilience within the agriculture sector. The global financing gap for agriculture stands at an estimated USD 150-200 billion annually, with only 4% of global climate finance directed toward climate-resilient agriculture projects. This is partly due to the prevailing financing focus on specialized institutions, which offer microfinancing to farmers and

SMEs, and dedicated facilities for downstream companies. Additionally, mobilizing capital is a challenge, mainly because of government policies and instruments that fail to attract private investment. These trends underscore a significant opportunity for financial sector players to bridge these gaps, both for the benefit of the agriculture sector and as a strategic financial opportunity.

In the GCC, governments are also allocating significant funds to enhance domestic agriculture production and invest in farmlands. Private sector financial institutions are actively increasing their involvement in the sector, identifying opportunities and financial innovations to bolster the sustainability and resilience of the agricultural value chain.

Sustainable finance: a key lever for agricultural value chain transformation

Sustainable finance presents promising opportunities for GCC banks to drive innovation and invest in sectors crucial for sustainable economic growth. The global sustainable finance market has demonstrated remarkable growth, surging by nearly 63% since 2015. This growth is underpinned by the rapid expansion of green bonds and Green Sukuk markets, reflecting a global commitment to a low-carbon transition.

To effectively catalyze the transformation of the agricultural value chain in the GCC, the financial sector should adapt its product and service offerings.

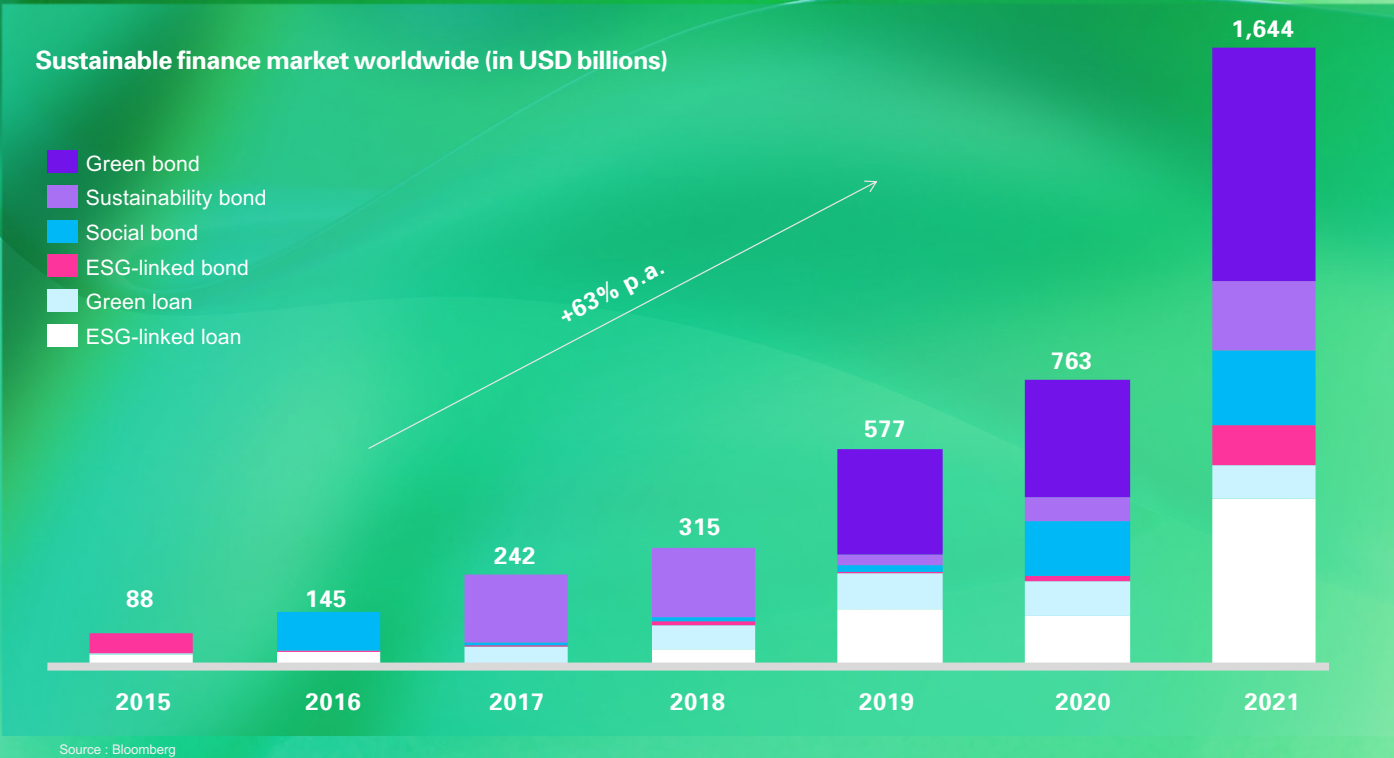
Within the agricultural value chain, sustainable finance solutions have gained increasing importance, driven by the imperative of promoting environmental responsibility and social inclusivity. These solutions encompass a range of financial instruments, including green bonds, Green Sukuk, sustainability-linked loans, sustainable agriculture investment funds, and impact investing, all aimed at delivering positive environmental and social outcomes.

Furthermore, financial institutions are progressively embracing sustainable finance frameworks and guidelines to manage their financing of sustainable activities and enhance transparency for stakeholders. For instance, the Climate Bonds Initiative has established specific Agriculture Criteria for projects seeking climate bond certification, encompassing goals related to greenhouse gas emissions reduction, resource

management enhancement, soil health improvement, and the promotion of social benefits. These tools assist banks with assessing climate risks in their financing activities and achieving desired sustainability outcomes in line with industry best practices.

Sustainable finance products and frameworks play a pivotal role in steering the agricultural value chain toward climate resilience and sustainability. These instruments offer essential financial support and create compelling incentives for stakeholders to adopt environmentally responsible practices. By directing investments into climate-smart agriculture, renewable energy solutions, water stewardship, and sustainable supply chain initiatives, they effectively curtail the sector's environmental footprint.

Consequently, these financial mechanisms bolster food security by mitigating climate change risks within the agricultural value chain.



Empowering sustainable food systems

FAB, as a leading regional bank, is working on advancing sustainable finance and supporting the UAE's ambitious sustainability goals. The bank recognizes the critical importance of sustainable food systems, especially considering challenges arising from a growing global population and the effects of climate change.

FAB is committed to the UAE National Food Strategy 2051 and actively contributes to its realization through a wide range of financial instruments tailored to meet clients' unique needs in the agriculture value chain.

FAB's vision for the country's food security

FAB is currently engaged in collaborations with three prominent regional players in the agriculture sector, providing them with funded and non-funded working capital lines, supply chain financing, and global market products. These financial solutions play a crucial role in enhancing the UAE's food security in several ways. They support these companies in expanding the scope of their operations and coverage across the agricultural value chain, both regionally and globally, to make available a broader selection of food items that can be readily accessible. Additionally, FAB's financing efforts focus on localizing food supply chains, thereby enhancing self-sufficiency, reducing external vulnerabilities, and ultimately reducing the carbon footprint associated with the shipping and transportation of imported food.

FAB also supports the diversification of food supply sources and promotes the adoption of cutting-edge technologies within the UAE's food and beverage sector, ultimately enhancing efficiency and productivity. Moreover, FAB actively encourages its clients to seek out and collaborate with partners who share their commitment to sustainable practices, including the adoption of renewable energy, water conservation measures, waste reduction initiatives, and sustainable supply chain management. This includes the

establishment of partnerships to develop dedicated sustainable agriculture accelerator programs that support the growth of startups in the agri-food sector, as well as AgriTech solutions tailored for hot climate environments that facilitate the development of agriculture in the region.

Additionally, FAB has curated a comprehensive suite of sustainable and ESG products. Among these offerings, green bonds and loans stand out, designed to facilitate the sustainable transformation of clients' operations within the food value chain. This financing is targeted at innovative clients and large regional agri-food companies developing solutions, including but not limited to a solar-powered desalination plant that can produce fresh water from brackish sources for irrigation purposes and other sustainable solutions.

FAB's commitment extends to providing financing advisory services to clients engaged in various aspects of food production, distribution, sourcing, and trading. The bank collaborates closely with its clients to identify and assess their exposure to sustainability risks, assisting them in developing strategies to mitigate these risks. The bank also aids in establishing sustainability reporting Key Performance Indicators (KPIs) and disclosure frameworks that contribute to maintaining transparency in its financing. These services strive not only to promote the growth of sustainable finance but also aim to contribute to the broader and increasingly urgent goals of food security and addressing climate change.

This transition toward sustainability in agricultural finance underscores a strategic advantage for financial institutions. It presents them with an opportunity to be at the forefront of innovative, responsible, and impactful investments in a critical sector. This not only fosters a positive reputation but also opens doors to new revenue streams and partnerships, ultimately contributing to long-term financial stability and growth while simultaneously advancing sustainability objectives.



ITFC's USD 4.5 billion Food Security Response Program

In the face of mounting challenges, including global food insecurity driven by factors such as inflation, supply chain disruptions, sanctions, and geopolitical tensions, member countries of the Organization of Islamic Cooperation (OIC) find themselves in urgent need of robust support for securing essential food supplies. Recognizing this pressing issue, the Islamic Development Bank (IsDB) Group took a significant step in July 2022 by endorsing a comprehensive Food Security Response package amounting to USD 10.5 billion over 3.5 years.

Within this package, the ITFC committed USD 4.5 billion to meet the emergency financing requirements for essential food and agricultural supplies and has already approved almost USD 3 billion through 32 facilities in favor of 12 countries including Egypt, Burkina Faso, Senegal, and Uzbekistan. The Republic of Uzbekistan has benefitted from the Food Security Response Program, as ITFC provided USD 100 million in funds through syndication for the purchase of wheat and related items.

The syndicated financing, implemented by ITFC, contributed to food value chain optimization, through the purchase of locally produced agricultural goods during harvest season, storage in warehouses, and release/sale periodically when needed to ensure an uninterrupted supply of wheat, a vital food commodity, throughout the year. Using the reserves purchased through this facility, the government was able to stabilize price hikes for wheat in several instances by supplying goods to the local market.

This financing also helped the government to pay close to 6,700 farming units (employing 133,660 people, including 40,000 women) from different regions of the country, during the harvest season immediately upon delivery and ensured that the farmers received a fair and timely payment for their produce, while also providing access to a steady food supply.

Islamic finance: de-risking the agricultural value chain

Islamic finance closely aligns with sustainable finance products, employing strategies rooted in negative screening and the exclusion of sectors, activities, and industries that do not align with Sharia principles. Islamic Finance is committed to channeling funds into projects and organizations that unequivocally uphold principles of responsibility and unwavering ethical conduct within the scope of their business and operational activities. Islamic finance can play an important role in the sustainable transformation of the agricultural value chain. Risk-sharing is ingrained in Islamic Finance, which allocates risk across various stakeholders, creating compelling incentives for all involved parties to embrace sustainable practices and enhance their resilience to the challenges posed by climate change.

This emphasis on risk-sharing exceeds the boundaries of financial transactions and permeates decision-making processes throughout the entire agricultural value chain. Farmers, agribusinesses, and investors are galvanized to adopt climate-resilient strategies, encompassing the cultivation of drought-resistant crops, the implementation of precision agriculture techniques, and the adoption of sustainable water management practices, among others. Furthermore, Islamic Finance principles encourage responsible resource management, encompassing judicious water conservation, sustainable land utilization, and environmentally conscious farming methodologies.

Fostering entrepreneurship for economic diversification

Emirates Development Bank (EDB) and First Abu Dhabi Bank (FAB) credit guarantee and co-lending program for SMEs in the UAE

In 2021, Emirates Development Bank (EDB) and First Abu Dhabi Bank (FAB) signed a Memorandum of Understanding (MoU) to collaborate on a credit guarantee and co-lending program to support Small and Medium Enterprises (SMEs) in the United Arab Emirates (UAE). This partnership aims to provide strategic financing solutions and foster entrepreneurship among UAE citizens, contributing to the country's economic diversification goals. The program is designed to offer financial support to SMEs, particularly start-ups, with a focus on job creation and economic development.

Under the agreement, FAB will offer up to AED 100 million in financing to SMEs, with 50% of the facility amount being either guaranteed or co-lent by EDB, reducing the risk for both the bank and the SMEs. Public-private partnerships are not only poised to strengthen the entrepreneurial landscape in the UAE but also hold the potential to address critical issues such as food security and climate change.

As the UAE strives for economic diversification, the development of small and medium enterprises (SMEs) in sectors related to agriculture and sustainable technologies can play a pivotal role. By fostering innovative start-ups and job creation in these sectors, this partnership can contribute to:

- Enhancing agricultural productivity: As key players in the agriculture sector, SMEs can significantly boost food production. Access to financing enables them to invest in modern farming techniques, technology, and infrastructure, leading to increased agricultural productivity and improved food security.
- Promoting sustainable farming practices: Financial support empowers SMEs to adopt sustainable farming practices, focusing on resource conservation, waste reduction, and reduced environmental impact. Agri-finance can be directed towards initiatives such as organic farming, efficient irrigation systems, and eco-friendly farming techniques.
- Fostering agricultural innovation and diversification: Access to funding and strategic financial solutions encourages SMEs in agriculture to diversify their offerings and innovate. This can result in the development of new, sustainable agricultural products and practices, contributing to economic growth and environmental sustainability.
- Job creation: Supporting SMEs in the agriculture sector plays a vital role in job creation. The promotion of local agribusinesses not only ensures a steady supply of fresh produce but also offers meaningful employment opportunities for local communities.

Empowering sustainable agriculture through public-private partnerships (PPPs)

Public-Private Partnerships (PPPs) serve as a strategic mechanism to advance financing for food security and climate change resilience. They combine the capital mobilization and risk-sharing abilities of private-sector financial institutions with the technical expertise and research capabilities of multilateral institutions. This collaboration promotes sustainable practices, including climate-smart agriculture and climate-resilient infrastructure development within the agricultural value chain, ultimately fostering resilience and food security in the face of climate change challenges.

In the GCC, where transitioning to a low-carbon economy is a priority, PPPs have the potential to spearhead climate-resilient agricultural practices. These partnerships can leverage innovative finance mechanisms, such as green bonds and sustainable sukuk, to fund eco-friendly agricultural projects and energy-efficient practices. The collaboration between multilateral institutions and private sector entities can also drive the adoption of modern technologies, like precision agriculture and sustainable irrigation methods, which are crucial for conserving water resources and mitigating climate change impacts.

By facilitating collaboration among various stakeholders, PPPs play a pivotal role in achieving tangible outcomes for GCC countries.



Recommendations

Securing sustainable food systems demands unified efforts across entire food value chains. With COP28 on the horizon, ongoing collaboration emerges as the linchpin for the industry’s sustainability pursuits. The recommendations outlined below serve as an extensive roadmap, emphasizing the paramount significance of innovative financing tools, capacity building, policy engagement, robust reporting, and strategic partnerships in propelling agricultural sustainability.

Internal capacity building

- Develop training materials and regular sustainability awareness programs for financial institution staff across all three lines of defense to foster an understanding of sustainable finance trends, regulations, and best practices.
- Work with partners in the agricultural sector through dedicated advisory and capacity-building solutions to ensure upskilling on sustainable practices along the supply chain.

Financial instruments innovation

- Launch new agri-financing lines that incorporate sustainability considerations as part of the overall outcomes of the intended financing.
- Increase the level of green bond and sustainable financing lines for agri-sector clients to support their transformation and strategies for resilience to climate change.
- Reinforce the supply of working capital solutions that directly contribute to improving the sustainability footprint of clients across the agriculture value chain.

Reporting

- Reinforce the reporting requirements for financial institutions about their exposure to sustainability risks, including climate change, and physical and transition risks.

- Encourage clients to provide more detailed and comprehensive sustainability reports about their financing facilities at the corporate level.

Policy level engagement

- Accelerate the implementation of guidelines and regulatory frameworks that support the growth of sustainable finance across financial markets.

Incentivizing emissions reductions

- Prioritize long-term sustainable agricultural financing solutions that promote emissions reduction and environmental conservation.
- Encourage partners and clients to capture data to calculate and track emissions associated with financing in the agriculture sector.
- Set science-based emissions targets to incentivize the focus on financing sustainable and long-term solutions.

Partnerships

- Leverage syndication arrangements to support capital pooling and reinforce risk mitigation capabilities.
- Promote knowledge and risk sharing through PPPs to ease the transfer of leading practices across the agriculture value chain.
- Ensure active participation in industry multistakeholder networks that aim to advance sustainability in the agriculture value chain.

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About us

About KPMG Lower Gulf:

For about 50 years, KPMG Lower Gulf Limited has been providing audit, tax, and advisory services to a broad range of domestic and international, public and private sector clients across all major aspects of business and the economy in the United Arab Emirates and the Sultanate of Oman. We work alongside our clients by building trust, mitigating risks, and identifying business opportunities.

KPMG Lower Gulf is part of KPMG International Cooperative’s global network of professional member firms. KPMG firms operate in 143 countries and territories, and in FY22, collectively employed more than 265,000 partners and people, serving the needs of businesses, governments, public-sector agencies, not-for-profits and through KPMG firms’ audit and assurance practices, the capital markets. KPMG in the UAE and Oman is well connected with its global member network and combines its local knowledge with international expertise, providing the sector and specialist skills required by our clients.

About First Abu Dhabi Bank:

FAB, the UAE’s largest bank and one of the world’s largest and safest institutions, offers an extensive range of tailor-made solutions, products and services, to provide a customized experience. Through its strategic offerings, it looks to meet the banking needs of customers across the world via its market-leading Corporate and Investment Banking and Personal Banking franchises.

About The International Islamic Trade Finance Corporation:

The International Islamic Trade Finance Corporation (ITFC) is a member of the Islamic Development Bank (IsDB) Group. Commencing operations in January 2008, ITFC has provided over USD 70 billion of financing to OIC member countries. ITFC was established with the primary objective of advancing trade among member countries, which would ultimately contribute to the overarching goal of improving the socio-economic conditions of the people across the world. In 2022, ITFC approved USD 1.8 billion for food and agriculture sector financing.

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