Sustainable Development Council Of Sri Lanka

The Economic Rationale for a Blended Financing Facility in Sri Lanka's Agricultural Sector

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Executive Summary

Blended finance can be broadly defined as the combination of public concessional ODA with private or public resources, generally with the aim of 'mobilizing' or 'leveraging' development finance from other actors. The essential component of blended finance is that grants, or grant-like financing, are used to reduce the barriers to investment from other sources of finance. By employing grant financing to overcome some of these barriers, the rationale follows that it may attract private investment into a certain sector.

Sri Lanka's economy requires private investment. The Government of Sri Lanka (GoSL) faces severe fiscal constraints that hinder public investment in vital economic sectors. It was estimated that in the 2024 budget, Sri Lanka committed 65% of government revenue to servicing interest payments on previous sovereign debt obligations. This presents significant opportunity costs whereby the government cannot afford to make essential supply-side investments in the economy due to fiscal constraints.

The agricultural sector in Sri Lanka is critical to the economy; it employs 25% of the labour force and occupies almost 50% of total land. Land use is dominated by smallholder farmers; 1.65 million smallholder farms averaging less than 2 hectares of land produce 80% of total annual food production. However, despite this significant use of resources, the sector only contributes to 8% of GDP. At the highest level, this demonstrates a lack of productivity and the need for modernisation in the sector to add more value to the abundance of resources available. Smallholder farmers face income sustainability challenges due to limited access to technology and modernization processes, low sector-level productivity, climate shocks and limited access to finance for scaling up production.

Sri Lanka's agricultural sector faces significant economic and climate vulnerabilities at the micro- and macroeconomic level, which creates a vicious vulnerability cycle that exacerbates the effects of economic and climate shocks. Rural communities and smallholder farmers are disproportionately affected by these shocks and efforts must be made to build resilience in the sector. Blended finance offers a potential solution to address these vulnerabilities by complementing access to finance with technical assistance and access to infrastructure, technology and markets, as lack of access to finance alone is not the primary concern of small agribusinesses. A resilient, inclusive and sustainable agricultural sector has positive multiplier effects on the economy through improved food security, income sustainability, climate resilience, and broader macroeconomic stabilities.

Successful blended financing initiatives in Indonesia, India, and several African countries demonstrate how effectively targeting sub-sectors and adjusting incentives can increase private sector participation in the agricultural sector while also prioritising development. When incentives align across all stakeholders and mechanisms distribute resources efficiently, partners prioritise their own interests and the positive spillover effects of their decisions lead to better developmental outcomes across the economy.

Successful blended financing facilities are tailored to navigate the economic, social and environmental complexities of each individual case study. Sri Lankan policymakers and stakeholders must identify the most effective ways to mobilise finance given local priorities and constraints, while ensuring that projects are diligently monitored and evaluated to maintain their impact. Each successful case study had clear targets for the individual sector in which financing was mobilised, which had broader economic benefits beyond the sector. Prioritising sector-specific, community-level challenges and presenting all stakeholders with mutually beneficial solutions are the most effective ways to produce economic and environmental benefits through a blended financing facility.

This report has identified potential areas of cooperation for a blended financing facility in the agricultural sector. These include:

- **Technical assistance** programmes that guide farmers through complicated processes that improve their incomes and resilience.

- **Investments in natural farming practices**, such as employing natural fertilisers, complemented by technical assistance to increase yields and incomes sustainably.

- Establishment of community-level markets to **strengthen supply chains**, to ensure that farmers have access to necessary inputs while buyers have access to consistent, high-quality supply of outputs.

- **Crop diversification:** improving access to agricultural inputs all year round to ensure a sustainable source of income that is resilient to climate shocks.

- Investments in **small-scale renewable energy sources**, such as rooftop solar, to provide sustainable access to electricity for households and irrigation systems.

- **Digitalisation**, such as through local e-commerce platforms, and efforts to improve transparency and understanding of policy and legal landscapes.

These target areas have the potential to address structural challenges in the agricultural sector, but investment should not be isolated. Holistic solutions must place smallholder farmers and small businesses at the heart of the strategy, creating an enabling environment that incentivise farmers to invest more time and resources into their own business. Locally led projects that collaborate with local communities and advisors, empower marginalised groups and encourage local cooperation will be essential for growth and diversification in the sector.

By correctly identifying challenges and allocating concessional finance effectively, private finance will follow. Policy makers must not pursue private finance ‘by any means necessary’, but instead create an environment where targeted investments that generate economic returns are accompanied social and environmental improvements.

1 An Introduction to Blended Financing

Blended finance can be broadly defined as the combination of public concessional ODA with private or public resources, generally with the aim of 'mobilizing' or 'leveraging' development finance from other actors (Perera, 2017). The essential component of blended finance is that a grant, or grant-like financing, is used to reduce the barriers to investment from other sources of finance. Common barriers to investment in developing countries include weak infrastructure, political and economic uncertainty, poor technical capacity and knowledge, and unclear returns.

By employing grant financing to overcome some of these barriers, the rationale follows that it may attract further investment into a certain sector. Therefore, identifying productive areas to utilise this money is a vital part of a blended finance facility. If public money is allocated efficiently, it can attract further investment much greater than the initial investments and have a significant multiplier effect. When targeted correctly for development goals and economic growth, a blended financing programme can attract private finance to support public goods.

One example of effective blended finance would be infrastructure investments. Infrastructure investments typically generate relatively low returns through direct revenues (e.g. highways, bridges, or railroads), but are essential investments for the productivity of many sectors of the economy. It is unlikely that private investors would invest in this type of infrastructure directly for its short-term economic returns but may instead target projects like this through debt financing and generate returns through interest payments. If a government faces constraints, it may also be unable to raise funds to invest in infrastructure, which may lead to underinvestment in infrastructure across both private and public financiers.

However, if a government were to employ grant financing from a multilateral partner to invest in infrastructure, this may create more attractive economic opportunities for private investors in sectors that benefit from infrastructure investments (e.g. freight, manufacturing, and agriculture). By investing in infrastructure without additional debt or the pressure of economic returns, the broader economy benefits from improvements in infrastructure. This also increases raises the capital stock available in the economy, which in turn may improve business opportunities and attract private investments in sectors that see productivity improvements as a result of improved infrastructure. This demonstrates how the initial investment removes some of the barriers to private investment and leads to a multiplier effect that attracts further financing in the medium- to long run.

This multiplier effect is often referred to as 'additionality', which describes the increase in investment that would otherwise have not occurred, had the initial investment not been made. It is investment as a product of investment. Effective blended financing facilities target sectors that lack investment and create an attractive business environment that leads to new investment in the sector.

Sri Lanka's economy requires private investment. The Government of Sri Lanka (GoSL) faces severe fiscal constraints that hinder public investment in vital economic sectors. It was estimated that in the 2024 budget, Sri Lanka committed 65% of government revenue to servicing interest payments on previous debt obligations (Abeyratne, 2023). This presents significant opportunity costs whereby the government simply cannot afford to make essential supply-side investments in the economy due to fiscal constraints. To overcome these constraints and ensure that the economy follows a sustainable growth trajectory, attracting private investment upon an upgrade to the sovereign credit rating is crucial.

Essentially, Sri Lanka's economy requires investments that the government cannot finance independently. The government must allocate its available finance effectively and ensure that the value of public benefits of investment far exceed their initial spending, which requires additionality and private investment to compound public investment. This demonstrates the urgent need of blended financing to create a more attractive environment for private investment, and to signal to capital markets that the government is committed to building partnerships with the private sector to achieve its development outcomes. This involves identifying sectors that would create significant economic, social, and environmental benefits, to ensure that private finance can be leveraged to support public outcomes.

The Sustainable Development Council of Sri Lanka, as the nodal government institution with responsibilities for coordination, facilitation, monitoring, evaluation and reporting on the implementation of 2030 Agenda for Sustainable Development in Sri Lanka, recognises that the Sustainable Development Goals (SDGs) must be at the heart of developmental outcomes, and is prioritising these outcomes as part of the economic recovery processes. A blended financing facility that attracts private financing to complement philanthropic and multilateral support presents an opportunity to align all stakeholders and create mutual incentives to invest in Sri Lanka's economy, not only for economic growth, but also to support overall development through targeted, sustainable, and inclusive growth.

By combining private sector finance with development finance, grants, concessional finance and technical assistance, the investment landscape becomes more attractive and can address many structural challenges that the government cannot address singlehandedly. A blended financing facility would have a project preparation facility that identifies and builds locally led projects that give a voice to local communities and marginalised groups who are more familiar with challenges facing their sector. Stakeholder consultations and diagnostic studies through collaboration between partners would ensure projects are suitable for local communities, while also making projects bankable to attract private investors.

SDC have already worked with a diverse range of stakeholders to understand which sectors may benefit most significantly from private investment and has identified structural challenges in the agricultural sector that must be addressed with the support of private financing. Not only would this support the economic development of a vital sector of the economy, but it also presents an opportunity to invest in a sector with social,

environmental and developmental multiplier effects that exceed the initial economic returns. This report presents the economic rationale for establishing a blended financing facility to support Sri Lanka's agricultural sector, through attracting private finance to develop smallholder farmers, agri-entrepreneurs, and small- and medium-sized enterprises at the heart of the sector.

The report is structured as follows: section 2 outlines some of the challenges in the agricultural sector and how a blended financing facility can complement efforts to address them; section 3 describes the broader developmental benefits of a resilient agricultural sector and the potential spillover effects this has on the macroeconomy; section 4 examines previous blended financing case studies, with a focus on agriculture, to understand how financing can be effectively targeted and utilised; section 5 discusses what Sri Lanka can learn from previous case studies and identify priorities for implementation; and section 6 suggests potential target areas and considerations to better inform the policymaking processes.

2 Challenges in the Agricultural Sector

The agricultural sector in Sri Lanka is critical to the economy; it employs 25% of the labour force and occupies almost 50% of total land. However, despite this significant use of resources, the sector only contributes to 8% of GDP. At the highest level, this demonstrates a lack of productivity and the need for modernization in the sector to add more value to the abundance of resources available (and currently employed) in the sector. This would also contribute to essential improvements in efficiency; it is estimated that Sri Lanka's agricultural sector experiences post-harvest losses at a rate of up to 40% due to improper and unscientific post-harvest practices, gaps in infrastructure and technology, and lack of knowledge (Rajapaksha, Gunathilake, & Fernando, 2021).

Previous data suggests that there are over 1.65 million smallholder farms in Sri Lanka, averaging less than 2 hectares in size, which contribute to over 80% of total annual food production (Ministry of Agriculture and Plantation Industries, 2016). The sector is dominated by smallholder farmers who face income sustainability challenges due to limited access to technology and modernization processes, low sector-level productivity, climate shocks and limited access to finance for scaling up production. Smallholder farms focus primarily on 'non-plantation sector' output, such as rice, maize, fruits and vegetables on a small scale, often for personal consumption and subsistence.

It is also estimated that 82% of smallholder farmers work part-time alongside other professional obligations and commitments; the limited prospects for commercialization in the sector prevents entrepreneurship and improvements in productivity (Ceylon Chamber of Commerce, 2023). This is also leading to emigration from the sector, with agricultural households encouraging their children to migrate towards cities and pursue non-agricultural work, which places significant pressure on domestic production and food security in the long run.

Limited access to finance, technology and sector-specific skills are enabling a steady decline in agricultural capacity and food security in Sri Lanka. A complex risk landscape and profitability concerns deters private investment and leaves smallholder farmers with financial and capacity constraints in their attempts to innovate or scale up their production for more economically, socially and environmentally sustainable practices. Public sector constraints and economic instability hinders agricultural sector growth, adaptation, and entrepreneurship, but essential investments are required to address climate vulnerabilities, low productivity growth, weak infrastructure and financial constraints.

Therefore, to overcome public sector constraints and create better incentives for private sector investment in the agricultural sector, a blended financing facility could contribute to adjusting the risk landscape and creating opportunities for investment in Sri Lanka's agricultural sector. These opportunities must be economically attractive, but also socially attractive by addressing many structural barriers to development that are prioritised by concessional financiers.

By identifying problems in the sector and understanding how increased access to finance, infrastructure, technology and coordination can support modernisation and innovation, blended finance becomes a potential solution. However, to maximise effectiveness, problem statements and proposed solutions must take priority. Without in-depth diagnostic and analysis of the sector, incentives for private sector participation will be minimal. The remainder of the section aims to give vital context on some of the structural challenges in the agricultural sector and discusses where blended financing opportunities may avail.

2.1 The Productivity-Vulnerability Paradox

Among many smallholder farmers in Sri Lanka, research cites a 'productivity-vulnerability paradox', in which farmers have become increasingly vulnerable despite significant technical developments made towards increasing productivity (Quealy & Yates, 2021). Quealy and Yates conducted first-hand qualitative research in Sri Lanka's Dry Zone, focussing specifically on smallholder farmers, rural communities and underserved areas, to identify the mechanisms through which this vulnerability materialises.

Firstly, farmers described the immense pressure to continuously cultivate higher yields to achieve security paired with increasing production and livelihood costs. For example, shifting from traditional seeds to hybrid seeds requires the increased purchase of fertilisers and pesticides from the market, which often means that small-scale farmers are unable to generate enough income to offset the initial costs of cultivation.

Secondly, the increasingly 'neo-liberalised' conditions in which smallholder farmers must compete has created fragmentation in communities and eroded the productivity gains of high-yielding crop varieties. The increasing competition has reduced cooperation in many farming communities and led to a breakdown in knowledge sharing

and important collective norms, such as shared water resources, which were previously at the heart of community prosperity.

Another component of the productivity-vulnerability paradox is the overuse of chemical fertilisers, which to improve productivity and increased yields, has undermined resource bases and led to a long-term depreciation in land quality that reduces overall productivity and yields. This also spills over into significant health consequences for vulnerable smallholders due to their exposure to chemicals, which further reduces productivity and drives indebtedness.

This study demonstrates that the current landscape in the agricultural sector faces several structural challenges that must be overcome to increase productivity and address vulnerabilities amongst smallholder farmers, particularly in the face of previous interventions that have exacerbated some of these challenges.

2.2 Small Holdings, 'Andhe' and 'Mudalali'

Many smallholder farmers are very small, sometimes owning only one acre of land, and a lot of the disaggregation of agricultural land emerged as a result of inheritance and redistribution (e.g. A farmer with two sons distributes his 4-acre plot of land between them, who then distribute to their two children, suddenly having 1 acre each). This land fragmentation creates challenges around scaling up agriculture and limits the ability of farmers to diversify away from paddy cultivation. Therefore, it has become increasingly common for farmers to cultivate paddy for subsistence, part-time, and instead work as daily labourers in some of the larger villages to earn more income. For example, farmers may work on railways or even on larger farms to supplement their subsistence income from paddy cultivation (Quealy, 2024).

The inability of many smallholder farmers to generate a sustainable source of income from either full-time cultivation or part-time cultivation and daily labour, often leads to farmers taking on short-term loans through 'Mudalali'. Local middlemen, who often distribute agricultural output from smallholder farmers to markets in larger villages, will provide loans to smallholder farmers for inputs such as seeds, tractor rental, or equipment rental at the beginning of the season as they lack the cash to finance operations themselves up front. These loans are often provided at high interest rates (10%+ per month) and collateralised with a share of incomes from agricultural output and/or a share of the harvested paddy (Quealy, 2024). Farmers are essentially taking on 'survivalist' finance, which is short-sighted and prioritises subsistence, which in some cases creates debt traps where smallholder farmers owe much of their subsistence output to middlemen. In some small villages where many smallholders face the same challenges, smallholders aggregate their production to the middlemen and become tenants on their own land, splitting input costs and losing a large share of output at the end of the cultivation cycle.

Despite the *de facto* ownership of land through collateralising debt being illegal, it is still very common. 'Andhe' agriculture is a form of sharecropping and is very common in local

farming communities, but income shocks, lack of access to decent prices, and high input costs often leads to this aggregated farming coming as a byproduct of indebtedness and 'feudal-esque' operations by middlemen in the form of credit. A significant consequence of this is that many smallholder farmers who are stuck in these 'indebtedness–Andhe' cycle struggle to get out. The small portion of paddy they receive after deductions is often barely enough for their subsistence, and almost never enough to make a substantial profit, which renders them reliant on more loans from the for the next cultivation season (Quealy & Rajarathnam, 2024).

Ultimately, smallholder farmers rely on middlemen to aggregate their agricultural output and make them price-competitive at local markets. This is not necessarily a fundamental problem, as economics of scale exists across all aspects of the economy, but the weaponisation of indebtedness and the lack of formal alternatives available to smallholder farmers trap them in a cycle of vulnerability where they are unable to scale up production or offset their input costs.

2.3 Perceptions of - and Access to - Finance

Although the informal access to finance through Mudalali systems can often be unsustainable and create difficult and rigid hierarchical structures in small villages, smallholder farmers still tend to prefer this finance as opposed to that offered by formal banks. Factors affecting whether smallholder farmers utilise formal credit mechanisms include the perceptions of debt in the community, bad previous experiences with both formal and informal credit, and 'scare stories' of those who have taken on debt but been unable to pay it back (Quealy, 2024). Smallholder farmers are incredibly risk-averse and would prefer to access finance through familiar means, which reinforces the role of middlemen. Even those reached by a development programme may still opt against formal finance in favour of Mudalali finance.

There is an appetite amongst smallholders to expand their output and sell products at local markets without the use of middlemen; however, there are broad challenges that go far beyond the access to finance. Access to land, indebtedness, part-time farming, and market access are just some of the challenges that make it difficult for smallholder farmers to stand alone in communities. Rising input costs across the sector also adds to the pressures as output revenues do not go as far.

2.4 Climate Vulnerabilities

The agricultural sector is particularly vulnerable to the impacts of climate change. Sri Lanka faces very significant increases in minimum temperatures under all emissions pathways, which have been shown to have negative consequences for rice yields, outweighing the benefits of increased carbon dioxide concentrations. Significant variations in water security also disrupt agricultural yields and this has multifaceted impacts on food security, livelihoods and rural-urban inequalities. As a country highly susceptible to extreme weather events such as prolonged droughts and floods, Sri Lanka is already seeing significant drops in crop production and a rapid increase in food

insecurity among rural households. This is a particular concern for Sri Lanka's dry zone, which accounts for two-thirds of the country and over 70 percent of paddy production (United Nations Sri Lanka, 2023).

Climate change is altering the timing, duration, and frequency of precipitation which is increasing the unpredictability of water availability. This has dangerous implications for the agricultural sector as droughts and excessive rainfall can lead to water scarcity for irrigation, affect crop production, and compromise the livelihoods of rural communities that are dependent upon agriculture. Extended droughts and floods in 2016 and 2017 disrupted two rice cultivation cycles and affected over 2 million people according to government estimates, curtailing economic growth and causing food inflation (Asian Development Bank, 2019). A severe drought in 2023 also significantly disrupted paddy production; over 60,000 acres were damaged due to lack of rainfall, affected over 50,000 farmers' livelihoods.

Temperature increases and high evaporation rates are expected to affect the staple crop - rice. Meteorological records point to 283 dry spells over the period of 30 years since 1974. Erratic and unseasonal rainfall and unpredictability of the monsoons severely impact agriculture, (both flooding and drought impacts on crops, including paddy) livelihoods, and socio-economic conditions of rural smallholders, undermining some of the investments made by the government on agriculture and irrigation (Presidential Secretariat of Sri Lanka, 2023).

Changing temperatures can also change the suitability and distribution of crops; crops that previously thrived in certain regions may no longer be viable due to the changing climate. This requires farmers to adjust their crop choices and farming practices, many of whom do not have the infrastructure, machinery, or knowledge to immediately alter their production. This poses significant economic costs on smallholder farmers.

Although smallholder farmers tend to make shortsighted decisions for their land, this is not due to a lack of awareness of the consequences or impacts of climate change, but rather that they are unable to factor it into their economic decision making. For example, there is some awareness of the benefits of omitting chemical fertilisers, but input costs are already so high that financing natural alternatives is not feasible in the short run (Quealy & Rajarathnam, 2024).

Furthermore, the recent fertiliser ban and the devastating effects it had on smallholder farmers has also increased risk aversion to government intervention and climate change policies. The associations that many farmers now make with natural fertilisers and non-chemical alternatives that were proposed as part of the fertiliser ban have vilified these policies and there is a severe lack of trust in the government policies. This poses challenges to a blended financing facility, as hostility towards government involvement in the sector may reduce the appetite for finance or participation in projects, and ultimately reduce the willingness of smallholder farmers to adopt climate-friendly approaches to agriculture.

There are some young farmers who are interested in scaling up natural practices and returning to the agricultural sector for full-time employment, but these are certainly a minority. The cultural heritage and the connection many have to the sector is significant and is part of many young farmers decision to forego opportunities in Colombo or elsewhere to pursue agriculture. However, the challenges facing the sector on both the input and output side threatens the ambition of these young farmers (Quealy, 2024).

2.5 Overcoming Challenges Through Blended Finance

To build resilience in Sri Lanka's agricultural sector, it is vital that smallholder farms have access to credit for commercialisation, but also to technical assistance, technology and inclusive growth principles to increase their productivity, yields, and income. Sri Lanka does not have an established development bank, which limits the ability of smallholder farmers to invest in themselves or their business. Concomitantly, smallholder farmers often face isolation and limited government-led coordination efforts in the value chain, which contributes to sectoral inequality as only medium- and large-scale enterprises can participate fully in scaling up efforts and commercialisation.

Providing access to finance in the agricultural sector to encourage entrepreneurship is not enough in isolation. Overcoming coordination problems, policy inconsistencies, and value chain exclusion also requires crucial investments in local infrastructure, technology, and technical assistance to empower smallholder farmers and provide them with access to vital services that can complement and develop their business. Experts recognise that smallholder farmers do not lack the knowledge or the application to grow their businesses, but rather they lack the means of facilitation, coordination, and navigation. This is where the roles of government and development partners must align and provide robust programmes that address these challenges holistically to support entrepreneurship.

3 The Developmental Benefits of a Resilient Agricultural Sector

Agriculture should be the target of a blended financing facility in Sri Lanka, particularly when examining imbalances in the sector. Excessive spending on fertilisers and fuel imports denominated in foreign exchange places significant pressure on the government and local farmers, which has negative economic spillover effects. By empowering local people to engage in climate-positive agricultural practices with locally sourced ingredients, this relieves pressures on various agencies and can lead to a more stable and sustainable agricultural sector that benefits both people and the environment.

Beyond the initial benefits of private investments for smallholder farmers, establishing a more climate and economically resilient agricultural sector will also have significantly positive spillover effects for Sri Lanka's economy.

3.1 Food Security

By placing the supply of staple foods in the hands of local businesses, supply chains become more resilient to exogenous shocks to prices and supply. This guarantees local communities more stable access to essential nutrition and brings improvements across all development indicators, such as health, education and productivity.

Food security also goes beyond the local level. By improving efficiency and productivity through reducing post-harvest losses and increasing production, local farmers participate in agricultural value chains by providing inputs to larger scale commercial operations or through selling products directly beyond their local community. This may increase the strength of national supply chains through source diversification and locally sourced produce that can be preserved more easily. When complemented by improvements in infrastructure, such as transport, storage and technology, this reduces reliance on imported products and enables consumers in cities and larger communities to have more sustained, affordable access to locally produced food.

3.2 Rural Empowerment

Agriculture is the backbone of rural communities and is an essential component of both household income and subsistence. By providing better income-generating opportunities for rural households in their communities, this raises the opportunity cost of rural-urban migration and encourages skilled workers to support their own community through income and knowledge transfer. If there is strong access to well-paying jobs and business development in rural communities, this distributes economic benefits more evenly across regions and can attract further investments in infrastructure and social services (such as health and education) to support the population.

Without access to sustainable income in rural communities, young people and skilled professionals are more likely to pursue work in major cities (or, in many cases, abroad) which contributes to a ‘brain drain’ effect. This exacerbates rural-urban inequality by disincentivising skilled workers from building up their own business, and instead pursuing labour outside of the community. Furthermore, by reducing the incentives of rural-urban migration and empowering rural communities, this more effectively distributes resources across the entire economy and supports country-wide development.

3.3 Income Enhancement

By building stronger supply chains and diversifying access to inputs, this creates more sustainable access to necessary agricultural products at all levels of the economy. For smallholder farmers and small businesses, improved access to technology and infrastructure improves efficiency, reduces post-harvest losses, and enables producers to build reserves to be more resilient in the face of economic or climate shocks.

Income enhancement does not necessarily mean only higher incomes, but also means more consistent incomes that enable small businesses and smallholder farmers to plan further in advance and make long-term economic decisions for their household. This can

include in health, education, production and infrastructure, which all have long-term economic benefits for the household. By enabling households to think longer-term through income sustainability, they can make better decisions in the interest of their own development, rather than prioritising short-term emergencies.

3.4 Climate Resilience

Improved access to infrastructure, inputs and services are vital to build climate resilience in Sri Lanka. Smallholder farmers must be supported to make longer-term economic decisions that are climate positive, which are facilitated by investments in climate change mitigation and adaptation efforts that reduce their vulnerability.

If farmers have access to a diversified supply chain and can access necessary infrastructure, this enables them to make longer-term business decisions and prioritise areas beyond subsistence. For example, with access to technical assistance and affordable inputs, farmers may experiment with more climate-friendly practices and implement new methods of cultivation, which may have longer-term benefits on the quality of their land and thus their productivity. Moreover, resilience to climate shocks can help households smooth incomes over time and not face severe economic challenges when vulnerable to climate shocks and disruptions to their harvest. Reducing climate vulnerability directly translates to reducing economic vulnerabilities in rural households that are disproportionately affected by climate change.

Implementing sustainable land management practices, reducing chemical fertiliser consumption, and promoting natural farming practices contribute to a more resilient agricultural sector that have positive spillover effects on climate and resilience.

3.5 Fiscal Balance

Investments in the agricultural sector that empower local businesses and improve agricultural livelihoods enables rural communities to become more self-sustainable. Increased incomes, shifts towards energy autonomy (e.g. small-scale rooftop solar) and natural farming practices (i.e. reduced chemical fertiliser consumption) may reduce the reliance of smallholder farmers on government subsidies. This can improve the government's fiscal position through reduced subsidy costs for inputs as smallholder farmers become more productive and self-sustainable.

Moreover, by digitalising businesses and encouraging the formalisation of employment through improved access to government services and infrastructure, this may contribute to improvements in the tax base. Therefore, by empowering entrepreneurs and encouraging business development, the government could benefit from both increased revenues and reduced spending in the long run.

3.6 Foreign Exchange Reserve Sustainability

By promoting domestic agriculture and strengthening local supply chains, this reduces the reliance on imports of agricultural products that can be produced domestically. While this diversification supports food security, it also improves the foreign exchange position by reducing the amount of foreign exchange spent on essential imports.

If Sri Lanka can reduce its reliance on chemical fertilisers, coal and oil for energy, and imported food products, it can reduce the amount of foreign exchange required to service essential imports and thus reduce the pressure on foreign exchange reserves.

4 Successful Blended Financing Case Studies

Because blended financing has a broad definition and can be implemented across many sectors in an economy, it is vital to understand how successful facilities have been cultivated and what can be learned from their implementation. This section examines international case studies, their effectiveness, and how they may influence Sri Lanka's own blended financing facility.

4.1 Indonesia

Indonesia had made strong commitments to climate targets (such as reducing carbon emissions and rehabilitating land), energy/electricity access for rural communities and improving smallholder farmer productivity. However, research acknowledged that there was a funding gap more than $20 billion that needed to be filled to achieve these targets (Tripathi, 2024). Recognising public sector constraints, the Indonesian government explored potential mechanisms to attract private finance into areas that needed it most.

The **Tropical Landscapes Financing Facility** was established in 2017 and prioritised the scaling up and replication of reforestation and conservation projects in rainforest areas, as well as investing in productive sectors that would benefit communities in these regions. The rainforest was 400,000 hectares in size but had lost 22% of its land (88,000 hectares) to deforestation. Previously, natives to the rainforest were accomplices in this environmental degradation as there were no incentives to generate income from more sustainable sources, nor was there the opportunity.

The Loan Facility provided access to long-term credit for commercial projects with measurable environmental and social impact, as well as financial returns. The platform issued 'multi-tranche' long-dated *Tropical Landscapes Bond*, with an investment term of between 10 and 15 years, and an average loan holding period 2 – 3 years. This was Southeast Asia's first-ever sustainability project-linked bond (ADM Capital, 2022).

In the Loan Facility, BNP Paribas provided liquidity to finance the credit facility, which was supported by a credit guarantee from Development Finance Institutions. ADM Capital sources and structures project loans. Cashflows were securitised and sold by BNPP via a long-dated bond programme. The Loan Facility provided loans for smallholders to improve efficiency and support jobs growth across the sustainable agriculture supply chain. The Loan Facility was combined with a **Grant Fund** which supported pipeline

development, education, and other grant funding alongside monitoring and evaluation of loans (ADM Capital, 2017).

The Grant Fund was established under UNOPS and capitalised by donors. The grant fund focused on knowledge/capacity building in rural communities to improve livelihoods, train communities and provide infrastructure that promotes development (e.g. small-scale solar, technology, education). These investments increased the productivity of smallholder farmers and thus the repayability of the financing.

The project has been successful in preventing deforestation over the last 7 years and Indonesia's deforestation rate has dropped to one of the lowest in the world. The programme directly employed 16,000 people and indirectly benefited 34,000 people. The bond repaid at par in August 2022 (ADM Capital, 2022).

4.2 Andhra Pradesh, India

The **Sustainable India Finance Facility**, supported by the Government of Andhra Pradesh, pioneered a Community Managed Natural Farming programme that aimed to transition 6 million farmers from synthetic chemical farming to regenerative agriculture. The programme prioritised natural farming amongst smallholder farmers, particularly women in rural communities.

The German Development Bank provided the initial finance for the programme; €300m at a rate of 0.45% to the local government, having raised finance at 0.2% and generating a marginal return. The proposed mechanism for repayment included reduced subsidy costs associated with chemical fertilisers and electricity usage, which would go down due to natural farming requiring less water through irrigation systems and water pumping mechanisms (Tripathi, 2024).

The programme was not instructive; it encouraged farmers to take on their own level of risk with respect to natural farming methods. The project found that within 12 months of exposure to natural farming, small holder farmers discovered the benefits themselves and committed to switching entirely to natural farming, regardless of their initial level of risk. Natural farming demonstrated economic, environmental and health benefits due to reduced chemical fertiliser consumption (Tripathi, 2024).

The partnerships demonstrated how natural ingredients such as jaggery and buttermilk, widely available to the communities, were an active substitute for chemical fertilisers and can accelerate microbes for crops. In fact, the transition toward natural farming in these communities increased farmers' incomes by 50% and agricultural yields by 11%. Maintaining soil-organic carbon is essential for long-term land productivity so this programme helped preserve land quality through removing chemical fertilisers. In India, soil-organic carbon is down to 0.4%, when 2.5% is the optimal concentration for crops (Tripathi, 2024).

The incidence rates of diseases such as diarrhoea, anaemia and certain cancers in local health centres decreased by 85%, according to some locally led research. Researchers also found that farmers would grow organic food to keep for themselves and their families and then sold the excess, rather than producing as much as they could for sale. When people were placed at the heart of the conversation, their lives improved and so did the environment.

4.3 Rwanda

a) Ireme Invest

Ireme Invest works with Rwanda's private sector to channel finance into SMEs and cooperatives operating in agricultural adaptation. The facility offers tailored financial products and services that fast-track green investment. The facility has two main components: a credit facility and a project preparation facility.

The credit facility provides financing to eligible projects, managed by the Development Bank of Rwanda. Projects benefit from loans and a credit guarantee with a 12% interest rate, a maximum of 12 years loan agreement, and access to a 2-year grace period; these conditions aim to make repayment terms sustainable and manageable without the need for refinancing (Ireme Invest, 2024)

The project preparation facility calls for the submission of projects by entrepreneurs, businesses and cooperatives who will benefit from technical assistance and resources to accelerate projects in agricultural adaptation. It complements access to finance for small agribusinesses with technical assistance and capacity building initiatives.

b) World Bank's Blended Finance Initiative

A USD$257.5 million blended finance package was provided by the World Bank to maximise development financing for micro-, small-, and medium-sized enterprises in Rwanda (World Bank Group). The initiative brought together credit, grants, concessional loans, investment banks and disaster risk management agencies to provide sustainable finance to grassroots businesses. The initiative provided three main sources of finance to businesses:

1. Post-pandemic financial relief to stabilise businesses and build resilience.
2. Credit lines to refinance debt, provide working capital and support investments for business adaptation.
3. Risk sharing instruments, such as partial guarantees, bridge lending, insurance, and technical assistance.

4.4 Bangladesh

The Bangladesh Climate and Development Platform (BCDP) was announced in 2023 as part of the country's efforts to implement its climate change agenda and integrate

climate risks into fiscal planning, while also placing climate change at heart of private and public sector economic development. The Platform is the first of its kind in Asia and takes place in the context of a USD$1.4 billion Resilience and Sustainability Facility arrangement under the International Monetary Fund (International Monetary Fund, 2023)

The Resilience and Sustainability Facility arrangement and the Green and Climate Resilient Development Policy Credits support reforms to strengthen Bangladesh's resilience to climate change, advance the decarbonization of the economy, and manage transition risks. Specific reforms supported by the IMF program and the GCRD aim to integrate climate and green dimensions into public procurement and public planning, incentivize locally led climate actions and scale up a national disaster risk financing strategy.

The partnership brought together partners from the bilateral, multilateral, development finance and NGO sectors to bolster climate action in Bangladesh. Partners included: The Asian Development Bank (ADB), the World Bank, International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA), Asian Infrastructure Investment Bank (AIIB), Agence Française de Développement (AFD), the European Union and the European Investment Bank (EIB), as part of Team Europe, the Green Climate Fund (GCF), the Government of South Korea, Japan International Cooperation Agency (JICA), and the United Kingdom (International Monetary Fund, 2023).

The prospect of this blended financing facility promotes inter-agency coordination; many of the partners involved in the agreement already have independent climate and development projects in Bangladesh, so the platform will enable coordinated action for greater developmental impact. This transparency and framework also aims to attract further climate finance to Bangladesh and further contribute to the country's climate resilience and sustainability efforts.

The BCDP will also establish a project preparation facility – led by the World Bank and ADB - to improve the bankability of projects and support scalability to attract private investments. It will also attract private investments to scale up ongoing efforts and mainstream projects for economic and social development, while relieving the pressure placed on the public sector to deliver these services under their severe fiscal constraints. JICA is supporting the BCDP through technical assistance and financing by providing technical capacity, concessional loans and grants. This will be complemented by UNDP's technical assistance on strategic climate change-sensitive planning and budget management.

While the BCDP is in its early stages, it demonstrates the coordination benefits of such a blended financing operation and how there is significant bilateral and multilateral interest to ensure that projects are implemented effectively and impactfully, and bankable.

4.5 Ghana

The Financing Ghanaian Agricultural Project (FinGAP) stimulated commercial lending to 'middle borrowers' who were underserved in the country's agricultural sector. This focussed primarily on farmers growing staple crops of maize, rice and soy, and prioritised food security as part of enhancing local agriculture. Financing gaps existed due to high-risk perception, low profitability perception, high costs associated with serving smallholder farmers and SMEs, sector inexperience, and limited capacity to support agribusinesses (Palladium Group, 2019).

FinGAP established a two-pronged 'pay-for-results' approach to address supply and demand for agricultural finance; results-based contracts were provided to business advisory services to identify, package and present investment opportunities (demand), and financial institutions were incentivised to expand lending to agribusinesses through lending targets and performance-based grants (supply). A results-based approach improved efficiency as financial institutions and advisors innovated to create more effective strategies (USAID, 2018).

FinGAP prioritised capacity building efforts and technical assistance to support the development and establishment of new financial products that catered to agriculture-specific needs, factoring in geographic and demographic differences. The programme also prioritised networking and partnership building to promote coordination, cooperation and trust between lenders, advisors and farmers, which also facilitated value chain participation and supply resilience.

FinGAP addressed barriers to demand and supply of finance but also overcame structural challenges in the business environment. Benefits included:

- Smallholder farmers improved productivity, reduced post-harvest losses and improved market access through increased financing and technical support.
- Agribusinesses accessed finance to invest in their operations.
- Financial institutions overcame risks associated with lending to the agricultural sector and thus increased their customer base.

The programme also had a very high social value; women-led businesses accessed financing directly and households were also able to increase education, healthcare and savings expenditure as a direct consequence of improved incomes and community infrastructure (Palladium Group, 2019).

The programme considered results-based methodology to be successful and that a focus on quality customer service helped mitigate risk. It also found monitoring and evaluation exercises to be particularly effective. However, the programme also recognised that farmers still faced relatively high interest rates, which placed relatively more pressure on smallholder farmers, and that some farmers required more technical assistance and market linkages due to constraints that were initially not factored into the model (Palladium Group, 2019).

4.6 East Africa

The One Acre Fund provides asset-based financing to smallholder farmers in East Africa to assist their income growth and poverty alleviation. The programme provides inputs, training and services to smallholder farmers to ensure that access to quality farming products is complemented by technical assistance and infrastructure to maximise impact (One Acre Fund, 2024).

The One Acre Fund also supports staple crops on top of commercial crops, livestock and trees, and places emphasis on ensuring families are subsistent and achieve food security from their own land. Their impact is rigorously measured and evaluated regularly to ensure that those receiving support from the fund are seeing growth in yields and incomes.

The Fund also places responsibility and accountability within communities, working with local farmers and neighbours who can deliver impact at a local level. By serving their own communities, the Fund recognises that their delivery partners understand the context and priorities of the smallholder farmers.

30% of One Acre Fund is financed through grant payments, with recent funding coming from the Children's Investment Fund Foundation and the Global Innovation Fund, and 70% of One Acre Fund's expenses are financed via the farmer loan repayments scheme. For every $1 invested by the fund, the farmer produces $3.16 in extra income (averaged over three years) (One Acre Fund, 2024).

5 Establishing a Blended Financing Facility in Sri Lanka

5.1 Localisation and Ownership

When considering blended financing, successful case studies clearly demonstrate the need to establish clear incentive structures for all stakeholders involved in the implementation. These incentives can be direct financial benefits or accountability frameworks that enable those involved to take ownership of their own role in the platform. For example, in Ghana, the 'pay-by-results' approach cultivated an environment where business advisors and financial institutions were given innovative freedom to meet the targets set by the programme. This reduced the implementation and administration costs of the programme as it required less oversight from partners, while also improving the efficiency of delivery as decision-making was owned by those who were most familiar with their own operations.

Moreover, the Indian case study outlined the need to empower local communities in their decision-making processes. Smallholder farmers were not forced to implement changes and bear risk initially, but rather recommended and informed of its potential benefits. Farmers took on some initial risk, but extended their participation when the risk was demonstrably low. By giving farmers the opportunity to implement new methods of cultivation and providing them with the technical assistance and infrastructure to experience it themselves, it promoted accountability for the business decisions taken and placed the decision in the hands of the farmers. If the methods and science behind the project are robust, farmers will naturally gravitate towards them once they recognise

the benefits. However, this recognition is often more effective through self-discovery, rather than dictation from those outside of the community.

Given the community nature of smallholder agriculture in Sri Lanka's rural communities, promoting ownership of business decision making and presenting opportunities to farmers may be the more effective solution. Research in Sri Lanka's Dry Zone demonstrates that the spillover effects of one farmer's behaviour into the wider community is high, and that farmers will often replicate the behaviour of other more successful farmers (Quealy, 2024). By promoting community level coordination and communication, as farmers begin to implement newer, successful farming practices, evidence suggests that others may follow. Therefore, the quality of the projects is crucial for success, and implementation must be robust and generate direct, tangible benefits for farmers to ensure that their participation is justified and contagious.

Finally, by promoting locally led initiatives and enabling community leaders to work closely with all stakeholders, trust between smallholder farmers and implementation partners improves dramatically. The One Acre Fund demonstrates very clearly the impact of working closely with local delivery partners, especially those engaging in the programmes, as they act in both their own interest and that of smallholder farmers. Furthermore, by diluting the officiality of engagements, this may improve the trust of smallholder farmers in the programmes. Given recent policy shocks and the failure of some government interventions, such as the overnight chemical fertiliser ban in 2021, there is a severe reluctance amongst rural communities to work with official stakeholders and their hostility towards formal, instructive interventions from those outside of the community may reduce the appetite for finance, risk, or overall participation.

5.2 Complementing Finance

There is little to no evidence that an increased access to finance **alone** is the deciding factor for smallholder farmers to expand business practices in Sri Lanka. While access to finance is certainly a factor for investing in business practices, it becomes more attractive for farmers when it is complemented by clear improvements in infrastructure, market access and technical capacity to utilise new resources more effectively.

Many farmers already have access to credit through informal channels; however, much of this finance is considered 'survivalist' finance which is short-sighted and prioritises subsistence. This includes smallholder farmers taking on short-term loans for agricultural inputs which are collateralised with a share of incomes from agricultural output, creating a debt trap when farmers are unable to service higher informal interest rates and face diminishing yields.

Although informal finance is often unsustainable and creates difficult hierarchical structures in rural communities, smallholder farmers still often opt to use this familiar finance as opposed to formal finance offered by banks. Factors affecting whether smallholder farmers utilise formal credit mechanisms include the perceptions of debt in the community, bad previous experiences with both formal and informal credit, and

'scare stories' of those who have taken on debt but been unable to pay it back. Therefore, providing finance for smallholder farmers must go beyond access and be complemented by supply-side improvements across the sector.

Supply-side improvements will vary across regions, communities and seasons, but can be broadly summarised as a) improved access to infrastructure, b) technical assistance, and c) resilience (e.g. access to inputs, adaptation to climate change). The Tropical Landscapes Facility demonstrated clearly how infrastructure can complement access to finance. By improving local technology access, such as through small-scale solar for electricity and irrigation, farmers were able to embrace grant-funded productivity increases that materialised as higher financial returns, which made their debt repayable. The grant fund was a crucial component of the facility as it supported farmers with targeted infrastructure that created wider benefits.

Complementing access to finance with other opportunities for smallholder farmers is at the heart of blended financing and it is these combinations that make projects bankable and sustainable, as well as socially, environmentally and economically impactful.

5.3 Making Climate Resilience Profitable

Research in Sri Lanka's Dry Zone demonstrates that although smallholder farmers tend to make shortsighted decisions for their land, this is not due a lack of awareness of the consequences or impacts of climate change, but rather their inability to factor it into their economic decision making (Quealy, 2024). For smallholder farmers prioritising subsistence or small-scale production, they simply cannot afford the input costs to make the necessary adaptations.

The Indian case study demonstrates perfectly how to strike a balance between climate and economics. By providing a climate-positive alternative that also improved yields and incomes, farmers made positive economic decisions that benefitted the local environment. While technical assistance and capacity building efforts to raise awareness of climate change can be effective, smallholder farmers prioritising short-term economic stability are still unlikely to implement changes and this reduces the impact of these efforts. Instead, farmers should be presented with better economic alternatives to their current practices, and these must be environmentally beneficial.

5.4 Inclusivity and Social Empowerment

Another important aspect of successful blended financing projects is their developmental impact. In each of the case studies examined, there is a focus on social and environmental benefits that go beyond the direct economic returns of a project. When raising finance, particularly through grant funding or multilateral partnerships, the social impact of a project is key. By identifying social challenges that can be overcome through financing projects, such as focussing on women's empowerment in local businesses, improving children's educational attainment or improving health outcomes, blended financing becomes attractive beyond its direct economic returns.

A successful blended financing facility is a catalyst for finding solutions to problems. If problems are identified correctly and opportunities are presented to financiers, they are much more likely to engage and provide finance than if there were merely economic demands for investment. This was reinforced by Satya Tripathi, Secretary General of the Global Alliance for a Sustainable Planet, who emphasised the need to identify problems that can be overcome with investment that may otherwise be foregone due to government constraints (Tripathi, 2024). This is where the private sector can support development and find economic solutions to social and environmental problems.

Furthermore, economic evidence suggests that the social benefits of development projects have long-term economic benefits that materialise indirectly. For example, by empowering women in rural communities to take on a share of agricultural businesses, this places women in meaningful work and shifts labour force participation towards new income generation. In many households in Sri Lanka, women manage the land while men work as daily labourers to supplement household income. This creates a smallholder agricultural sector that does not prioritise agriculture, but instead prioritises subsistence that is complemented by other full-time work. Projects must focus on engaging women in the formal agri-business sector and empowering them to pursue agricultural income for their household, which can be combined with men's labour income to increase overall household income.

For example, in both India and Ghana, the agricultural projects focussed on women's empowerment as part of the broader social development goals for the project. This was effective in mobilising finance for a social, environmental and economic cause, and contributed to community transformation alongside generating returns. While identifying and overcoming social challenges is attractive for generating blended financing projects, there is also a clear economic benefit to addressing social and developmental challenges, which can contribute to longer-term economic capacity and overall economic improvements.

5.5 From Microeconomies to the Macroeconomy

For blended financing – and policy interventions more generally – to be effective in the agricultural sector, there must be an emphasis on a bottom-up approach. Each successful case study had clear targets for the individual sector in which financing was mobilised, which had broader economic benefits beyond the sector. Prioritising sector-specific, community-level challenges and presenting all stakeholders with mutually beneficial solutions is the most effective way to produce economic and environmental benefit through a blended financing facility.

To consider the counterexample; the chemical fertiliser ban in 2021 that decimated much of the agricultural sector was a policy decision motivated by the decision to reduce foreign exchange outflows from Sri Lanka's agricultural sector. While there was – and still is – a rationale to promote natural farming and the phasing out of chemical fertilisers in the agricultural sector, the 'top-down' approach to fixing a foreign exchange imbalance

through local-level natural farming failed to recognise the broader consequences of short-term policy decisions.

When promoting entrepreneurship in the agricultural sector, it is vital to understand why it is necessary on the local level. If enhancing productivity in the sector is with the primary goal of exporting products and generating foreign exchange, this skips out the essential 'middle level' stages of the agricultural sector that dictate its efficiency, security and resilience on a local and international level. By prioritising local actions for local benefits, such as through food security, improved access to local markets, value chain participation and business expansion, this builds a more resilient agricultural sector that becomes structurally ready to tackle broader economic challenges.

A coordinated agricultural sector with access to high quality inputs, technology, value chains, coordinated markets, and technical capacity should be the goal, as addressing microeconomic imbalances across all sectors creates macroeconomic benefits that far exceed the sum of its parts. In India, natural farming introduced higher productivity and better land management practices that improved yields and incomes, and reduced poverty. However, the indirect macroeconomic benefits that materialised came because of this bottom-up approach. By promoting natural farming practices, farmers reduced their demand for chemical fertilisers and electricity (through reduced water demand from irrigation systems), which reduced subsidy expenditure by the state government and created savings that could be used to repay the debt. Farmers benefitted from improved incomes; the state government benefitted from reduced subsidy costs; and financiers benefitted from loan and interest receipts. Had the state government prioritised the reduction in subsidy expenditure on chemical fertilisers and electricity, it is difficult to imagine that this natural farming project would have materialised in the same way.

While it is important to consider the broader macroeconomic benefits of a project, particularly those funded through concessional finance or donors, it is important to recognise that repayability is most achievable when localised. A project must generate its own returns and if it is beneficial for the sector, it will have the desired impact on the macroeconomy through structural changes in the long run.

6 The Way Forward

This report aims to support policy making processes by examining the prospects of blended financing in the agricultural sector. Previous case studies and economic rationale dictates that, if employed effectively, a blended financing facility has the potential to generate additional investment that has an economic, social and environmental multiplier that can reach far beyond public investment constraints. Therefore, this report has identified potential areas of cooperation for a blended financing facility in the agricultural sector and describes the challenges that development partners may aim to address through their investments.

6.1 Proposed Target Areas within the Agricultural Sector

- **Technical assistance** programmes that guide farmers through complicated processes that improve their incomes and resilience.

Projects must support the upskilling and development of small agricultural enterprises. Targeted and personalised technical assistance programmes must be at the heart of investments to ensure that farmers have the technical capacity and equipment to improve their yields and increase production. This includes providing knowledge resources for farmers, such as demonstration videos or pictures, that can be shared in communities and passed on to young people, as well as consistent capacity building efforts that account for environmental, social and economic differences across rural communities, crop types, and farm sizes.

- **Investments in natural farming practices**, such as employing natural fertilisers, complemented by technical assistance to increase yields and incomes sustainably.

By encouraging a shift away from chemical fertilisers towards more efficient agricultural practices, farmers can benefit from improved land management, higher yields, better health outcomes, and overall economic, social and environmental benefits. The Sustainable India Financing Facility demonstrates how effective this transition can be when farmers are given the opportunity to think long-term and explore better practices. This generates multifaceted sustainability for farmers, which builds resilience in the sector.

- Establishment of community-level markets to **strengthen supply chains**, to ensure that farmers have access to necessary inputs while buyers have access to consistent, high-quality supply of outputs.

By promoting coordination in rural communities and supplying high-quality inputs to farmers, this provides stability and resilience in the face of supply shocks and ensures that farmers can plan long-term for their business. The One Acre Fund demonstrates that when farmers have stable access to the necessary components of their business, complemented by technical assistance to improve productivity, they are able to create a more resilient business model that supplies competitive products to the markets.

Coordinated efforts can also aggregate the output of smallholder farmers and overcome the transaction costs of small-scale farming. By providing sustainable and affordable access to essential inputs, farmers can cover their costs and generate profits to reinvest in social, economic and developmental outcomes that go beyond subsistence.

- **Crop diversification**: improving access to agricultural inputs all year round to ensure a sustainable source of income that is resilient to climate shocks.

Farmers must have access to agricultural inputs all year-round and understand when they are most productive. This combines technical assistance and access to inputs by

ensuring that farmers are able to generate a sustainable income throughout the year and adapt their cultivation processes depending upon the climate, their land, and demand. This builds resilience across the sector and diversifies supply chains, which in turn ensures a stable supply of products to the market for buyers.

- Investments in **small-scale renewable energy sources**, such as rooftop solar, to provide sustainable access to electricity for households and irrigation systems.

Rural households are under increasing pressure due to rising energy costs for their daily operations. By autonomising electricity in rural areas and ensuring consistent, affordable access to energy, farmers can continue to work productively on their land and create more financial space to invest in their business, their family, and their land.

Shifting away from heavily polluting machinery and inefficient energy systems also has broader environmental and health benefits that farmers are aware of, but unable to address due to short-term economic pressures. Supplying small-scale renewable energy technology can reduce the number of external inputs required for their business and place more control in the hands of the farmers.

- **Digitalisation**, such as through local e-commerce platforms, and efforts to improve transparency and understanding of policy and legal landscapes.

Improving access to technology and overcoming communication barriers is an essential component of agribusiness development. Several case studies created app-based platforms for commercial centres, as well as enabling farmers to access knowledge bases and information platforms to continue gaining technical expertise. Access to affordable and reliable technology can improve business efficiency and productivity both through smoothing buy-and-sell processes and knowledge sharing.

6.2 Additional Considerations

The aforementioned target areas have the potential to address structural challenges in the agricultural sector, but investment should not be isolated. Holistic solutions in the agricultural sector must place smallholder farmers and small businesses at the heart of the strategy, creating an enabling environment that makes it attractive for farmers to invest more time and resources into their own business. Going beyond subsistence farming and participating in the supply chains requires clear incentives, returns, and broader benefits that outweigh the alternatives, such as subsistence farming complemented by other part-time and full-time work or pursuing formal education to transition away from agribusiness.

Solutions must place the decision-making in the hands of the smallholder farmers but create incentives for smallholder farmers to invest in themselves and their business. Locally led projects that collaborate with local communities and advisors, empower marginalised groups and encourage local cooperation will be essential for growth and diversification in the sector. Stakeholder consultations and diagnostic studies must

identify the nature of the structural challenges in the sector, build bankable projects for investment, and complement financial assistance with technical assistance and capacity building efforts to differentiate the solutions from basic financial inclusion.

Region- and sub-sector- specific diagnostic studies are required to fully understand the challenges facing the agricultural sector, and finance must aim to support local businesses in their own development. Building resilience in the sector requires inclusivity, long-term planning and projects that support all income groups. This will require locally led action complemented by development partners' technical assistance, emphasising the need for communities to describe their challenges and the incentives required to overcome them.

By correctly identifying the problems and allocating concessional finance effectively, private finance will come. Policy makers must not pursue private finance 'by any means necessary', but instead create an environment where targeted investments that generate economic returns also generate social and environmental benefits. A national level blended financing facility should dictate the broader development goals and attract private finance to achieve them.

References

Abeyratne, S. (2023, November 19). Debt for Debt and Budget 2024. *SundayTimes.lk*.

ADM Capital. (2017, February). *The Tropical Landscapes Finance Facility.* Retrieved from ADM Capital: https://www.admcf.org/wp-content/uploads/2017/02/TLFF-Introduction-20170201-Final.pdf

ADM Capital. (2022, 12). *South East Asia's first sustainability project bond.* Retrieved from ADM Capital: https://www.admcapital.com/wp-content/uploads/2022/12/RLUFS2022_13_12.pdf

Asian Development Bank. (2019). *The Enabling Environment for Disaster Risk Financing in Sri Lanka: Country Diagnostics Assessment.* Manila: Asian Development Bank.

Ceylon Chamber of Commerce. (2023). Report on the Brainstorming Dialogue on Commercialization of Sustainable Investment Opportunities in the Agribusiness Sector. *Brainstorming Dialogue on Commercialization of Sustainable Investment Opportunities in the Agribusiness Sector.* Colombo: Ceylon Chamber of Commerce; Sustainable Development Council; Sri Lanka Banks Association.

International Monetary Fund. (2023, December 3). *Bangladesh and its Partners are Launching the Bangladesh Climate and Development Platform to Leverage Adaptation and Mitigation Investments*. Retrieved from International Monetary Fund: https://www.imf.org/en/News/Articles/2023/12/03/bangladesh-launch-climate-development-platform-to-leverage-adaptation-and-mitigation-investments

Ireme Invest. (2024). *Rwanda's One-Stop Centre for Green Investment*. Retrieved from Ireme Invest: https://iremeinvest.rw/about-us/

Ministry of Agriculture and Plantation Industries. (2016). *Agriculture Sector Modernization Project* . Retrieved from Ministry of Agriculture and Plantation Industries: https://www.agrimin.gov.lk/web/index.php/home-1/12-project/841-agriculture-sector-modernization-project#:~:text=About%201.65%20million%20smallholder%20farmers,poverty%20over%20the%20past%20decade.

One Acre Fund. (2024). *One Acre Fund: What We Do*. Retrieved from One Acre Fund: https://oneacrefund.org/what-we-do

Palladium Group. (2019). *Transforming the Agrifinance Market System in Ghana Positive Impact Case Study.* Palladium Group. Retrieved from SAFIN: https://safinetwork.org/wp-content/uploads/2023/03/f6ddfc_8802e17a260a4836a9f33acc8c201bb6.pdf

Perera, J. (2017). *Blended Finance: What it is, How it works and How it is used.* Oxfam.

Presidential Secretariat of Sri Lanka. (2023). *Sri Lanka - Climate Prosperity Plan - Preliminary Report.* United Nations Framework Convention on Climate Change.

Quealy, H. M. (2024, July 15). Agricultural Research for Blended Financing. (M. Iveson, Interviewer)

Quealy, H. M., & Rajarathnam, C. (2024). When crises converge: how uneven agrarian development influences the effects of climate change in Sri Lanka's North-Central dry zone. *Not Yet Published*.

Quealy, H. M., & Yates, J. S. (2021). Situated adaptation: Tackling the production of vulnerability through transformative action in Sri Lanka's Dry Zone. *Global Environmental Change*.

Rajapaksha, L., Gunathilake, C. D., & Fernando, P. T. (2021). Reducing post-harvest losses in fruits and vegetables for ensuring food security – Case of Sri Lanka. *MOJ Food Processing & Technology*.

Tripathi, S. (2024, May). Roundtable Discussion on Blended Finance Instruments with Mr Satya Tripathi (Secretary General of Global Alliance for a Sustainable Planet).

United Nations Sri Lanka. (2023). *Water as a Gamechanger for Sustainable Recovery in Sri Lanka*. United Nations.

USAID. (2018). *FINAL REPORT FINANCING GHANAIAN AGRICULTURE PROJECT (USAID FinGAP)*. USAID.

World Bank Group. (2016). *International Development Association Project Appraisal Document on a Proposed Credit in the Amount of SDR 89.2 million ($USD125.00 million Equivalent) to the Democratic Socialist Republic of Sri Lanka for an Agriculture Sector Modernisation Project*. Washington D.C: World Bank.

World Bank Group. (n.d.). *Mobilizing More Money for Small Businesses in Rwanda through Innovative Blended Finance*. Retrieved from The World Bank: https://thedocs.worldbank.org/en/doc/86721f41f40ef7529c929dd6baf1d5dd-0340012022/original/Case-Study-Rwanda-Blended-Finance.pdf