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Programme Completion Review: Market Development in Northern Ghana (MADE) programme

Supplemental Review Report

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Executive summary

This report has been prepared to supplement the standardised Programme Completion Review report on the Market Development in Northern Ghana (MADE) programme, which concluded on 30 November 2020.

Funded by the FCDO and implemented by a consortium led by Nathan Associates London Ltd., MADE was a £15.98m Market Systems Development programme that sought to improve the incomes and resilience of poor farmers and small-scale rural entrepreneurs in the Northern Savannah Economic Zone by improving the way in which markets work. Emphasising sustainability and systemic change in markets, the programme sought to focus on causes rather than symptoms, addressing constraints rather than delivering specific services. Programme interventions focused on market facilitation, where key players in market systems were encouraged to work more effectively. This is based on the understanding that more lasting and deeper change can be achieved by addressing the reasons why the market is not working effectively.

This report responds to the Foreign, Commonwealth and Development Office (FCDO) specific requests to identify the 'big picture' programme findings, including lessons that can be learned from other market systems programmes in Africa and how these can be used to inform the forthcoming FCDO-supported Agriculture Transformation Ghana (ATG) programme. Thus, lesson from four other market systems development programmes were considered: (1) Market Development in the Niger Delta, Nigeria, (2) Propcom Mai-karfi in Nigeria, (3) Transforming the Economy through Climate Smart Agriculture – Northern Uganda, and (4) the Promoting Inclusive Markets in Somalia programme.

Programme results

Over its three programme phases, MADE performed well and generally exceeded targets. It helped to improve the incomes and resilience of some 94,993 smallholder farmers and small-scale rural entrepreneurs in northern Ghana, 45 per cent of whom were women. It generated approximately £62.5 million additional net income among these farmers and enterprises, representing an average increase in income of £658 per smallholder farmer. By the end of the programme, MADE's partner firms had invested more than £54 million to procure and deliver new and improved inputs and services to over 136,000 smallholder farmers across the seven regions of the Northern Savanna Ecological Zone.

In the midst of COVID-19, MADE launched an internship programme in which 30 young agricultural graduates were selected, 14 of whom were young women. These were placed in 30 partner firms covering 41 of the 78 districts that make up the Northern Savannah Ecological Zone. The interns worked alongside farm advisory agents and assisted in providing vital health and good agronomic practice messages to over 19,500 rural farming families and distributing 27,000 items of personal protective equipment at an estimated cost of £23,000 to the partners, through input dealerships or visits to farming communities. Since the pilot internship programme has concluded, 12 interns (including seven women) have accepted full or part-time employment with host enterprises and a further nine are currently discussing potential engagement later in the year, during the aggregation and recovery stage.

Emphasising sustainability and systemic change in markets, MADE sought to focus on causes rather than symptoms, addressing market constraints rather than delivering specific services. Programme interventions focused on market facilitation, where key players in market systems were encouraged to work more effectively. MADE's focus on connecting small-scale farmers to markets by working with

intermediary agribusiness was largely successful. By improving the ability of these firms to plan and negotiate contracts, MADE was able to scale-up the number of producer beneficiaries, while improving the competitiveness and sustainability of agribusinesses. MADE reached a point where the agribusinesses that used its Advanced Business Model were able to plan better and sustain the delivery of their farm advisory services to smallholder farmers. Agribusinesses estimated that between 25 and 75 per cent of their growth since joining the programme has been derived from the farm advisory model.

MADE was also successful in reaching a significant majority of its programme log-frame targets. However, it is unclear—and perhaps too early to tell—the extent to which the programme actually addressed underlying market constraints or systemic barriers. While the sustainability of the programme's interventions is apparent at the enterprise level (e.g., leveraged investment, expanding sales and competitively bundled services), the broader impact of this on the whole northern agricultural market system is unclear. As important as these programme achievements are, the challenges to agricultural transformation remain. This is especially the case when considering the range of external supporting functions affecting market systems and government policy, legal and regulatory regime and its distortionary effects on market systems.

Lessons

There were many lessons identified from the experience of the MADE programme:

- Carefully assess programme assumptions
- Develop a pragmatic, systemic response to working in thin markets
- Focus on agribusinesses that can link smallholder farmers to markets.
- Diffuse knowledge and build management capacity in communities
- Develop and formalise agribusiness models
- Apply adaptive management
- Invest in quality partnerships
- Improve partner selection to create scale
- Promote labour markets for private agriculturalists
- Pay careful attention to gender and social exclusion in market systems
- Improve enterprise-level monitoring
- Conduct regular pause and reflect sessions
- Identify the opportunities and limitations of market systems approaches to climate and environmental impacts
- Strengthen the integration of policy legal and regulatory reform, including quality infrastructure into market systems programming

Key lessons from other market systems development programmes in Africa were identified in programme design:

- Use diagnostic studies to inform project design with partners
- Work with the private sector and selected market partners
- Create a clear value proposition for partnership
- Diversify service delivery across sectors
- Use of incentives and subsidies to help supply side actors drive market system changes
- Build on service models in larger supply chains

- Support business environment reforms
- Take active steps to mainstream gender and empower women

Lessons in programme management:

- Be pragmatic and flexible when working with partners
- Balance facilitation with direct provision
- Invest in capacity building
- Improve access to finance
- Promote scale and sustainability planning
- Prepare for external shocks

Lessons in programme monitoring and evaluation:

- Use monitoring and evaluation to inform continuous adaptation
- Begin monitoring early
- Build the capacity of partners in data collection and reporting

Recommendations for agricultural transformation

Recommendations for future programming to achieve agricultural transformation are presented. Recommendations for programme design:

- Ensure north-south linkages and engagement is embedded in programme design
- Drive investment through better commercial linkages
- Consider the effects of the programme on sustainability, resilience, endurance, and transformation
- Support the business enabling environment for private sector-led agricultural transformation
- Support increased government understanding of market distortions
- Support export facilitation and promotion
- Focus on quality infrastructure
- Design interventions to address irrigation and other facilities and infrastructure
- Seek to balance market facilitation with direct delivery
- Establish a deliberate gender strategy
- Access to finance for mechanisation
- Climate-smart production and business practices

Recommendations for programme management:

- Invest in the training of programme management and partner staff
- Apply adaptive management
- Align partner selection with structural change objectives
- Target female-owned agribusinesses
- Engage with actors in the political-economy
- Coordinate for better impact and reduced duplication
- Broaden community networks to enhance outreach
- Employ a gender specialist

Market Development in Northern Ghana (MADE) programme

Recommendations for programme monitoring and evaluation:

- Invest in the development of cost-effective monitoring and evaluation approaches
- Ensure a strong articulation of adaptive programming and the role of monitoring and evaluation
- Track gender-sensitive changes in market systems
- Further work on enterprise-level monitoring
- Expand programme monitoring across other donor-funded market systems programmes

Table of contents

List of abbreviations

ADVANCE	Feed the Future Agricultural Development and Value Chain Enhancement programme (USAID)
AGRA	Alliance for a Green Revolution in Africa
ATG	Agriculture Transformation Ghana
FCDO	Foreign, Commonwealth and Development Office, United Kingdom Government
FEA	Farm enterprise advisor (MADE programme)
GDP	Gross Domestic Product
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German technical cooperation agency)
M4P	Making markets work for the poor
M&E	Monitoring and evaluation
MADE	Market Development in Northern Ghana programme
MOAP	Market-Oriented Agriculture Programme
MSD	Market systems development
NUTEC MD	Transforming the Economy through Climate Smart Agriculture – Northern Uganda
PFJ	Planting for Food and Jobs (Government of Ghana programme)
PSD	Private sector development
SDGs	Sustainable Development Goals
SRO	Senior Responsible Owner (FCDO)
USAID	United States Agency for International Development
VfM	Value for money

1. Introduction

Funded by the FCDO and implemented by a consortium led by Nathan Associates London Ltd., the Market Development in Northern Ghana (MADE) programme was a £15.98m programme that sought to improve the incomes and resilience of poor farmers and small-scale rural entrepreneurs in the Northern Savannah Economic Zone by improving the way in which markets work, with a focus on agricultural value chains: rice, groundnuts, onions, and other vegetables including chili.

MADE was a Market Systems Development (MSD) programme that applied a Making Markets Work for the Poor (M4P) approach to agricultural markets in northern Ghana. Emphasising sustainability and systemic change in markets, the programme sought to focus on causes rather than symptoms, addressing constraints rather than delivering specific services. Programme interventions focused on market facilitation, where key players in market systems were encouraged to work more effectively. This is based on the understanding that more lasting and deeper change can be achieved by addressing the reasons why the market is not working effectively.

This report has been prepared as a supplement to the standardised Programme Completion Review (PCR) report. While the PCR report follows the specific template assigned to such reports, this supplement provides an opportunity to reflect more broadly on the design, management and achievements of the programme. This is done to contribute to further considerations the Foreign, Commonwealth and Development Office (FCDO) is undertaking to support agriculture transformation across Ghana. The report responds to FCDO's specific requests to identify the big picture programme findings, including lessons that can be learned from other market systems programmes in Africa and how these can be used to inform the forthcoming FCDO-supported Agriculture Transformation in Ghana (ATG) programme.

After presenting a brief background and context for private sector and agriculture development in Ghana, including a synopsis of the major government policies and programmes in Chapter 2, Chapter 3 presents an overview of the forthcoming ATG and Chapter 4 summarises the overall lessons learned from the MADE programme. This is drawn from the PCR report and provides further details where relevant.

Chapter 5 considers the challenges to economic transformation in agriculture. This is firstly done through a review of the current literature on how market systems development programmes can promote transformation, recognising their focus on market systems and their inherent limitations in terms of the other binding constraints on investments that improve economic productivity across and within strategic sectors. After identifying the specific ways MSD programmes can be better designed and managed to contribute to transformation, this chapter summarises the overall lessons learned from the MADE programme, drawing from the PCR report and then goes on to identifying the lessons from four other MSD UK-supported programmes in Africa.

Finally, Chapter 6 presents a series of recommendations for FCDO to consider as it initiates the ATG programme. These recommendations are drawn from the results of the MADE PCR report and the experiences of the four other MSD UK-supported programmes in Africa.

2. Background and context

The incidence and severity of poverty in Ghana reduced by nine percentage points from 55 per cent in 2011 to 46 percent in 2017. The intensity of poverty also reduced from 54.2 per cent in 2011 to 51.7 per cent in 2017. However, poverty remains persistently high in rural areas at 64.6 per cent. Twice that of the urban areas, at 27.0 per cent.[1]

The United Nations Development Programme's Northern Ghana Human Development Report 2018 found that human development outcomes in Northern Ghana are very low. The Human Development Index in the region was estimated to be 0.116 compared 0.575 for the national level. The Northern, Upper East and Upper West regions have long had the highest poverty headcount ratios in the country, exceeding the national average by large margins. While the contribution of the three Northern regions to national poverty has declined over time, poverty levels remain high in the zone. The Upper West Region has the highest incidence of poverty in the country, with many districts having poverty headcount ratios of over 80 per cent.[2]

The FCDO's work in agriculture markets in Ghana is based in a broader context of private sector development (PSD) and the challenges of agriculture transformation.

2.1. Private sector development in Ghana

Ghana's agenda for private sector development was articulated in two successive private sector development strategies (PSDS), which aimed to achieve sustainable and inclusive growth through a holistic approach to economic diversification. These strategies attempted to induce a policy mix of sound economic management, a good business environment, improved governance, open trade policy, and efficient trade process. PSDS I (2005-2009) focused on regulatory reform. PSDS II (2010 and 2016) aimed at transforming Ghana into a more productive, diversified, and internationally competitive economy.

Despite some successes, government support for PSD remains a challenge. The government is currently implementing a 10-point Industrial Transformation Agenda. This includes the National Industrial Revitalisation Programme, which aims to provide a stimulus package to economically viable but financially distressed companies, the One District One Factory policy, which is geared towards decentralising industrial development and providing state 'facilitation' to help medium to large scale business to set up. The agenda includes support to 'strategic anchor industries', such as agro-processing industries in industrial parks and special economic zones, and the development of small and medium-scale enterprises. Other agenda items include business regulatory reforms to reduce the cost of doing business and improvements to public-private dialogue.

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1 The broad pattern suggests that the Northern, Upper East and Upper West Regions had the highest levels of multi-dimensional poverty and overall incidence and intensity of poverty. However, there are areas that recorded the significant improvements. For example, the intensity of poverty was found to decrease from 87.4 per cent in 2011 to 68.1 percent in 2011 in the Upper East Region, while poverty in the Upper West Region decreased from 79.4 per cent to 65.5 per cent, and the Northern Region from 83.5 per cent to 80.8 per cent in the same time period. Reference: *Multi-Dimensional Poverty – Ghana,* Ghana Statistical Service, June 2020

2 United Nations Development Programme (2018) *Northern Ghana Human Development Report 2018; Bridging the poverty gap and fostering socio-economic transformation and empowerment to contribute to human development for all*, UNDP Ghana, Accra

2.2. Agricultural development

Agriculture is an important sector for diversifying the economy of Ghana and achieving economic growth that reduces poverty and regional inequalities. Agribusiness, including agriculture production and downstream processing activities, is the largest sector in Ghana's economy. Agribusiness accounts for 25 per cent of Gross Domestic Product (GDP). It employs nearly half the workforce and, with 35 per cent of exports, is Ghana's main export.

Agricultural growth reduces poverty by about three times as much as non-agricultural growth.[3] It also has a high capacity for job creation.[4] Evidence shows that agricultural growth is the most effective form of growth for poverty reduction and has among the highest growth multipliers in Ghana, creating 750 jobs for every additional one million US dollars of output.[5] This is mainly due to agricultural processing which directly employs poorer workers and can have strong backward linkages to the types of agriculture that poor households are engaged in.[6]

If Ghana achieved the Sustainable Development Goals (SDG) targets for agriculture in 2030 (i.e., a doubling of productivity) a further 848,000 more people would escape poverty whilst also creating 671,000 new jobs. Additional economic growth and job creation would also be generated as farmers increase their incomes and spending. Lower food prices would also boost consumption spending by poorer consumers who otherwise spend a large proportion of their income on food.

As well as fostering poverty reduction and inclusive growth, investments and policies designed to support agricultural productivity are critical to facilitating structural transformation of the Ghanaian economy and to managing the ongoing process of urbanisation.[7] The sector is essential to generate more resilient incomes and rural jobs for the seven million Ghanaians still living below the poverty line.

The agri-food system, covering agribusiness, transport of agricultural goods, agro-processing, and the catering, restaurant and hotel industries, generated 38.2 per cent of GDP and 54.8 per cent of employment in 2017. During 2013-2017, the agri-food system GDP grew annually at 2.6 per cent and employment in the agri-food system grew annually at 1.7 per cent, reaching $20.8 billion and 6.1 million workers in 2017.[8] Yet, smallholder production dominates in northern Ghana. About 80 per cent of agriculture in Ghana is produced by smallholder farmers growing food for consumption and cash crops on an average of 1.2 hectares. Infrastructure, processing, storage, and marketing facilities are rudimentary. Drought, the erosion of arable land and floods have contributed to low agricultural productivity and weak market access.

Ghana's market systems have weak regulations and standards, inadequate coordination among market actors; inadequate private sector engagement in input

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3 Christiaensen, L. and J. Kaminski (2015) Structural change, economic growth and poverty reduction; micro evidence from Uganda', in Christiaensen, L. et al. (2013) *Africa's Growth, Poverty and Inequality Nexus: Fostering Shared Prosperity*, Washington, DC, World Bank.

4 World Bank (2018) *World Development Report 2018*, World Bank and IFPRI "Agriculture, structural transformation and poverty reduction: Eight new insights Special Issue" in October

5 World Bank (2018) *Third Ghana Economic Update: agriculture as an engine of growth and jobs creation (English)*. Washington, D.C., World Bank Group.

6 Dorosh, P. A., and J. Thurlow (2018) 'Beyond agriculture versus non-agriculture: Decomposing sectoral growth–poverty linkages in five African countries' *World Development* 109 (September 2018): 440-451. Special Section: Agricultural Growth and Poverty Reduction.

7 World Bank (2017) *Ghana - Agriculture sector policy note: transforming agriculture for economic growth, job creation, and food security (English)*. Washington, D.C., World Bank Group.

8 Thurlow, J. (2019) *Measuring changes in Ghana's agri-food system*, report to USAID/BFS.

distribution networks; a lack of product diversity; insufficient market size; and limited financial services for micro, small, and medium enterprises. Ghana's market size, especially in the Ghana Zone of Influence, is insufficient to attract large investments that benefit from economies of scale, except for export-oriented products. While the growing urban middle class increasingly demands high-quality processed foods, consumption among the urban poor is shifting to cheap convenience foods. Dietary shifts among consumers present an opportunity to expand and modernise Ghanaian food industries. Yet, food needs are met increasingly through imports.[9] Food imports in Ghana tripled from 2009 to 2013 and in 2017 comprised between eight and 14 per cent of primary agricultural products and 47 per cent of processed food products.[10] Ghana cannot meet local demand and compete in global markets unless it improves agricultural market systems.

Key agriculture policies and programmes

The government's medium-term plan for the agriculture sector has been articulated in two successive Medium-Term Agriculture Investment Plans (I and II) under the pan-African Comprehensive Africa Agriculture Development Programme framework: *Investing for Food and Jobs: An Agenda for Transforming Ghana's Agriculture (2018–2021).*

The government's agriculture modernisation programme is aimed at improving production efficiency, achieving food security and profitability for farmers, and significantly increasing agricultural productivity as the basis for industrialisation, job creation and export. Successive governments have introduced policies and programmes to improve farmer access to production inputs, including planting materials and access to extension services, with varying degrees of success.

The Planting for Food and Jobs (PFJ)initiative started in 2017. It seeks to increase food productivity, ensure food security and reduce food import bills, while modernising agriculture and making it a source of employment for the youth. The main pillars are:

- Supply of improved seeds and fertiliser to farmers at subsidised prices;
- Free extension services;
- Marketing opportunities for produce after harvest, (arrangements have been made to offer ready markets for participating farmers); and
- E-Agriculture (a technology platform to monitor and track activities and progress of farmers).

This ambitious, supply-oriented programme seeks to supply organic and inorganic fertilisers and improved seeds to about 1.2 million farmers. The seed and fertiliser interventions are expected to increase the production of maize, rice, soya, sorghum, cowpea, groundnut, cassava, sweet potato and assorted vegetables. Surveillance has been stepped up to keep pests under control to ensure food security. Over 2,700 extension officers have been enrolled and enhanced extension services are being provided to farmers to improve adoption of new technologies and increase on-farm productivity. The government has procured tractors and equipment for sale to farmers at subsidised rates to enhance access to mechanised services.

PFJ began mid-way through MADE's implementation. While its purpose was similar to MADE and other donor programmes, it took a very different approach. PFJ sought to improve access to both input and output markets and directly focused on

9 See Rakotoarisoa, M.A., M. Iafrate and M. Paschali (2011) *Why has Africa become a net food importer? Explaining Africa agricultural and food trade deficits*.

10 See Arndt, F. and C. Hartley (2017) *Identifying priority value chains in Ghana*, IFPRI.

motivating farmers to increase their crop yields and indirectly on generating employment opportunities along agricultural value chains. PFJ claimed to be 'governed by demand and market-driven approaches that would lead to increases in the adoption of quality seeds of improved varieties, fertilisers and good agronomic practices, and marketing of farm outputs while building a critical knowledge base and strengthening systems that will further catalyse private sector participation and full engagement in the agriculture sector'. The PFJ implementation plan identified areas where private sector participation would be key for success, and areas where government would provide services directly.

Given its market development approach, the PFJ offered MADE the opportunity to work with government to enhance the role of the private sector in agriculture. PFJ sought to work with private companies engaged in seed production and distribution, fertiliser blending and production, importation and distribution, input dealers, processors, traders, financial institutions, nucleus farmers and farmer-based organisations, in ensuring smallholders' effective access to inputs, services, technical know-how, finance, and markets.

Many of MADE's partner firms were potential partners of PFJ. Hence, it was important for approaches to be complementary. There were also areas of complementarity with research and development, where the PFJ's objectives were to 'diversify the varietal choices available to farmers and promote adoption of varieties that are high yielding, are climate resilient and resistant to the prevalent biotic and abiotic stresses'. Government's Infrastructure for Poverty Eradication Programme also focused on areas of importance to MADE, including improving irrigation and warehousing.

In areas of divergence in approaches, there was opportunity for MADE to demonstrate better ways of engaging. For example, MADE demonstrated some good alternatives to the public provision of services, including the PFJ's free extension services, with the promotion of private extension services. On input subsidies, the PFJ sought to implement an improved farm input subsidy model for providing fertilisers and seeds to its targeted beneficiaries. The issue of subsidising farming inputs is a challenge to market systems work. While subsidised inputs may be welcomed by farmers, they can also undermine markets and lead to inefficient and ineffective use of inputs. Small market systems programmes, such as MADE, may not be able to influence wider subsidy programmes, but they can help to re-orient distorted markets as they strengthen the market systems within which subsidies are provided.

The government approved a Climate Change Policy in 2013. Strategic focus areas place emphasis on developing climate-resilient agriculture and food systems. Climate related hazards affecting the agriculture sector include water stress for crops with increasing dry spells; degradation and erosion of arable land (with compound effects across wider landscapes); and intermittent floods and the resulting damage to critical infrastructure. To mitigate the effects of climate change, the government is increasing the availability and efficient use of water in smallholder crop and livestock systems; and promoting on commercial basis proven technologies such as conservation agriculture, irrigation and integrated soil fertility management.

The Gender and Agricultural Development Strategy empowers the Ministry to be gender-responsive in programme planning and implementation, and to ensure inclusive development. In its efforts to increase the demand for agricultural products, the government is supporting improvements to quantity, quality and timely delivery of produce. Key measures include setting grades, standards and regulations to guide the conduct of actors. The government is facilitating capacity building in negotiations and skills development in contracting for actors along the value chain. The government is supporting selected products beyond the farm gate in post-harvest

activities, including storage, transportation, processing, packaging and distribution, and providing incentives for the private sector and other stakeholders to invest in post-harvest activities. It is also ensuring continuous expansion and upgrading of road infrastructure, connecting farms to market centres. Government policy is also to strengthen essential services to support proper functioning of the sector: to address the limited insurance for farming activities; inadequate start-up capital; lack of credit for agriculture; and absence of risk mitigation measures and innovative financing mechanism for agricultural lending.

Government support to agricultural development includes the promotion of agro-industrial enterprises under the One District, One Factory initiative. The government is providing support for sustained raw material supply to small and medium-scale agro-processing enterprises, through the initiative. The government's ambition is to use private sector-led industrialisation to add value to local products, generate more jobs and bring more Ghanaian products to the global markets. Furthermore, under the One Village, One Dam initiative, community-owned, and managed small-scale irrigation schemes are being facilitated, with priority given to Northern Ghana.

The government's infrastructure programme is prioritising strategically important agriculture roads to open up food producing areas to facilitate the marketing of agricultural produce. The Infrastructure for Poverty Eradication Programme aims to expand and improve on existing capital structures at the local level, with a focus on rural and deprived communities.

Finally, the Ghana Commodities Exchange became operational in November 2018. It is a state-of-the-art trading system linked to warehouses located in rural communities.

3. Towards agricultural transformation in Ghana

The forthcoming FCDO-funded ATG programme aims to support a transformational shift for a more productive and resilient agricultural economy. It will build and develop markets for agriculture and trade, to create rural jobs, increase incomes and improve resilience to climate change.

The programme has been designed to address the key barriers to private sector development and promote inclusive and resilient growth. It will work directly with agri-businesses that produce, source and trade in Ghana to become more productive, competitive and attractive for investment. It will provide opportunities to link these businesses to domestic, regional and international buyers, investors and expertise, including from the UK. In addition, the programme will support an improved enabling environment for commercial agriculture to succeed.

This programme builds on a decade's worth of experience and learning on market development and agricultural investment in Ghana. FCDO's MADE and AgDevCo programmes have helped enterprises expand their operations, creating jobs, and improving their revenue and profitability through the provision of more inputs and services to a larger number of smallholder farmers.[11] By improving access to and use of these products and services, farmers have increased their productivity, sales, resilience, and incomes. This experience, along with securing $10 million of equity investments, have demonstrated that commercial agriculture is a viable opportunity for inclusive growth.

11 The UK has committed over £150 million of funding to AgDevCo, which provides loan and equity financing to agribusinesses in eight African countries.

ATG will operate alongside the FCDO-supported Jobs and Economic Transformation programme, which aims to stimulate investment into five targeted manufacturing sub-sectors to drive jobs and industrial transformation at scale. It does this by: stimulating investment from anchor firms into priority sub-sectors; helping Ghana implement industrial and trade policies; building the capabilities of domestic firms to increase local content, and addressing the gaps in the enabling environment through support to industrial parks, special economic zones, etc.[12]

The ATG Business Case identifies several factors that constrain productivity growth: insufficient surplus due to low productivity from poor and inadequate inputs (i.e., seeds, fertilisers, also labour); lack of infrastructure, including storage and transport links to markets; climate change; weak land rights and unstable regulatory environment; lack of market information (i.e., prices, volumes, and products); inability to meet required standards, and; monopoly power of local traders, input dealers and lenders.

These factors prevent the vast majority of smallholder farmers engaging with commercial markets and accessing rural value chains. As a result, low levels of resilience and low incomes impair rural livelihoods and stimulate urbanisation while jeopardising food security. Insufficient domestic downstream processing has led to a focus on the trade and export of raw commodities, particularly in the crop sector. Ghana's large scale agro-processing capacity is located near the ports of Accra or Tema, making it easy for firms to rely on imported raw materials rather than those produced by small-scale farmers up-country.

It is anticipated that ATG will comprise three components.

Component 1 – Catalytic Fund: Designed to deepen the impact of existing agribusiness investments, ATG will provide grants and technical assistance to agribusinesses. It will support agribusinesses to integrate smallholder farmers more efficiently into their supply chains and overcome coordination failures, while using finance to accelerate commitments from investors into agribusinesses with strong development returns.

Component 2 – Market Development in Ghana: Designed to help improve access to functioning markets that benefit the poor and increase climate resilience, ATG will focus on addressing the underlying systemic constraints within selected agricultural markets in a sustainable and catalytic way by providing support as a 'market facilitator'. It will work with key players in the market system to catalyse the adoption and delivery of a range of innovative business models, services and offers to farmers and will include adapting and scaling some of the successful approaches and models piloted under the MADE programme.

Component 3 – Policy Fund: Designed to support an improved business and policy environment through market analysis and policy reforms. ATG will help foster a productive dialogue between the government, private sector and influential organisations such as Ghana's Commodity Exchange. The policy fund will support market and political economy analysis and policy influencing. The fund will include a dedicated business intelligence function, sourcing, appraising, packaging, and

12 Several opportunities have been identified for synergies between JET and ATG, such as through JET's support to develop and build new markets on light manufacturing, such as sustainable packaging. This can complement ATG's support to agricultural markets by addressing non-agricultural input supplies which are predominantly imported. JET's support to industrial and trade policy can open-up opportunities for agribusinesses supported by ATG to provide inputs and export to regional and international markets. Finally, JET support to Ghana on unlocking investment and doing business policy constraints, particularly to increase certainty for investors in Ghana, will also benefit investors looking to invest in agribusinesses with smallholder supply chains.

disseminating useful local, business, market and context intelligence for the programme and, where appropriate, other stakeholders.

4. Market Development in Northern Ghana (MADE)

MADE sought to achieve a positive change in annual real incomes for over 75,000 farmers and small-scale entrepreneurs and increase agricultural yields by facilitating the development and deployment of new business models, technology and agronomic practices. A total of £6.4m was allocated to funding interventions designed to deliver these innovations and, through them, improve the functioning of the market systems.

MADE was not the only programme operating in northern agricultural markets. Others included the United States Agency for International Development (USAID)-funded Feed the Future Agricultural Development and Value Chain Enhancement (ADVANCE) project (see Box 1) and the German-funded Market-Oriented Agriculture Programme (MOAP, see Box 2). The US will fund a new programme following the closure of the ADVANCE project, the Market Systems and Resilience Activity (also Box 1). The Alliance for a Green Revolution in Africa is also working in these markets (see Box 3), as is the Canadian funded Modernising Agriculture in Ghana, which focused on markets, but worked directly with the government (see Box 4).

All these programmes exhibit a clear private sector development and market systems approach to supporting development in the agriculture sector. While programmes such as MADE, ADVANCE and MOAP have a strong focus on the northern region, others are working across the country. All programmes support better access to growing markets for producers and agribusinesses.

AGRA and the Modernising Agriculture in Ghana work closely with government, while the others are more directly aligned with private market actors. MADE possibly stands out as being the closest to private businesses and the least directly engaged with government authorities.

All programmes contain elements of support for business environment reform (i.e., policy, legal and regulatory reform) as well a number are focused on quality infrastructure issues such as certification (e.g., MOAP and AGRA).

Box 1: USAID ADVANCE and forthcoming Market Systems and Resilience Activity

The USAID Feed the Future Agricultural Development and Value Chain Enhancement (USAID ADVANCE) project is a five-year project implemented by a consortium led by ACDI/VOCA. The project's main goal is to increase the competitiveness of the maize, rice and soy value chains in Ghana. USAID ADVANCE achieves this goal through boosting the agricultural productivity of the three commodities, improving the value chain actors' access to finance and markets, and strengthening local capacity. The project developed an out-grower business model that aims to reach 113,000 smallholder farmers, while ensuring mainstreaming gender and youth empowerment.

USAID ADVANCE adopts a value chain approach where smallholder farmers are linked to information sources, inputs, equipment, finance, and markets through a nucleus of commercial farmers and traders (i.e., aggregators) who have the capacity to invest in these value chains. The project builds the capacity of farmers and farmer-based organisations to increase the scale and efficiency of their farm businesses, through improved production and post-harvest handling practices.

Phase 1 (ADVANCE I): 2009 – 2014 (Target 34,000 achieved 37,022 smallholders)

Phase 2 (ADVANCE II): 2014 – 2018 (Target 127,000, Achieved 131,493)

Phase 2.5 (ADVANCE 2.5 – COVID-19 extension): May 2019-April 2021 (Target 24,000 (17 districts with Maize and Soy value chains. No rice.)

Market Development in Northern Ghana (MADE) programme

A new USAID programme, known as the Market Systems and Resilience Activity will commence in 2021. This five-year programme will endeavour to increase inclusive agriculture-led economic growth in northern Ghana through competitive, stronger, and more resilient markets. The programme has four objectives:

1. Increase commercialisation and profitability of agriculture markets
2. Increase institutional capacity of market actors
3. Improve market access and quality of business services
4. Improve the enabling environment for local market actors

SOURCE: USAID ADVANCE

MADE commenced on 1 September 2013, with an Inception Phase that ran to 31 March 2014. Phase 1 of programme implementation began on 1 April 2014. Originally planned to run four years, a two-year no-cost extension was granted in December 2017. Phase 1 continued to 28 February 2018 (i.e., almost four years). Phase 2 commenced on 1 March 2018 and ran to 28 February 2020 (i.e., two years). However, in October 2019, an additional no-cost extension was granted, allowing a third and final phase to run from 1 March 2020 to 30 November 2020 (i.e., nine months). Thus, from initial inception to the end of Phase 3, MADE ran for a period of seven years and three months.

While Phase 3 was intended to be a no-cost extension, the first impacts of the coronavirus (COVID-19) were experienced as this phase commenced. This led to an immediate reconfiguration of the programme's work plan, in consultation with the FCDO Ghana Office. As a result, FCDO approved £685,787 of additional funds for Phase 3 for MADE to respond to COVID-19 and safeguard the achievements of the programme to date.

Box 2: Market-Oriented Agriculture Programme

Market-Oriented Agriculture Programme (MOAP) is financed by the German Government (Southern Ghana), co-financed by the EU (Northern Ghana) and implemented by the Ministry of Food and Agriculture, supported by the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ).

MOAP aims to promote sustainable and inclusive agriculture to improve livelihoods and food security. The programme works in 14 districts in Upper West and Northern Region and seeks to create jobs, increase productivity, enhance product quality, and preserve the environment. It provides policy advice to decision-makers and trains agricultural advisors to improve the competitiveness of the value chains for groundnuts, soybeans, mango, pineapple, citrus fruits, cashew, vegetables, rice and sorghum.

MOAP supports good agricultural practice, such as orchard management, integrated plant protection and measures to preserve soil fertility. In addition, it facilitates the certification of farms in accordance with standards such as Global GAP which plays a vital role for the access to international markets. The programme pursues a multi- stakeholder approach by working with farmers and private enterprises, their associations, input providers and local government. It aims to create an enabling environment for sustainable investment and agricultural infrastructure such as irrigation schemes, warehouses and transportation by empowering local communities through capacity building and a close cooperation with the private sector.

The programme began in April 2017 and is due to complete on 31 December 2023.

SOURCE: E-agriculture: Market-Oriented Agriculture Programme

The transitions between programme phases marked significant shifts in the programme strategy, based upon a series of annual reviews, reflections by MADE programme management and dialogue between MADE and FCDO. In each of these transitions, relatively changes were made to the programme logframe.

Phase 1 largely followed the design concept outlined in the Business Case and Inception Report. The programme focused on ways to make rural markets work more effectively (i.e., by addressing core functions), supporting market growth and development (i.e., intervening in support functions), and influencing non-government organisations and development partners to change their approach to market development (i.e., 'rule of the game'). This involved market diagnostic surveys and consultations with key input suppliers and produce aggregators across a variety of value chains. Twenty-two potential markets were reviewed, resulting in the shortlisting of six for deeper analysis and subsequently the selection of four (i.e., rice, groundnuts, onions, and other vegetables).

By the end of Phase 1, MADE had begun to promote to partners a more comprehensive and systemic approach to the smallholder out-grower models, built around the supply of affordable bundled inputs and services. This model, known as the Advanced Business Model, was based on rigorous annual business planning and the engagement of farm enterprise advisors (FEAs). Eventually, over 500 advisers worked as outreach agents during the course of the programme. These people worked with enterprises to ensure inputs and services were applied, produce was properly aggregated, and business investment was fully recovered.

However, it also became apparent that the programme was focusing on a narrow range of commodities, which did not represent the bulk of out-grower partner sales. Limited access to working capital and markets reduced the ability of partner firms to grow and diversify. Weaknesses in the team structure also became apparent, with only limited progress made in the diffusion of programme results to government and development partners. There was also a lack of coherence in monitoring, learning and dissemination. The programme was also criticised for its limited engagement with the public sector, which reduced its potential to create changes in the formal rules of the market. An underspend toward the end of this phase, led to the first no-cost extension and a shift in the programme's strategy.

With Phase 2, the programme moved away from a broad value chain approach and towards a stronger focus on enterprises in the market system. The Advanced Business Model became the core of the programme, which focused on a core group of the high-performing partner firms that would be able to crowd-in other market players through commercial partnerships. Contracts with partners were extended for the full two years, and the selection criteria tightened to bring in not just the larger firms but those that were willing to share risk and achieve extended outreach by buying into the Advanced Business Model.

Box 3: Alliance for a Green Revolution in Africa

The Alliance for a Green Revolution in Africa (AGRA) aims to leverage resources of partners to catalyse and sustain an inclusive agricultural transformation in Africa and increase capacity of smallholder farming households and agricultural systems to better prepare for and adapt to shocks and stresses.

AGRA seeks to help catalyse and sustain an inclusive agricultural transformation by contributing to the Government of Ghana's strengthened coordination and implementation capabilities. AGRA works with the Government of Ghana and various strategic partners to increase incentives for private sector participation and investment in the agricultural sector while enhancing access to finance and markets; the adoption of climate smart technologies and use of inputs (i.e., seeds and fertiliser). In the first decade, AGRA built an asset base in technologies, partnerships and models which can be scaled for a significant impact on the status of inclusive agriculture in Ghana. The strategy and support for Ghana from 2017 to 2021 seeks to bring these elements together and contribute to the national strategy, improving the incomes and food security for at least 1.2 million smallholder households through an investment of US$26 million in state capability support and policy engagement,

as well as support to value chain development for maize, rice, soy and cassava, and market systems development.
SOURCE: AGRA in Ghana; AGRA Ghana Operational Plan, revised, June 2019

While Phase 3 was intended to be a no-cost extension, the first impacts of the coronavirus (COVID-19) were experienced in March 2020 as this phase commenced. This led to an immediate reconfiguration of the programme's work plan, in consultation with the FCDO Ghana Office. FCDO approved £685,787 of funds for Phase 3 for MADE to respond to COVID-19 and safeguard the achievements of the programme to date.

Initially conceived as a final opportunity to embed MADE's cumulative impact and ensure that any outstanding capacity, market and technology gaps were filled, Phase 3 drew on a slimmed-down team of local business development providers to take partner firms through the capacity-building and road map exercises. Rather than contributing to the programme's log-frame outcomes, Phase 3 was designed to consolidate and improve sustainability. With support from FCDO Ghana, the MADE team quickly moved its operations online in response to COVID-19. This included providing support to partners to conduct their annual business planning and crop forecasting remotely. An internship programme was also launched in which 30 young agricultural graduates were selected, 14 of whom were young women. These were placed in 30 partner firms covering 41 of the 78 districts that make up the Northern Savannah Ecological Zone to help with their COVID-19 response. The intern programme, which originated from recommendations contained in the programme's 2019 gender analysis, were able to pass on vital heath and good agronomic practice messaging to over 19,500 rural farming families over a four-week period. Interns supervised distribution of 27,000 items of personal protective equipment at an estimated cost of £23,000 to partners, either directly through the input dealerships or during visits to farming communities. This turned out to be a very successful pilot scheme that generated strong interest and support.

Box 4: Modernising Agriculture in Ghana

The Canadian supported project, Modernising Agriculture in Ghana, takes a different approach to agricultural market development and transformation by providing direct funding to the Ghana Ministry of Food and Agriculture to improve food security and make the agriculture sector more modern, equitable and sustainable.

The project seeks to implement a comprehensive market-oriented approach to farming and to strengthen and modernise agricultural extension services. The project covers the entire country at the national, regional and district levels and is expected to benefit 2.8 million farm households, including many female farmers. Project activities include:

- Delivering agricultural extension services and market-oriented training to farm households, with a particular focus on providing information linked to improved cultural practices and the appropriate use of fertilizers, pesticides, tools and machinery;
- Equipping District Agricultural Departments and Regional Agricultural Departments with extension materials, equipment and logistical support;
- Supporting innovative, demand-driven and market-oriented research to address current challenges being faced by smallholder farmers;
- Updating and reorienting a standardized curriculum for agricultural colleges and farm institutes to be more market-focused, gender-sensitive and climate-smart; and
- Improving the enabling (i.e., administrative and legal) environment to facilitate access to local and foreign markets for agricultural production.

The project anticipates it will achieve three outcomes. First, increase the adoption of relevant, productivity-enhancing technologies, which would result in yield increases in maize and rice, and a reduction of post-harvest losses.

Second, increase adoption of market-oriented approaches to farm management, which would result in increased volume of produce marketed and agribusiness agreements signed. Third, increase private sector investments in sustainable agricultural input supply, production, marketing and processing, which would result in increased number of farmers accessing input suppliers, loans, and equity investment to grow their businesses.
SOURCE: Government of Canada website: Project profile — Modernizing Agriculture in Ghana

Also in Phase 3, MADE completed a groundnut branding and traceability assessment. This was the last in a series of five assessments covering key Advanced Business Model components. Undertaken by Fairtrade, the study showed that only a small segment of the market, mostly larger retail outlets and supermarkets, were aware of the risks of aflatoxin and demand a level of supply chain traceability and testing from institutional buyers. The report concluded that sector transformation towards increasing demand for aflatoxin-free and traceable groundnuts should be driven by greater state-led regulatory and public health requirements. It also recommended focusing on the small but growing demand from supermarkets and processors for high quality local produce to substitute imports from the USA and Bukina Faso.

Finally, Phase 3 saw the production of 'roadmaps' for ten MADE partner firms. These showed the extent to which agribusinesses in Northern Ghana had progressed since the period of inception in 2014 and highlighted the impact COVID-19 was having on the industry. The roadmaps plotted the path to diversification, away from monoculture cultivation and the reliance on single buyers and toward further processing, improved storage and transport, improved inventory and warehouse management and the development of a branding strategy.

Over its three programme phases, MADE performed very well. In each of the first two phases, the programme exceeded its targets, and while Phase 3 cannot be measured against agreed targets (because they were not formulated), it also appears to have performed well.

The MADE Business Case indicated that the programme's outcome would be to improve the incomes and resilience of poor farmers and small-scale rural entrepreneurs in northern Ghana. It was anticipated that by 2017, 77,600 poor producers would have recorded a positive change in annual real incomes as a result of the programme, which would help them increase their resilience to climate change. In fact, by the end of Phase 1 (Year 4), the programme had only led to 48,200 smallholder farmers experiencing positive income change, 44 per cent of whom were women. However, as a result of the programme shifting its focus and refining its strategy in Phase 2, some 94,993 were found to experience this income change, 45 per cent being women.

The Business Case went on to indicate that agricultural yields in the chosen sectors would increase by six per cent year-on-year, with the average annual real income for beneficiaries increasing by £80 by 2017. At the conclusion of Phase 1, the average income-increase per smallholder farmer experiencing positive income change was £434 and, by the end of the programme, MADE had generated approximately £62.5 million additional net income for 94,993 smallholder farmers, representing an average increase in income of £658 per smallholder farmer. By the end of Phase 2, MADE's partner firms had invested more than £54 million to procure and deliver new and improved inputs and services to over 136,000 smallholder farmers across the seven regions of the Northern Savanna Ecological Zone.

While the Business Case estimated that 15 per cent of the programme's beneficiaries would be women, this figure was far exceeded, with some 45 per cent of smallholder farmers and small-scale enterprises experiencing positive income change being

women and 42 per cent smallholder farmers experiencing income increases of over £80 being women. This is a noteworthy achievement, especially given that the Business Case considered its 15 per cent target 'ambitious' in the context of northern Ghana where similar types of interventions in northern Ghana (e.g., Northern Masara Maize Partnership Project) and northern Nigeria (e.g., Procom) have reached only 7-10 per cent.

Emphasising sustainability and systemic change in markets, MADE sought to focus on causes rather than symptoms, addressing market constraints rather than delivering specific services. Programme interventions focused on market facilitation, where key players in market systems were encouraged to work more effectively. MADE's focus on connecting small-scale farmers to markets by working with intermediary agribusiness was largely successful. By improving the ability of these firms to plan and negotiate contracts, MADE was able to scale-up the number of producer beneficiaries, while improving the competitiveness and sustainability of agribusinesses. MADE reached a point where the agribusinesses that applied its Advanced Business Model were able to plan better and sustain the delivery of their farm advisory services to smallholder farmers. Agribusinesses estimated that between 25 and 75 per cent of their growth since joining the programme has been derived from the farm advisory model.

MADE was also successful in reaching a significant majority of its programme log-frame targets. However, it is unclear—and perhaps too early to tell—the extent to which the programme actually addressed underlying market constraints or systemic barriers. For example, barriers facing women farmers and enterprises, and whether the changes it facilitated in the core markets were transformative for the partner firms and beneficiaries.

Attribution of results to the MADE programme are also unclear, as MADE worked in a context where there were numerous government, donor, non-governmental, and private sector interventions providing similar products and services to many of the same actors. While MADE's market development approach aimed to facilitate market delivery rather than deliver direct services, there were many smallholder farmers and agribusiness that benefited from government subsidised support. For example, government's PFJ programme provided improved seeds and fertiliser to farmers at subsidised prices, along with free extension services and access to ready markets for participating farmers. Thus, MADE's short-term impact on smallholder farmers and agribusinesses may have been influenced by these government subsidised inputs. However, in the medium to long-term, it is anticipated that the real benefits of the programme's market systems interventions will become more apparent as partners maintain improved business practices and continue to record improved performance. For example, MADE partners will also continue to benefit from the support provided by their FEAs while non-MADE farmers are unlikely to continue to benefit from PFJ's free extension service.

While the sustainability of the programme's interventions is apparent at the enterprise level (e.g., leveraged investment, expanding sales and competitively bundled services), the broader impact of this on the whole northern agricultural market system is unclear. As important as these programme achievements are, the challenges to agricultural transformation remain. This is especially the case when considering the range of external supporting functions affecting market systems and government policy, legal and regulatory regime and its distortionary effects on market systems.

5. Using market systems to achieve economic transformation

Attention is now turned toward the role of donor and development agency programmes using MSD and related approaches to support economic transformation. While the lessons learned from the three phases of the MADE programme are an important contribution to this discussion (see 5.3, below), so too are the lessons from other agricultural MSD programmes operating in Africa (see 5.4, below) along with a broader body of research and experience in delivering market-oriented outcomes to achieve economic transformation.

5.1. Defining economic transformation in agriculture

Economic transformation may be defined as the process of moving factors of production from low to high productivity activities. It includes both the structural reallocation of resources towards higher-productivity sectors to raise aggregate productivity in the economy, drive intra-sectoral shifts within sectors towards higher-productivity activities, within and between firms.[13]

Within this definition, the transformation of production structures is central. Transformation is usually considered to consist of sectoral changes in employment and output. However, it can also be considered as productivity increases within sectors, value chains or firms. Thus, transformation is a process involving 'doing things differently, doing them in more productive ways, and about diversification away from traditional structures, at macro and micro levels.' This includes an emphasis on creating jobs in activities that are more productive than were previously the case.[14]

In terms of many developing economies, including Ghana, McMillan, et al. (2017, p. 3) suggest that the 'process of moving labour out of low-productivity agriculture and into high-productivity manufacturing or structural change is crucial for structural change'. Thus, 'economic transformation policies in poor economies should support the growth of agricultural productivity as labour productivity is far lower in agriculture than in non-agriculture' (p. 33). This is supported by evidence that suggests that, even within less productive sectors, such as agriculture, the promotion of more productive firms and activities can raise average productivity in the sector and nationally.[15]

5.2. MSD and agricultural transformation

While agricultural transformation is an explicit goal for FCDO through its support of the forthcoming ATG programme and, indeed, other supported programmes, it is clear that there can be limitations to the use of an MSD approach. There may also be ways to ensure MSD programmes are designed, managed and monitored in ways that enhance their contribution to transformation, regardless of the implicit limitations.

A research synthesis on the evidence for promoting economic transformation through MSD highlights that MSD 'is an explicitly pro-poor approach, concerned with improving the performance and position of disadvantaged groups within market systems'. Thus, its focus is not always on transformation, per se, but on 'inclusive

13 McMillan, M., J. Page, D. Booth and D.W. te Velde (2017) 'Supporting economic transformation: an approach paper'. London: ODI, SET

14 ODI (2019) *Promoting Economic Transformation through Business Environment Reform*, Study Report, Donor Committee for Enterprise Development, Cambridge, UK

15 Dercon, S. and D. Gollin (2014) 'Agriculture in African development: a review of theories and strategies', *Working Paper* WPS/ 2014-22. Oxford: CSAE

economic transformation; paying attention to how productivity gains are shared and distributed throughout the economy.'[16]

In general, MSD has been found to play three important roles in supporting transformation.[17] First, MSD supports the seeding of innovation in new and emerging sectors or addressing 'rules of the game' constraints to allow these innovations to prosper.

Second, MSD supports the scaling-up of modern sectors that are already showing promise for economic transformation and helping to ensure opportunities are equitably distributed and can translate into lasting pro-poor impact.

Third, MSD supports the development of economic livelihoods in sectors where people in poverty are currently engaged, including through raising on-farm productivity, while diversifying rural employment opportunities in complementary sectors, such as tourism.

Research in Africa and Asia by Gatsby Africa and ODI shows that 'interventions at sector level, coordinated around a targeted set of activities, in a politically smart way, and set in a competitive framework, can be an important driver of economic transformation'. Indeed, it is possible to develop dynamic, competitive sectors even when broader conditions in the economy are unfavourable.[18]

5.3. Lessons from the MADE programme

This section identifies a range of lessons the MADE programme has learnt across its three phases. These lessons are presented as a contribution to improving the design and management of the ATG programme.

In its End of Programme Report (2020, p. 44), MADE suggests that its 'fundamental lesson' is: 'With the right level of targeted support to showcase the commercial case for the adoption of new business models, built around a strongly performing smallholder farming sector, the private sector is capable of playing a leading role in the modernisation of agriculture in northern Ghana.' As a PSD programme, MADE has highlighted the ways private investment can drive growth and the ways private firms can connect producers to markets.

Carefully assess programme assumptions. MADE was an ambitious programme in its application of an MSD approach to northern agriculture markets. As Phase 1 commenced, the extent of this ambition and the challenges of working in an economic depressed region with many poor smallholder farmers, under-developed agribusinesses and high levels of informality quickly became apparent. While the programme undertook assessments in a wide range of value chains and markets, it struggled to apply MSD interventions in the way originally envisaged in the programme design.

The programme's Business Case suggested there was 'huge scope to attract agri-processing to the region', as well as 'tremendous opportunity to increase trade with neighbouring countries' (paras 15 and 16). However, this proved not to be the case. Indeed, the thinness of regional markets and the general level of underdevelopment in the region were major obstacles. Fortunately, the programme and FCDO identified

16 Impact Management (2019) 'Promoting Economic Transformation through Market Systems Development, Study Report, Donor Committee for Enterprise Development, Cambridge, UK, pp. 10-11.

17 Impact Management (2019), Op. Cit., pp i-ii.

18 Neil Balchin, N., D. Booth and D.W. te Velde (2019) *How economic transformation happens at the sector level; Evidence from Africa and Asia*, Gatsby Africa and ODI, p. 9.

these problems prior to the end of Phase 1, when the programme's strategy was revised, and a no-cost extension granted.

Develop a pragmatic, systemic response to working in thin markets. Ghana's north is known as a lagging, disadvantaged region. When consulting with programme designers and those involved in the first phase of the programme, it was interesting to note how a number of practical challenges to applying an MSD approach were experienced. These were largely around the local levels of capacity found among farmers and agribusinesses in the north, as well as with the high levels of informality. Subsequently, MADE has described the challenges of working in 'thin markets'. While agribusinesses, 'should be a driving force for progress', MADE says in its End of Programme Report (2020), these 'were known to face higher costs and thinner markets in the north, with weak linkages between firms and between the private and public sectors.'

There is much discussion in the MSD literature regarding the opportunities for MSD outcomes in thin or 'shallow markets'.[19] The relatively small size and low density of local markets dispersed over a vast area, with only a few poorly coordinated market actors and weak market information, are constraints shared across many markets and value chains in Ghana. This requires a detailed understanding of the nature and dynamics of selected markets and the capacity of market actors. In these situations, the process of MSD often requires more than a single programme intervention. Instead, a range of simultaneous interventions are necessary for market actors to begin to show an interest in 'crowding in' investments in order to transform market systems for more inclusive growth.[20]

MADE has described how the original programme design contained in the Business Case had underestimated the thinness of markets in the north and was overly optimistic about the appetite of firms to engage. It described this as a considerable barrier to progress. Getting new ideas adopted was a slow and protracted process. Only four northern firms were selected for partnership grants in the programme's first year. Moreover, the expected interest from larger firms from the South looking North for opportunities to expand their outreach never materialised.[21] MADE was often faced with trying to balance a pure MSD facilitation only approach, with a more pragmatic direct service delivery and capacity building approach.

Focus on agribusinesses that can link smallholder farmers to markets. MADE's Advance Business Model worked well.[22] At the end of Phase 1, MADE responded to the challenges described above and established a comprehensive and systemic approach to the smallholder out-grower model, built around the supply of affordable bundled inputs and services. Called the Advanced Business Model this approach relied on a network of farm enterprise advisors (FEAs) who worked as outreach agents to ensure inputs and services were properly applied, produce was properly aggregated, and business investment was fully recovered. FEA services are

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19 The term 'shallow markets' is used to describe markets with relatively few market actors and consumers, geographically dispersed with low density of market actors, few types of products available, limited specialisation, weak information flows, limited coordination among market actors, a lack of support functions, a lack of clear regulations and government practices, adverse informal rules and norms, weak or non-existent market institutions (such as associations), limited mechanisms for managing risks, or a lack of connection to economic growth centres (Miehlbradt, et.al., 2018).

20 Miehlbradt, A., B. Warner and D.S. Kelly (2018) *Promoting Systemic Change in Shallow Markets; Lessons from Phase One of the Market Development Facility*, Market Development Facility.

21 MADE 2020 End of Programme Report, p. 9.

22 MADE (no date) *Farm Enterprise Advisory Services Business Case; The case for FEA service delivery to commercialise agriculture in Northern Ghana*, MADE, NATHAN, UK Aid

described as 'the first- and last-mile market link' for smallholder farmers located in areas away from commercial centres. They were 'change agents for agricultural transformation', operating with lead farmers to form a framework within which industry is able to control the quantity and consistency of supply.

There is a clear need for working capital to pay for FEA services. Traditionally, many agribusinesses rely on loans or credit facilities from commercial banks for this purpose. However, interest rates can be high, ranging from ten to 40 per cent. In response, some agribusinesses have secured invoice discounting in order to bridge payment terms from their buyers, while others have gone further and deepened their relationships with buyers by sharing the cost of interest. Warehouse receipt finance opportunities are also expanding in Northern Ghana. It is expected that with the introduction of the GCX, further opportunities will be available in the future.

MADE has reached a point where most agribusinesses using the Advanced Business Model have the ability and capacity to sustain delivery of their farm advisory services to smallholder farmers. Agribusinesses estimated that between 25 and 75 per cent of their growth since joining the programme has been derived from the farm advisory model. The programme also found that this model could be applied to efforts to build resilience and develop coping strategies for farmers and agribusinesses in the face of climate change and market distorting events such as the COVID-19 pandemic.

Diffuse knowledge and build management capacity in communities. MADE was able to extend its outreach to smallholder farmers through the use of community networks and organisations. Indeed, enterprises have shown themselves willing to support the formation of community groups and to train group lead farmers as a means of extending and reinforcing the farm advisory service.

In Year 7, training for cluster group lead farmers showed a ratio of one lead farmer to 50 members, allowing an FEA to work directly with four to eight 'service coordinators', rather than the 200-400 individual farmers under the normal out-grower model. Diffusing knowledge and farm business management capacity at a community level, rather than at a business level, was found to be a significant development in expanding the programme's outreach.

Develop and formalise agribusiness models. MADE supported the development and formalisation of agribusiness models that gave smallholder farmers the opportunity to achieve higher levels of productivity within a market structure that contained a set of rights and obligations. While the programme recognised the commercial limitations based on land availability and plot size, this was not considered an essential barrier to semi-commercial-scale agriculture. Similarly, while the supply of affordable inputs was not considered sufficient in itself to bring about systemic change, the provision of essential services and the introduction of delivery mechanisms that bundled inputs and services into a more cost-efficient package was important.

The establishment of model farms and demonstration plots provided the opportunity for the programme to introduce new ideas and production technologies. This created opportunities to train and service smallholder farmers. While most firms are oversubscribed by farmers wishing to join out-grower schemes and are under-equipped and under-financed to meet the additional demand, MADE found it was possible to align farmer and supplier interests and share risks through commercial partnerships. Smallholder farmers could improve their chances of joining out-grower

schemes and securing better terms by joining farmer associations or belonging to community cluster groups.[23]

Apply adaptive management. The programme adopted adaptive management processes to ensure that changes were based on evidence delivered through knowledge of the programme, and on monitoring data. MADE programme management suggest that a key to success of the programme was its ability to respond effectively and quickly when shifts in interest were manifested and where changes in approach were needed. At the end of Phase 1, MADE shifted away from value chain to enterprise development because of what it observed as the industry's need for support. The programme's management team grew in experience alongside the partner firms with whom they were working.[24] Adaptions were also exhibited in the way the programme identified and worked with partners to bundle agriculture services and products.

The COVID-19 pandemic also created significant challenges to programme strategy and management. However, the programme was successful, with support from FCDO Ghana, in developing a new contingency plan (March 2020). The revised approach established new contracts with partner firms and initiated an internship scheme that placed recent agriculturalist graduates into the marketplace to help businesses in their time of crisis.

Invest in quality partnerships. The MADE Advanced Business Model required a strong relationship to be established between the programme, FEAs and agribusinesses and smallholder farmers. Interviews with these actors show that these partnerships developed trust and confidence. Indeed, the strength of these partnerships was tested by COVID-19. Yet, all actors appeared to perform well in this time.

Improve partner selection to create scale. MADE applied a facilitation role in its work with small-scale rural enterprises. These firms were both beneficiaries and drivers of change. Because of this, MADE relied heavily on developing a partner selection process to identify and attract interested and far-sighted market players. Potential programme partners were required to demonstrate their potential to expand numbers and invest in their targeted outreach programmes. This included the tracking of the number of women farmers registered and the average turnover and level of investment in smallholder farmers. Firms wishing to join the programme had to demonstrate an ambition for change, a desire to grow, a formal management structure to allow effective monitoring, and a proven track record of financial stability and capacity to invest. Shortlisted firms were invited to a series of proposal workshops, where intervention offers were outlined and memoranda of understanding were drawn up describing the obligations of both parties.

Selected partners were taken through a series of two-day business planning sessions as part of the visibility exercise, to highlight the level of investment required and the nature of support that could be provided to achieve key seasonal deliverables of inputs and services to out-grower farmers. These sessions also took businesses through a land mapping exercise that culminated in the release of a series of crop

23 In Year 7 more than half of the smallholder farmers receiving Advanced Business Model inputs from partner firms belonged to such groups and societies.

24 A programme aimed at bringing about behavioural change, particularly one starting from such a flat base, needs time to find purchase and build momentum. In 2014, MADE found itself working in a sector already heavily supported through development partner programmes and initially hesitant to buy into and invest in another agricultural sector initiative. It took several years to demonstrate the value of making bundles of affordable inputs and services available to out-grower farmers; and several more to embed market systems approaches and encourage businesses to grow, diversify and enter into formalised B2F and B2B commercial partnerships.

forecasts for maize, rice, sorghum, soybean, groundnuts, and vegetables which the businesses could then use to attract buyer interest and financial support from value chain operators. Finally, grants were released against a set of milestone deliverables that had to be reported and verified.

Promote labour markets for private agriculturalists. The programme's pilot internship programme ran from June to September 2020 and involved 30 recent graduates from Ghanaian agricultural colleges. These graduates were placed with selected agribusinesses operating in the Northern Savannah Ecological Zone. The graduates worked alongside farm advisory agents employed by the private sector to optimise the application and use of input supplies and services by smallholder farmers. Since the pilot concluded, 12 (including seven women) of the 30 interns have accepted full or part-time employment with host enterprises and a further nine are currently discussing potential engagement later in the year, during the aggregation and recovery stage.

While most agriculturist graduates aspire to government employment as extension officers, this pilot scheme has opened up and demonstrated a new set of labour market opportunities in the private sector.

Pay careful attention to gender and social exclusion in market systems. MADE has sought to challenge stereotypes and empower marginalised groups, especially women and youth. The programme had a positive impact in engaging with female smallholder farmers and it expanded its inclusive approach to better understanding the barriers and opportunities for women and young people in higher-levels of the agricultural sector. A 2019 gender assessment, commissioned by MADE, made a number of valuable recommends to the programme.[25] This included:

- Bringing together agribusinesses interested in targeting women, in order to encourage the sharing of lessons learned, both positive and negative, promote the adoption of already existing best practices, and track any new efforts for further dissemination;
- Tracking the economic benefit of working with women so that partner firms can see the profitability of working with women;
- Providing gender sensitisation by facilitating gender trainings with the government Women in Agricultural Development Directorate for interested agribusinesses, so they can embed messages about equity and equality in their technical assistance;
- Establishing fora for female FEAs to meet and share challenges and successes;
- Addressing female FEA recruitment challenges and being more active in linking partners with female agricultural students;
- Sharing findings with development partners working in the agriculture sector; and
- Adjusting partner selection criteria to allow more women business owners to join programmes, either as lead firms or as support enterprises, to help women-owned businesses develop growth strategies and have access to a wider network of market support.

25 MADE 2020 *Gender Assessment Report*, Nathan Associates London Ltd., June (revised July).

More generally, it has been important for MADE to disaggregate programme performance by gender, both as a management tool and when reporting on programme performance.[26]

It is somewhat of a shame that the gender assessment was only undertaken in mid-2019. Many of its recommendations were extremely relevant, but the programme had limited time to put these all into action. Indeed, there remain some significant concerns regarding the programme's design and implementation with regards to women. SEND Ghana (2014) report that women are the key actors in Ghana's agriculture, constituting over half the agricultural labour force and producing 70 per cent of the country's food stock. Women make up 95 per cent of those involved in agro-processing and 85 per cent of those in food distribution.[27] Thus, it is somewhat surprising that the MADE Business Case presents a target of only 15 per cent for outcomes related to women. This seems to be a considerably low figure and there is no evidence presented on why such a modest target was set. The US-funded ADVANCE programme has 48-50 per cent involvement by women and was specifically designed to deal with women's participation. The assumptions underlying women's participation in northern agriculture markets and the potential of the programme to effectively target these important market actors seems to have been understated and misplaced, both in the programme's design and execution.

Improve enterprise-level monitoring. Over the course of the programme, increasing emphasis was placed on refining and improving business management practices. MADE engaged with partner firms to establish business workplans and strategies, including promoting the use of new tools to improve data collection and analysis. These approaches have evolved over the course of the programme.

One specific development was the use of farmer passbooks. These were introduced in Year 4 to help formalise data collection. Initially paper based, the use of passbooks was limited. Then, following a phase of design, development and pilot testing by an Accra-based software firm, two apps were launched in April 2019 for use among all MADE partner firms for further testing. M-Access was a management information and performance monitoring tool, while TonPos was a transaction and stock control tool. These apps produced data that made it possible to see how firms were doing without the need for calling sales and farm advisory agents to a central location to submit data. This significantly reduced transport costs and improved the amount of time agents were in the field doing their job. It is also sped up the time taken to respond to requests for supplies and services.

However, multiple challenges arose, including the lack of sufficient numbers of smartphones to implement at scale. There were also problems with installing the app on user phones. Additionally, because the launch of the apps was at the very end of the pre-season planning stage many agribusinesses opted to continue with their paper-based systems. Despite these problems, it appears that M-Access and TonPos could be further refined and developed. Indeed, high-quality and easy-use electronic data capture at the enterprise level has proved to be extremely important.

Conduct regular pause and reflect sessions. One effective mechanism in its approach to adaptive management and for ensuring goodwill and trust between the FCDO and programme management was the Quarterly 'pause and reflect' sessions. These sessions became integral to the programme's ability to review the evidence of

26 It is interesting to note that disaggregating performance data has shown that women farmers are generally more willing to adopt new technologies and adhere to good agricultural practices than their male counterparts. This led agribusinesses to favour recruiting female farmers when expanding outreach. Some 54 per cent of the new farmers registered by partner firms in 2020 were women.

27 SEND Ghana (2014) 'Women and smallholder agriculture in Ghana', *Policy Brief* No 4, October

change in programme partnerships, provided by the M&E system, and to reflect on this data, identifying what changes should be made in the quarter to come. These sessions were run over a few days and involved the direct participation of the FCDO SRO.

Identify the opportunities and limitations of market systems approaches to climate and environmental impacts. As efforts to promote smallholder farmer productivity results in more intensive cultivation practices, there is increasing danger that this will lead to the over-extraction of soil nutrients and the deterioration of the resource base of the soil. Thus, it is essential that farmers adopt sustainable agricultural practices. To this end, MADE supported conservation farming practices. This included:

- The establishment of demonstration plots and model farms to promote wider uptake of climate-smart practices. The demonstrations were done in collaboration with 15 agri-businesses, three irrigation equipment suppliers and two mechanisation equipment manufacturers and have shown how the combined use of these technologies and practices led to significant improvement in crop performance.
- The FEAs were training in good agricultural practices (GAP) in order to ensure all advice was oriented towards increasing climate- and market-related resilience.
- The application of improved seed varieties and the use of synthetic fertilisers and crop-residue management was promoted. This was found to have contributed to increasing crop yields and to maintaining soil fertility while enhancing soil organic matter.
- Support for mechanisation training to agribusiness machine operatives at Damongo College, including the use and maintenance of rippers used for minimum tillage.

Agribusinesses involved with MADE described how many climate-smart practices are continuing beyond the life of the programme. For example, the demand for drought-resistant seeds introduced into the market by the programme is continuing to grow.

An assessment of the programme's climate- and environment-related interventions found that considerable achievement had been made, but also indicated that much more needs to be done. While farmer yields have increased under MADE, thanks to more reliable access to improved seed varieties, agrochemicals, fertiliser and mechanised tillage services, and to certain GAP practices, yields could be higher. Moreover, the 2020 *Case for Conservation Farming* notes that while improved market access and service supply linkages can mitigate vulnerability to short-term climate-related shocks, this is not enough to build resilience against longer-term climate change.[28]

Programme partners interviewed for this review highlighted the limitations in achieving desired results, when the problems with irrigation continue. The United Nations Development (2018) says a stronger focus is required on irrigation and integrated water management, coupled with local capacity strengthening to increase the resilience of communities to floods and drought, and facilitate diversification of livelihoods.[29]

Strengthen the integration of policy legal and regulatory reform, including quality infrastructure into market systems programming. Overall, the

28 MADE 2020 *Case for conservation farming*, Nathan Associates London Ltd., January.

29 United Nations Development Programme (2018) Op. Cit.

programme's work on influencing the 'rules of the game' largely focused on supporting the formalisation of agreements between agribusinesses and smallholder farmers (as discussed above). While this provided valuable support for farmers and businesses alike, it does not reflect any substantial work on policy or the rule of the game. This issue will need to be addressed in the forthcoming ATG if it is to have any meaningful impact on agricultural modernisation.

5.4. Lessons from other MSD programmes in Africa

MSD programmes in agriculture in Africa are not new. Indeed, over the last decade there have been a wide range of such programmes that the UK and other bilateral and multilateral donor and development agencies have supported. While in no way an exhaustive review, this section briefly considers four such programmes and other related research to identify lessons that have been learned. In particular, this section is concerned with those lessons that are most likely to offer guidance on how MSD programmes can contribute more effectively to economic transformation in the agriculture sector in Ghana.

The following MSD programmes are considered:

- Market Development in the Niger Delta, in Nigeria (MADE I and II);
- Propcom Mai-karfi in Nigeria;
- Transforming the Economy through Climate Smart Agriculture – Northern Uganda (NUTEC MD); and
- Promoting Inclusive Markets in Somalia.

The text boxes presented below provide a short summary of each of these programmes, while the lessons learned are presented thematically.

Programme design

Use diagnostic studies to inform project design with partners. MADE in Nigeria found it critical to preface interventions with research and analysis when defining the focus of development interventions. Building on the diagnostic studies already conducted in its first phase, the programme saw the need to strengthen this work. This was particularly important for the Edo State Investment Portfolio interventions, which were an additional component in MADE II. This helped to clarify the project's scope of complexity, define its goals and set realistic milestones, while allowing for interventions to be tailored to the appropriate target beneficiaries.

Box 5: Market Development in the Niger Delta (MADE I and II)
Donor: UK Government
Country: Nigeria
Duration: 2013-2020
The Market Development in the Niger Delta (MADE) project worked in all nine Niger Delta states to promote inclusive, pro-poor growth for farmers and entrepreneurs. The low use of quality agricultural inputs in this region, combined with poor supplies and poor knowledge of Good Agricultural Practices was found to reduce yields by about 30 per cent. MADE I facilitated market driven relationships and the use of demand creation activities, such as demonstration plots and field days to stimulate sustainable growth. MADE II was focused on strengthening the downstream support market actors (i.e., agro-retailers and spray service providers) to respond to, and further stimulate, the growing demand. MADE II scaled up successful market interventions from the first phase and established exit plans with local partners. The programme accelerated the outreach and outcomes from MADE I by doubling the results in half the time and half the budget.

MADE worked with companies and professional associations across six target sectors—including ICT, renewable energy, and entertainment—to present value propositions for investing in job creation. It partnered with nongovernmental organisations and education centres to tailor job training to market demands and connect with populations susceptible to trafficking.

MADE Nigeria reached 551,521 smallholder farmers through commercially driven initiatives, with 389,441 farmers showing increased productivity, of whom 307,722 experienced at least 15 percent increase in incomes over their baseline situation, with a net attributable income of £46 million. The programme assisted 36 lead firms across five sectors with changing their approaches to engaging with smallholder farmers, working through 1,982 extension service providers investing in cassava, agricultural inputs, fisheries, poultry and palm oil. It created a market for commercially driven extension provision, with more than 50 private training companies changing their delivery approaches from targeting donors and government to targeting smallholder farmers as prime clients. Service providers are moving into new sectors, applying the same skills to new product markets and selling an ever-widening basket of services to more than 100,000 smallholder farmers. Finally, the programme helped nine lead firms invest £8.5m in aspirational sectors targeting returnees, potential victims of human trafficking and vulnerable households in Edo State, Nigeria, reaching 33,000 target beneficiaries. It also influenced 24 additional investors and 20 development agencies to change their approach of engaging the poor by adopting MSD approaches.

SOURCES: BEAM Exchange: https://beamexchange.org/practice/programme-index/279/

MADE Nigeria (2020) *Lessons learned: Market development in the Niger Delta MADE II (March 2018 to February 2020) Programme Completion Report,* February

MADE Nigeria (2019) 'Use of smart subsidies to stimulate market demand; a case of the technology adoption grant (TAG) funds', *Learning Paper Series*, April

MADE Nigeria (2018) *Experience sharing and learning meeting with service providers and co-facilitators*

MADE in Ghana also invested heavily in diagnostic studies, particularly in Phase 1. However, the transition from Phase 1 to Phase 2 was characterised by a shift away from assessment towards the application of the Advanced Business Model and the strengthening of agribusiness and smallholder farmer commercial contracts.

Work with the private sector and selected market partners. The PIMS programme in Somalia, found that working with the private sector is a foundational component of the MSD approach and was at the core of PIMS implementation strategy. PIMS chose to prioritise partnering with large, established and influential firms while acknowledging the risks of potentially reinforcing existing power dynamics. It is noted that MADE in Ghana also employed this strategy as it moved from Phase 1 to Phase 2.

Create a clear value proposition for partnership. MADE in Nigeria found that smallholder purchasing decisions are strongly influenced by a clear value proposition. This is critical to attracting investments. The programme's experience has shown that smallholder farmers can pay for extension services provided they are cost effective and have a clear value proposition that is responsive to their needs and desire to improve their earnings.

The PIMS programme in Somalia also found that a key to successful partner engagement was the focus on engaging partners on the value proposition of the partnership (e.g., between the programme and the lead firm and the lead firm and the producers). The programme used 'deal notes' that spanned a specified time period and varied according to the seasonality of the sub-sector. The deal note was the primary management tool for the programme and included background information on the lead firm, partnership objectives and proposed activities, responsibilities of the partner and PIMS, expected results and milestones and financial contributions for both the partner and PIMS. Requirements regarding female

and youth participation in partner activities were also outlined in the deal note as a clear business case.

Box 6: Propcom Mai-karfi
Donor: UK Government
Country: Nigeria
Duration: Propcom 1 (2005-2011), Propcom Mai-karfi (2013-2021)
Propcom Mai-karfi applied an MSD approach to agriculture development in Nigeria. Building on the positive experience of its predecessor programme Propcom 1 (2005-2011), Propcom Mai-karfi (2013-2021) sought to stimulate sustainable, pro-poor growth in selected rural markets and improve the position of 650,000 poor men and women within these market systems. Propcom Mai-karfi worked in eight rural markets, both agricultural and non-agricultural, in northern Nigeria. By the end of its initial six-year term 2012–2017, Propcom Mai-karfi had raised the incomes of 665,000 poor rural people across northern Nigeria. This was achieved by engaging with private-sector companies, state and federal governments, community-based organisations and a variety of other motivated partners. Through its partnership approach, the programme has stimulated £27 million in private and public investment in the rural economy. A recent programme extension seeks to increase the incomes of 352,000 and improve the resilience of 444,000 poor men and women in northern Nigeria. Programme objectives are: • Expand the programme into conflict affected states in the north east to work towards sustained stability and economic recovery that improves livelihoods of the rural poor; • Increase resilience of the rural poor to climate change by growing a portfolio of Climate Smart Agriculture; • Continue to facilitate inclusive growth in rural and agricultural markets to address the growing levels of rural poverty and vulnerability.
SOURCE: Propcom Mai-karfi (2017) Lessons Learned, 2012–2017

In Ghana, the MADE programme primarily focused on private sector market actors. The creation of commercial agreements between agribusinesses and smallholder farmers, facilitated by MADE, was based on a clear and quantifiable understanding of the value of these agreements.

Diversify service delivery across sectors. MADE in Nigeria found that diversifying service delivery across sectors increases profitability for support market actors, providing more incentives to deliver services to farmers. Service providers look to increase their income by providing suites of services across sectors and will further embed the sustainability of their businesses, and farmers' access to services.

Use of incentives and subsidies to help supply side actors drive market system changes. The MADE programme in Nigeria found it valuable to design smart subsidies to reinforce the ability of supply side actors to continue to implement initiatives. The use of smart subsidies through MADE Technology Adoption Grants was validated in as the sales of the new technologies expanded, even once the subsidies had come to an end. Thus, supply side actors can drive market system changes with or without the support of the programme.

The Transforming the Economy through Climate Smart Agriculture programme in Uganda also gained traction with the use of programme incentives. After initial success, it was encouraged to develop and execute a clear plan for making programme innovations available to the financial services sector more broadly. This included the use of credit assessment and scoring, agency banking and digitally enabled access.

Build on service models in larger supply chains. Propcom Mai-karfi in Nigeria found that service provision models can meet many needs, if all participants benefit and have steady access to equipment, supplies and information. The programme experimented with service models for everything from land preparation and threshing to application of inputs and livestock vaccine delivery. However, the success of a business also depends on other factors in the wider market environment. For example, even the most entrepreneurial of service providers had limited agency to operate when a thresher broke down or vaccine supplies were unavailable. Embedded as they were within larger supply chains, their effectiveness depended on the smooth operation of the whole market system.

Support business environment reforms. The Propcom Mai-karfi in Nigeria suggests that government policies and interventions cannot be ignored and should be treated as more than just risks. Nigeria's government takes a strong role in development, and its activities and policies partly formed the context in which the programme was designed and managed.

MADE in Ghana paid much less attention to this issue. While the original Business Case included a clear strategy for government reform—and the programme Output on this topic remained—the programme instead focused more on the formalising of commercial contracts between agribusinesses and smallholder farmers. Looking forward to the ATG programme, more attention should be given to this topic.

Take active steps to mainstream gender and empower women. The MADE programme in Nigeria suggests that developing a framework for gender mainstreaming and women's economic empowerment initiatives and integrating this at a very early stage is critical to addressing the specific needs of women and other socially excluded groups. From the outset, programmes should develop an understanding of gender constraints and develop frameworks for how they intend to meet their targets particularly for disadvantaged groups such as women, children, etc.

The Propcom Mai-karfi in Nigeria found that empowering women means identifying sectors in which they are most active and working to improve their ability to compete. Reaching women in northern Nigeria was not straightforward and that a mainstreaming approach alone did not yield results. Achieving sustainable women's economic empowerment outcomes meant intervening in some of the agricultural sectors in which women dominate, and which are important to their livelihoods.

Programme management

Be pragmatic and flexible when working with partners. The MADE programme in Nigeria found that partnership is a dynamic process that requires flexibility and problem solving. Partnership development is largely about building relationships and trust; defining a shared vision of success and mutual accountability, understanding each other's challenges, interests and assets, with shared risks.

The AGRA programme in Ghana describes how partnerships are extremely critical in leveraging public and private resources to drive impact at scale and sustain growth. However, AGRA has found that it is critical to 'manage expectations of the different actors in a balanced manner and ensure that mutual accountability mechanisms are established from the onset'.[30]

Balance facilitation with direct provision. PIMS was able to differentiate itself from other development programmes in the country by engaging private sector actors on the business case and profit potential of more inclusive business models. This did

[30] AGRA 2019 *Ghana Operational Plan*, revised, June.

not stop at just demonstrating the business case but continued considering the low capacity of the private sector, to provided significant direct and in-direct support to the private sector so that they could develop their capacity to effectively and sustainable implement the models.

The Propcom Mai-karfi programme in Nigeria argues that it is important to balance facilitation with direct provision where required. Where value-chain participants have little capacity and face many challenges, as in northern Nigeria, do not be afraid to go beyond strict M4P ideals. While an M4P approach typically focuses on facilitation there is a balance to be found between this and direct provision. Moreover, the programmes claimed that long-term sustainability is built on short term learning by doing. While a 'purist view' of M4P means conducting market studies, pinpointing what leverage point will trigger systemic change and working on that point, in practice in northern Nigeria, all points in agricultural markets are interconnected, and there will always be more to learn about a sector as partnerships and activities develop.

Box 7: Transforming the Economy through Climate Smart Agriculture – Northern Uganda (NUTEC MD)
Donor: UK Government
Country: Uganda
Duration: May 2015 to April 2020
Implementation: Palladium International and Swisscontact
Smallholders and commercial farmers in Northern Uganda face several challenges that limit their yields and lead to low marketable volumes. These include the lack of farmer access to quality agricultural inputs, an undersupply and limited access to affordable commercial on-farm storage technology which contributes to high post-harvest losses, and noticeable information gaps that affect the deployment of services, profitability of actors and discourage investments. The NUTEC MD Programme sought to facilitate the transition of Northern Uganda from an isolated region that is highly vulnerable to climate change, and has previously been affected by a long conflict, into a dynamic, resilient, wealth creating economy, supplying great value products into local markets and global supply chains. It supports initiatives that increase firm level productivity, competitiveness, build capacities and strengthen channels among the distributor and the smallholder. NUTEC MD works with market actors to improve the deployment efficiency of available equipment and reduce the information gaps. The programme applied an MSD approach in solving challenges and systemic constraints in the Northern Ugandan agri-economy. It provides expertise and consultancy services to innovative businesses and implements activities to mitigate systemic market failures. It works on the premise that deepened and improved market functioning will increase incomes for poor men and women. NUTEC MD deals with smallholders and market actors in the sunflower, soya bean, sesame seed and rice sectors.
SOURCES: Swisscontact: https://www.swisscontact.org/en/projects/nu-tec-md FCDO Annual Review 2020

Invest in capacity building. Many MSD programmes in Africa have been required to build the capacity of their programme partners. The PIMS programme in Somalia found that since the market systems approach was new to Somalia and private sector capacity was generally low, it had to invested heavily in partner capacity building to address both technical and financial management weaknesses. This included strengthening local service providers with local and regional experts to assist the development of facilitators who will then train lead firms; training lead trainers and technical staff from lead firms and support demonstrations by local service provider's

technical teams; and training independent lead trainers to support the development of technical training in sub-sector.

Similarly, the Propcom Mai-karfi programme in Nigeria found that partners often need capacity building for long term sustainable market systems development. Partnership development is largely about building relationships and trust. It involves defining a shared vision of success and mutual accountability, and understanding each other's challenges, interests and assets with shared risks. Local organisations need sustained capacity development and mentoring alongside practical implementation in the medium term to internalise the MSD approach. Existing groups, community-based organisations and other structures can be effective in reaching smallholders with new market activities, but capacity building and group strengthening is also necessary.

Improve access to finance. The Propcom Mai-karfi programme in Nigeria found that access to finance is a nearly universal challenge. Thus, the programme became increasingly involved in facilitating, if not directly providing, finance at every level. The programme worked with the Nigeria Incentive-based Risk Sharing System for Agricultural Lending to facilitate access to reduced-interest, guaranteed loans in the agriculture sector as well as microfinance institutions active in northern Nigeria to provide loans.

PIMS in Somalia invested heavily in partner financial management capacity building and developed clear communications regarding accounting procedures. Programme partners reported that they appreciated the way in which PIMS staff listened and worked with them and that this led to increased trust and transparency.

Promote scale and sustainability planning. While PIMS was shorter than many other MSD programmes, it tried to promote scale and sustainability from the outset of its partnerships with lead firms in three specific ways. First, lead firms were trained in the MSD approach. Second, a majority of PIMS technical assistance to lead firms was provided through local organisations which have the capacity and incentives to continue to respond to the needs of private sector. Third, PIMS regularly convened the private sector in workshops and encouraged a collaborative rather than competitive environment which has resulted in sharing of good practices and even business linkages.

In Uganda, the Transforming the Economy through Climate Smart Agriculture programme was encouraged to focus a greater proportion of resources on facilitating crowding-in around the most promising business models developed with partners.

Prepare for external shocks. The Propcom Mai-karfi programme in Nigeria operated in a relatively unstable region. It found that macro-scale shocks were difficult to plan for in an M4P approach as one of its basic assumptions is the continual growth of the overall economy. Thus, there was a need to plan for these risks for each individual intervention. However, even as the programme sought to share risks, it found it hard to prepare for something as far-reaching as a currency losing significant value.

Programme monitoring and evaluation

Use M&E to inform continuous adaptation. The MADE programme in Nigeria found it was important to use the evidence from interventions to inform continuous programme improvements to ensure the programme stayed on track and achieved its objectives. Strengthening the feedback mechanism, though ongoing open communication between MADE and partners helped ensure that gaps in intervention delivery are addressed as appropriate on a continuous basis, allowing for more flexible management.

Box 8: Promoting Inclusive Markets in Somalia
Donor: UK Government (83%) and Danish Government (17%)
Country: Somalia
Duration: May 2015 to April 2020
Promoting Inclusive Markets in Somalia (PIMS) was designed to support transformational change in the Somali peninsula by strengthening market systems. The programme stimulated growth of the private sector and supported measures required to deliver long term job creation and ultimately reduce poverty. PIMS applied an MSD approach with an integrated Cash for Work (CfW) component to drive increased incomes, job creation, market growth, and enhanced productivity. The programme sought to address market failures in three productive sectors: Dairy, Sesame and Ocean Fisheries, with cross cutting light manufacturing inputs. Originally conceived as a three year, £11 million programme running from April 2015 to April 2018, the value of PIMS was increased in January 2017 to £14 million with additional funding from the UK and Danish Governments and a time extension was approved in April 2018 taking the end date of PIMS to July 2019 with operations ending in April 2019. PIMS worked across the three value chains with a total of 26 lead firms in Somalia. In total £5,699,867 was distributed as part of the Grants and Activities Fund. Across the four outcome targets, PIMS achieved increased incomes (60 per cent of firms reporting increased income per year), new jobs created (11,637 FTE jobs, 43% women), additional private investment (£13m additional private sector investment leveraged), and additional income generated (£26m net additional income generated for producers and private sector companies).
SOURCE: DAI (2020) PIMS Final Report

Begin monitoring early. The Propcom Mai-karfi programme in Nigeria says it was important for monitoring to start from Day 1 and continue dynamically, aligned with agricultural markets and seasons. This is required to provide data valuable for both the programme and its partners. While the programme initially assumed that private-sector partners would provide all necessary data, it soon became apparent that most businesses were only interested in two sets of data: expenses and revenue. Thus, the programme was required to build a dynamic, adaptive monitoring system to guide interventions, provide up-to-date management information internally and inform partners of issues in the field.

The Transforming the Economy through Climate Smart Agriculture programme in Uganda was encouraged to formulate a detailed account of how the market system might change on account of the programme's interventions, with a clear methodology for tracking that change.

Build the capacity of partners in data collection and reporting. The PIMS programme in Somalia found it important to build the capacity of and engaged its partners in data collection and reporting, rather than rely on a team of M&E specialist to collect monitoring data. This not only reduced data collection costs, but it also engaged the lead firms in understanding the value of their own data encouraging continued accurate data collection. Further, it was consistent with PIMS' overall value proposition to the lead firms. PIMS staff met regularly with lead firms to assess progress against milestones and strengthen lead firm capacity. In addition, programme partners attended quarterly stakeholder meetings with local government and PIMS staff to discuss progress and address issues.

5.5. Conclusions

MADE in Ghana forms a part of a collection of MSD programmes working in agriculture in Africa. Over the last decade, there have been a wide range of such programmes that the UK and other bilateral and multilateral donor and development agencies have supported. This section has sought identified lessons from these programmes in order to offer guidance on how MSD programmes can contribute more effectively to economic transformation in the agriculture sector in Ghana. While the following chapter focuses specifically on how FCDO can apply these lessons in its forthcoming ATG programme, there are a few conclusions that can be drawn from the way in which MADE in Ghana has operated compared to the other MSD programmes.

While all MSD programmes have applied a similar set of design principles (e.g., market diagnosis, piloting interventions, facilitating market actors, and scaling-up), MADE Ghana has successfully focus on creating a business model that focuses on agribusinesses and link smallholder farmers to markets. As a typical out-grower scheme, this approach is not unusual. However, MADE's relatively unique offering in this approach has been to formalise a process of commercial formalisation, contract negotiation and business planning with selected agribusinesses. Through its application of the Advanced Business Model, MADE was able to apply a process of market facilitation that allowed smallholder farmers and agribusinesses to better understand the markets they work in and identify where current investments will lead to better returns.[31] There have been other successes that have been somewhat attached to this model (e.g., partner selection processes, enterprise monitoring innovations and an adaptive approach to programme management), but its business-like approach to farmer-agribusiness linkages have been central and have worked well.

What did not work in Ghana has been attempts to find investors from the south of Ghana who can be attracted through an MSD programme to invest in northern farming and agribusiness markets. While this was an initial feature of MADE's design, this approach simply did not succeed. It is beyond the scope of this review to fully assess whether the MSD programmes in Nigeria or Uganda, which also focused on disadvantaged subnational regions, found success in their approaches. The Ghana MADE programme was successful in supporting farmer and business linkages among northern market operators and this led to the successful leveraging of additional private investments in northern markets. The challenge moving ahead toward a national ATG programme will be to find a way where more external private investment can be directed toward northern agricultural market actors.

Finally, MADE in Ghana did not succeed in supporting significant reforms in the business enabling environment in northern agricultural markets. While the programme's Business Case included this in its design, these ambitions were modified as the programme was implemented. Many MSD programmes in Africa, including those briefly reviewed above, include a focus on improving the business environment for market operators, which focuses on support for reforms to the policy, legal and regulatory framework, as well as to the regime for quality assurance. Yet, because these programmes are primarily designed to work with private sector actors,

[31] A recent review of business practices in MSD programmes around the world argues that MSD 'is largely about identifying business cases'. It suggests that this is especially the case 'for those not yet identified by the private sector because they do not know the potential customers, do not recognise the potential of new products and services, and do not know the business model to make and deliver to these customers in an affordable and useful manner, and cannot mobilise investment for unproven business models' (Bekkers, H. & M. Zulfiqar, 2020 *The story of MSD: achieving sustainable development at scale,* BEAM Exchange, accessed from www.beamexchange.org).

they are often poorly connected to the relevant government actors and less able to influence business environment reforms. In the case of Ghana's MADE programme, this led the programme to focusing on the formalisation of farmer-agribusiness contracting arrangements, rather than on other broader legal and regulatory issues. This is a challenge for many MSD programmes, and it is one the ATG programme should pay careful attention to.

6. Recommendations for MSD programming to achieve agricultural transformation

This report draws from the standardised MADE PCR report, along with other research-based and MSD programme experiences to ascertain lessons that may inform FCDO's work in agricultural transformation, primarily focused on the forthcoming ATG programme. This final chapter makes a series of practical recommendations for FCDO and the ATG management team to consider.

Recommendations contained in this chapter are organised around programme design, programme management and monitoring and evaluation.

6.1. Programme design

Ensure north-south linkages and engagement is embedded in programme design. MADE focused entirely on the disadvantaged northern region. There were times when the programme sought to facilitate investment and commercial linkages with the larger, more capable and more competitive firms in the south. However, these efforts were largely unsuccessful. While, as a national programme, ATG will be in a good position to leverage market and investment opportunities from the larger and more capable firms of the south, there are concerns that this might lead to a strong southern focus. That is, it will be easier for the programme to work in southern markets, unless a deliberate programme design is introduced to ensure a broader geographical reach is attained.

Drive investment through better commercial linkages. MADE's work with intermediary agribusinesses that connects traders with farmers has proved successful and deserves further application. The use of the Advanced Business Model and a network of farm FEAs has worked and can be used more broadly. FEA services have been described as 'the first- and last-mile market link' for smallholder farmers located in areas away from commercial centres and were 'change agents for agricultural transformation'. Propcom Mai-karfi in Nigeria also found that service provision models can meet many needs, if all participants benefit and have steady access to equipment, supplies and information.

Consider the effects of the programme on sustainability, resilience, endurance, and transformation. These concepts should be clearly defined in the programme design. It is important to clarify the extent to which market system programming contributes to these desired outcomes and how progress towards this will be measured. As described above when considering the outcomes of the Ghana MADE programme, there have been clear achievements in supporting enterprise-level change that is sustainable over the long-term and builds resilience among farmers and firms to external shocks. While still early days, the experience of firms within the COVID-19 pandemic suggests that many have weathered this shock relatively well. However, it is unclear to what extent the programme has altered broader market systems that ignite or contribute to a transformation of agriculture markets and a stepped change in agricultural productivity. These are the measures that future programmes should pay careful attention to.

Support the business enabling environment for private sector-led agricultural transformation. The MADE programme achieved little in terms of formal reform of the business enabling environment for agribusinesses and private investment into agricultural markets in general. In part, this was a result of the programme design. Over the course of the programme, greater emphasis was given to supporting the formalisation of out-grower schemes, contracts and business management practices. Given the high levels of informality in the north, this may have been appropriate. However, the ATG contains a specific component on business environment reform (i.e., Component 3, Policy Fund), which will focus on market and political economy analysis and policy influencing. It will be important to ensure that policy is not the primary focus here. Instead, attention should be given to the legal and regulatory framework that governs production, agribusiness and product distribution, including the regime for exports. Thus, the programme should pay careful attention to the reforms required to reduce the costs and risks associated with agribusiness, while increasing competitive pressures.

Support increased government understanding of market distortions. AGRA in Ghana says that it is important to create 'win-win' relationships with government. The highest levels of government need to be encouraged to prioritise agricultural transformation based on evidence. This required ongoing commitments to the agriculture sector through an inclusive investment plan, a willingness to critically assess and change resource commitments, policies based on evidence, and the importance of private sector as a driver of growth. ATG should also apply the policy fund to support efforts that help government understand more fully the negative effects that fully subsidised seeds, fertiliser and other inputs have on agriculture markets.

Support export facilitation and promotion. Increasing access to foreign markets will drive productivity, growth and transformation in agriculture. While MADE faced difficulties in this, primarily because of the challenges experienced in the quality and quantities of products produced in the north, there will be more opportunities through a national programme. By giving attention to export facilitation and promotion, the programme will be required to integrate its business enabling environment work (above), with its support for improvements in quality infrastructure (below).

Focus on quality infrastructure. MADE initiated a number of useful interventions into the issues affecting quality infrastructure. For example, the groundnut branding and traceability assessment conducted in August 2020 found that 5-10 per cent of the market demands the testing of groundnuts for aflatoxin.[32] Efforts to introduce Aflasafe into input bundles to control aflatoxin during the growing season were undermined by the absence of quality premiums to offset higher costs of production. Thus, it is essential to build supply-side safe trading channels for the market segment that does demand aflatoxin-free and traceable groundnuts. Moreover, there are significant shortcomings in standards that restrict the supply of raw materials to the nascent manufacturing sector. Maintaining good sanitary and phytosanitary standards of food products is necessary for smallholder farmers to be sustainably linked into domestic, regional and international value chains.

Design interventions to address irrigation and other facilities and infrastructure. There are a wide range of non-market systems related factors that influence the performance of farmers and agribusinesses in Ghana. The lack of

32 Aflatoxin contamination was a contributing factor to the decline in West Africa's share of the groundnut market, from 77 per cent in the 1960s to four per cent in 2010, resulting in a loss of around US $1.6 billion. Similarly, vegetable exports worth US$7 million (2,900 tons) were targeted by an EU import ban that came into effect in 2015 and again in 2019, causing these exports to collapse.

irrigation has been frequently been raised as a critical issue in the north and any programme that aims to transform the agriculture sector will be required to address this issue. There are likely to be micro (i.e., farm and firm) level interventions that can be directed at this challenge. However, broader, macro-level interventions will also be needed to facilitate increased public and private investment, including the adoption of new technologies. Other challenges requiring a combination of micro and macro-level interventions are those related to the cold chain and the improvement of feeder roads to improve transportation and logistics.[33]

Seek to balance market facilitation with direct delivery. The challenges of 'thin markets' are presented earlier in this report. Programme design must recognise the limitations of some market actors to engage successfully in commercial transactions and to become competitive. This requires a balance of market facilitation and direct service delivery and capacity building, while ensuring multiple programme interventions are carefully coordinated and systemically assessed.

Establish a deliberate gender strategy. MSD programmes should establish a deliberate gender strategy and consider a hybrid market systems approach with a more deliberate strategy to bring women up to a level where they can compete equitably with men.[34] This should include regular assessments to understand gender-based constraints and opportunities, and the design of activities to address these within the market systems framework.

Access to finance for mechanisation. MSD programmes in Africa, including MADE, have shown how market systems can be influenced to improve the access farmers and agribusinesses have to financial services. While financial services can be embedded into service provision, better business planning and management data can improve the success rate of commercial loan applications. However, the investments required to introduce higher levels of mechanisation are significantly higher and any programme seeking to transform agriculture through mechanisation will need to include interventions that specifically deal with this challenge.

Moving forward, ATG could provide an important role in helping financial services of various kinds to be bundled into agribusiness contracts and services, while also improving the capacity of smallholder farmers and agribusinesses to manage finances, build assets and negotiate with banks and other financial providers. Beyond this, ATG should also investigate the opportunities for financial instruments that can specifically be applied to agricultural mechanisation in selected crops, including the use of climate-smart technologies. This is likely to require specific financing measures that go beyond the working capital and trade finance arrangements currently used by farmers and agribusiness. These are higher level investments that would likely only be repaid over a few years.

Climate-smart production and business practices

Because improvements in smallholder farmer productivity create more intensive cultivation practices, increasing the danger of over-extraction of soil nutrients and the deterioration of the resource base of the soil, any agriculture transformation initiative should incorporate the use of climate-smart production and business practices. This is closely connected to the needs described above associated with farm irrigation and mechanisation. These challenges complement the market-related challenges

33 The United Nations Development Programme Northern Ghana Human Development Report 2018 says that, despite significant progress in road infrastructure, the road and transportation networks still mostly run south to north; and at border towns are often in a deplorable condition (United Nations Development Programme 2018, Op. Cit.)

34 MADE 2020 *Gender Assessment Report*, Nathan Associates London Ltd., June (revised July)

associated with changing farming techniques and the use of climate-smart services and other inputs. Thus, market systems changes should be combined with the introduction of new technologies and infrastructure to achieve more environmentally sustainable impacts.

In Nigeria, the MADE Technology Adoption Grants were a mechanism for creating new incentives for climate-smart production, as was the use of programme incentives in the Transforming the Economy through Climate Smart Agriculture programme in Uganda. MADE in Ghana developed some good experiences in this field and its *Case for Conservation Farming* (MADE 2020) shows how improved market access and service supply linkages can mitigate vulnerability to short-term climate-related shocks. However, on its own, demonstration projects, business cases and training are not enough to build resilience against longer-term climate change. These interventions should be balanced with a larger scale level of investment into the technologies, facilities and infrastructure required to transition to production and business practices that reduce environmental impacts. This includes greater investments into irrigation and integrated water management, coupled with local capacity strengthening to increase the resilience of communities to floods and drought, and to facilitate the diversification of livelihoods.

6.2. Programme management

Invest in the training of programme management and partner staff. This is specifically required to help staff identify business cases for social inclusion in programme activities and in the support of socially inclusive business models.

Apply adaptive management. Adaptive management processes are essential to ensure that programme shifts are responsive to the root causes of systemic change and based on evidence provided by monitoring data. Because transformation breakthroughs can and do occur in systemic contexts that are generally unfavourable, it becomes critically important to identify moments and sectors of opportunity in a timely fashion. Thus, programmes working in these domains must be flexible in order to recognise initial errors and change course when necessary.[35]

Align partner selection with structural change objectives. Drawing from the lessons of MADE and the other MSD programmes reviewed above, strategic partner selection is critical. This was important in MADE's transition from Phase 1 to Phase 2. There are dangers in moving too far away from poor beneficiaries in this approach and care should be taken to assess in advance the implications of these decisions. MADE's second phase focused on investment, finance and innovation in businesses with the drive and capacity to reach millions of farmers. Thus, the programme focused less on the poorest firms and smaller farmers in what is overall a poor region. Similarly, PIMS in Somalia chose to prioritise partnering with large, established and influential firms while acknowledging the risks of potentially reinforcing existing power dynamics.

Target female-owned agribusinesses. MSD programmes should specifically seek to increase the number of female-owned agribusinesses they work with. This may involve adjusting criteria to allow more women business owners to join the programme. It may also involve partnering with an organisation that has a mandate to raise capacity and help women-owned businesses develop growth strategies.

Engage with actors in the political-economy. While donor-supported programmes need to take care not to be seen to be interfering in sovereign political processes,

35 Neil Balchin, N., D. Booth and D. W. te Velde (2019) *How economic transformation happens at the sector level; Evidence from Africa and Asia*, Gatsby Africa and ODI, p. 9.

they can support domestic public, private and civil society actors in their efforts to improve the investment climate and business environment for agricultural transformation. MSD programmes can engage with strategic domestic actors to support evidenced-based policy development and legal and regulatory reforms.[36] Programmes can support the use of research tools and analytical frameworks and models that help government improve its understanding of markets and the costs and benefits of public intervention. Similarly, programmes can raise public awareness of these issues and facilitate public-private dialogue.

Coordinate for better impact and reduced duplication. MSD programmes should coordinate with other stakeholders to identify areas for collaboration and leverage and to avoid duplication. At a higher level, there is an opportunity to capture learning around inclusive market systems that can be shared at the local, regional and international levels. The ATG programme should establish a common platform for all donor and development agency programmes, along with relevant government ministries, departments and agency, to meet regularly, share information and monitor market systems change across a broadly agreed framework (i.e., set of common market indicators).

Broaden community networks to enhance outreach. MADE applied a facilitation role in its work with small-scale rural enterprises, which were both beneficiaries and drivers of change. MADE was able to extend its outreach to smallholder farmers through the use of community networks and organisations. In these instances, diffusing knowledge and farm business management capacity at a community level, rather than at a business level, was found to be a significant development in expanding the programme's outreach.

Employ a gender specialist. While ensuring all staff have appropriate skills to support women and men, MSD programmes should employ a gender specialist to help programme staff reduce gender disparities in access to and control over resources, opportunities and services. The specialist would coordinate gender training to help staff understand how they can carry out gender mainstreaming activities within an MSD programme.

6.3. Monitoring and evaluation

Invest in the development of cost-effective M&E approaches. A robust evidence framework is required to ensure programmes can understand the root causes of market problems and refine their interventions based on how current activities affect market systems. It is important to invest in collaborative action research and analysis to design ways of monitoring and evaluating systemic change across different contexts. This should be used to develop alternative approaches and test these across different programme areas, especially where headline indicators cannot convey the depth and richness of systemic change achievements. It is essential that this monitoring accommodate data to disaggregate programme performance and effects by gender.

Ensure a strong articulation of adaptive programming and the role of monitoring and evaluation. While the importance of adaptive programming is broadly recognised, the value of this approach, closely tied to the generation and analysis of regular monitoring data is essential. Changes to market systems at all

36 Reflecting on agriculture transformation in Ghana, on pineapples, by Gatsby Africa and ODI suggest that 'success in productive sector transformation occurs when and only when a mutual interest between indigenous entrepreneurs and politicians supports the formation of a pocket of effectiveness, where businesses get close support from a capable and specialised bureaucracy, enabling a sufficient level of productivity-oriented learning' (Balchin, et. al., 2019, Op. Cit., p.31).

levels need to be carefully monitored along with the emerging effects of programme interventions.

Track gender-sensitive changes in market systems. MSD programmes should track impact effectively using a monitoring, evaluation and learning framework that not only disaggregates data by gender but tracks systemic change for both sexes. Using this data, programmes should update their gender strategy regularly.

Further work on enterprise-level monitoring. MADE's experience in enterprise-level monitoring, such as with the electronic data capture and management system called M-Access should be continued and refined. High-quality and easy-use electronic data capture at the enterprise level has proved to be extremely important. This should also disaggregate business management data by gender.

Expand programme monitoring across other donor-funded MSD programmes. While recognising the limitations created by donor management and privacy arrangements, FCDO should liaise with other donor and development agencies supporting market systems change in Ghana agricultural sector to find ways in which the broader effects of MSD intervention can be captured and shared. At a minimum, this may involve regular meetings to share progress. A more ambitious approach would be to collaboratively contribute to a third-party assessment of change in selected agricultural markets.

6.4. Conclusion

MADE was an ambitious programme that performed remarkably well over its seven-year term. It piloted a number of innovative new practices that improved agribusiness productivity and competitiveness, while enhancing the sustainability of inputs required by smallholder farmers in a highly disadvantaged region of the country. Applying adaptive management principles and practices, MADE was—in close cooperation with the FCDO—able to learn from the effects it was creating in selected markets, and refine its models and approaches. This was no small feat in the face of the COVID-19 pandemic of 2020.

However, despite its achievement and successes in reaching a significant majority of its programme log-frame targets, it is unclear the extent to which the programme actually addressed underlying market constraints or systemic barriers. While the sustainability of the programme's interventions is apparent at the enterprise level (e.g., leveraged investment, expanding sales and competitively bundled services), the broader impact of this on the whole northern agricultural market system is unclear.

Thus, as important as these programme achievements are, the challenges to agricultural transformation remain. This is especially the case when considering the range of external supporting functions affecting market systems and government policy, legal and regulatory regime and its distortionary effects on market systems.

Looking forward to the anticipated commencement of the ATG in 2021, these are lessons that should be built upon. Agricultural transformation in Ghana demands a strong focus on market systems, accompanied by programme interventions that are designed to address other elements that also impede investment and productivity in agriculture markets, such as infrastructure, quality assurance, a more enabling legal and regulatory regime and increased government commitment to the role of markets in boosting competitiveness.