IMPLEMENTATION PHASE ANNUAL REPORT YEAR 5
MARCH 2018 - FEBRUARY 2019

DFID Market Development (MADE) for Northern Ghana Programme

SUBMITTED TO
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(Under DAI Wealth Creation Framework)

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LIST OF ACRONYMS

ASWG	Agricultural Sector Working Group
BDA	Business Development Adviser
BDS	Business Development Support
CSA	Climate Smart Agricultural
DFID	Department for International Development
EOI	Expression of Interest
EPA	Environmental Protection Agency
FDA	Food and Drugs Authority
FEA	Farm Enterprise Adviser
FGD	Focus Group Discussions
GAP	Good Agricultural Practices
GCX	Ghana Commodity Exchange
IITA	International Institute of Tropical Agriculture
KPI	Key Performance Indicator
MADE	Market Development Programme for Northern Ghana
MoFA	Ministry of Food and Agriculture
MoU	Memorandum of Understanding
MSA	Market Systems Approach
NSEZ	Northern Savannah Ecological Zone
PPRSD	Plant Protection and Regulatory Services Directorate
Q	Quarter
SHF	Smallholder Farmer
SRO	Senior Responsible Officer
TA	Technical Assistance
ToC	Theory of Change
TOR	Terms of Reference
VfM	Value for Money
Y	Year

SECTION 1. INTRODUCTION

The Market Development Programme for Northern Ghana (MADE) began operations in 2014, with an initial four-year implementation plan. In December 2017, a two-year extension was granted to allow MADE to deepen and widen the impacts of its market facilitation approach and to mainstream those impacts. This Year 5 annual report covers the first year of the extension, from March 2018 to February 2019.

It should be noted that while the Year 5 quarterly reports (Q1 – Q4) have provided detailed activity-level updates against deliverable targets, this Year 5 annual report presents a more high-level strategic view of the programme's interventions. It looks at the key lessons learned in years 1-4, provides context and rationalisation for the partner selection process, and outlines modifications to the approaches and methods adopted during the extension phase in order to ensure the sustainability of MADE impact beyond the life of the programme.

This report has six main sections:

- **Section 2** considers how the lessons learned during the first four years of the programme have led to shifts in thinking and approach.
- **Section 3** provides an update on the progress made towards deepening, widening, reinforcing and mainstreaming MADE impact.
- **Section 4** gives an update on the continuing progress towards improving smallholder farmer (SHF) resilience, productivity and incomes.
- **Section 5** sets out the results achieved against outcome and output targets and defines how these were measured.
- **Section 6** covers programme management and performance measurement.
- **Section 7** presents financial results and value for money (VfM) indicators.

SECTION 2. LESSONS LEARNED AND SHIFTS IN APPROACH

This section of the report considers key changes adopted in response to lessons learned.

During its first four years of operations, MADE was a catalyst for market development in the agriculture sector in the Northern Savannah Ecological Zone (NSEZ). MADE pioneered critical changes in the way rural enterprises engaged with smallholder farmers through a market systems approach (MSA) to development. The programme promoted the adoption of innovative business models (Input and Aggregator models), served as a "market facilitator", partnered with agribusinesses to build their capacity towards the delivery of integrated packages of inputs and services, and introduced farm advisory services to improve farmer performance. These actions have addressed community needs and helped boost incomes, raise productivity, improve market access and increase resilience for smallholder farmers (SHFs) and businesses alike. The results achieved and critical lessons learned during those early years have also informed the programme what further support business partners need to substantiate the gains already achieved, to meet overall target outcomes and ensure longer-term sustainability.

The following six key lessons learned have helped shape the interventions delivered in Year 5 and will continue to influence planning and operational decisions during the final year of the programme.

1. Organic growth is not the only way to build a successful business;
2. Effective farm enterprise management needs an on-farm presence at farm;
3. Effective engagement and communication needs work;
4. Planning needs to be robust but timely;
5. Good ideas need to be effectively delivered and reported;
6. Effective monitoring and verification of results.

Lesson Learned #1: Organic growth is not the only way to build a successful business

During the first four years of operations, a small number of high-performing partners emerged that were more resourceful and more willing to adopt the business models promoted to them. When shown the commercial viability of the Advanced Model during the annual work planning sessions, and when provided with the necessary support, these firms exhibited a greater willingness and potential to extend their outreach and deliver integrated packages of input supplies and services to a wider smallholder farmer (SHF) base. These same businesses also tended to apply more formalised contractual arrangements with their out-growers, to reduce the risk of side-selling and to help build trust and responsibility. A new breed of rural enterprises began to emerge from the "flat" market.

These high-performing adopters remain a small proportion of the total market actors operating in northern Ghana. The majority of agribusiness either lack the desire to "go-it-alone" or the resources in terms of management skills and access to investment finance to meet the advanced business model requirements and outreach targets. To further deliver on the success of the "7 Rs" and to broaden its adoption, MADE widened its partner selection process in Y5 to accept bids from business syndicates comprising lead and support enterprises working together under formalised agreements[1]. By sharing responsibility and risk, these alliances have been able to widen and geographically extend their business reach, offer smallholder farmers a more inclusive range of services and supplies.

By supporting enterprises to work in clusters rather than as individual firms, MADE is seeking not only to ensure SHFs gain access to improve input supplies and services but also to encourage partner firms to be more selective in their production and outreach strategies, to widen market opportunities and to

[1] The opportunities offered through the formal business partnerships has prompted many of MADE's lead firms to work with additional support enterprises in order to secure a higher-level advanced model capacity.

make it possible for farming communities to move out of subsistence farming into the production of marketable surpluses.

Selected partner firms and support enterprises will be supported to be more strategic in their thinking and to further improve performance and raise competitiveness, by participating in a bench-marking exercise designed to compare operational performance and to identify shortfalls and constraints. Businesses will be provided with diagnostic reports covering key performance elements and offered business development adviser (BDA) support to develop five-year road maps (strategic plans) to ensure further growth and future investment. The benchmarking and other capacity building exercises will take strategic network development and acquisition into consideration as a longer-term objective as well as organic business growth.

Lesson Learned #2: Effective farm enterprise management needs an on-farm presence.

Since its adoption into the advanced model in Year 3, the provision of farm enterprise advisory services has fast become recognised as a crucial component. An on-farm presence during key times in the agricultural calendar, to ensure input supplies and services are properly applied, has been shown to be essential to bring about the necessary yield and productivity improvements required to cover the costs of delivering the advance model. Farmers universally welcome the advice given by Farm Enterprise Advisors (FEAs) and their presence has helped to improve trust and encourage greater ambition in terms of acreage under cultivation and the introduction of new crop varieties. The end of Y5 annual crop survey illustrated how improvements in yield and product quality as a result of improved land preparation, sowing and harvesting under FEA supervision has had a positive impact in terms of price received for both producer and aggregator.

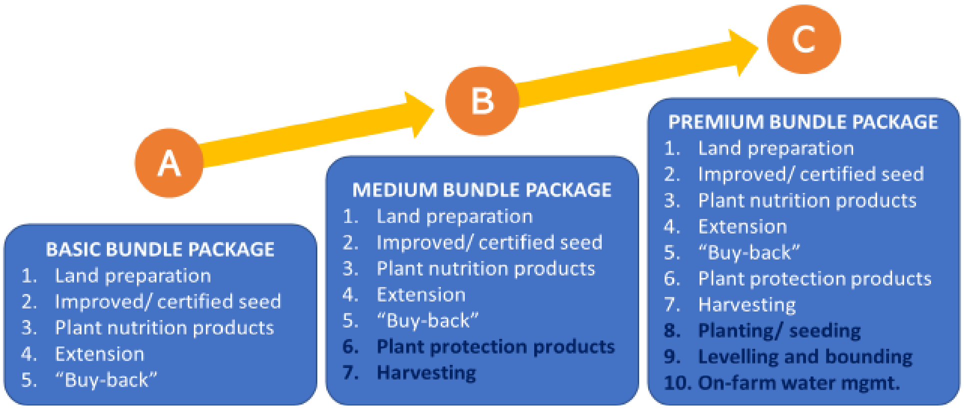
The roll-out of the FEA model has been rapid and universally adopted. In Y5 more than 350 FEAs and their managers were appointed by MADE partner firms at a ratio of 1 advisor for every 200 SHFs working either directly at farm level or by organising demonstrations on designated plots held by more experienced and respected lead farmers. FEAs help to identify and recruit SHFs, assist with land use management, pass on knowledge about "best farming practice", advise on correct and safe use of agro-chemicals and critically co-ordinate the draw-down of mechanisation services.

The FEA is the face of the agribusiness that many SHFs have never had the opportunity to meet and serves as the interface with the Government extension service that farmers rarely see unless a major infestation or disease is identified in the district. FEAs in general have become trusted and venerated members of the farming community and the key vehicle through which business planning and management is delivered. Production forecasting and the management of transaction records helps to build credit histories from which access to finance is secured.

FEAs play a key role and have great responsibility but critically there are shortages of skilled operatives to undertake the work. Firms are finding it difficult to attract qualified and trained staff. Of the 350-odd FEAs nominated for MADE support in Y5 only 20% had a relevant university or college education/qualification. Partner firms have invested heavily in the service but continue to rely on programme support to help train staff and cover their operational cost (cost of deployment) and this brings into question its sustainability once the programme ends.

In Y5 MADE invested a total of [redacted] in support of the FEA component of the Advanced Model (see Figure 1), equivalent to just over [redacted] per beneficiary SHF. MADE's partner firms contributed the equivalent of another [redacted] per SHF. MADE's support for FEA deployment accounted for over 80% of MADE's total implementation expenditure in Y5 and with even greater emphasis being given by partner enterprises to expanding outreach in Year 5 this figure is likely to rise still further unless improvements can be introduced to reduce the unit cost of delivering the service and partner firms can be persuaded to take on greater proportion of cost share.

Figure 1: Levels of the Advanced Model



Both the quality and the cost of services provided need to be addressed. The level of operational support per SHF can be decreased by improving the professional capacity of FEAs, and their skill at community and farmer-level engagement. Service quality can also be improved by speeding up data capture and management and equipping FEAs with the right tools.

Identifying and selecting suitable SHFs for Advanced Model services, and subsequently recording their biodata, represents a substantial cost and time outlay for firms, and has affected their ability to make compulsory reports available, in accordance with milestone verification obligations. In Year 3, MADE introduced the Farmer Passbook in an attempt to speed up data flow and make transactions more transparent. This paper-based system has not been widely used, however, so a more rigorous and easy-to-use system has been developed during Year 5 and will be rolled out across all 60,000 SHFs reached by the programme in Year 6.

Efforts will also focus in Y6 on vocational training and on-farm and demonstrations to raise the knowledge level and skills of FEAs in order raise the standard of the service.

Lesson Learned #3: Effective engagement and communication needs work

Much of the work during the first four years of the programme focused strategically on the core market, which enabled MADE to achieve significant traction with partner agribusinesses. The programme successfully promoted the market system development approach and the adoption of key principles and encouraged partners to implement improved business practices and deliver the Advanced Models.

However, effective engagement and communication with key programme stakeholders and development partners has been hindered by the lack of strong commercial presence and common agri-business interests in the region and the resultant slow uptake of programme initiatives. The theoretical "J-curve" growth in numbers of beneficiaries did not materialise as quickly as anticipated, although a number of small-scale agribusinesses and a growing number of SHFs saw significant improvements in productivity, income and profitability as a result of the work undertaken. Like many programmes in northern Ghana, MADE failed to achieve the predicted surge in take-up after the initial years of low-level adoption

This protracted period of uncertainty while waiting for the anticipated scaling-up of achievement led to a reluctance to trumpet the success of the programme. Instead, efforts were directed on securing and reinforcing what had been achieved rather than on introducing measures to widen and mainstream the market systems approach. By failing to achieve buy-in from government, development partners and other key stakeholders, MADE found itself having to compete for space and ideology with parallel programmes, all dedicated to achieving the same end result, but all based on different, sometimes contradictory, approaches. Without wider acceptance and adoption, MADE's efforts to reinforce and sustain gains beyond the life of the programme are at risk.

This key observation underscored the need to focus more keenly on broader stakeholder engagement and sensitisation during the extension phase. Year 5 interventions focused on identifying, documenting and sharing lessons learned in order to influence senior opinion within the public sector and to work more closely with development partners to share experiences. This was only partially achieved in Year 5, and efforts will be both heightened and extended in Year 6 - specifically by working with Ministry of Food and Agriculture's (MoFA) extension directorate to bring the farm advisory services and the public extension services into greater alignment. MADE will also invite development partners and key government representatives to "pause and reflect" meetings held each quarter to improve awareness on what MADE has achieved and to share lessons learned.

Lesson Learned #4: Planning needs to be robust but timely

Partner selection and the phased adoption of increasingly sophisticated business models that promote the market systems approach while being sustainable in the longer term have been a major element of the MADE team's work. The planning process required to drive forward change has had to be reproduced each year with a different complement of partner firms, and with modifications to the scope of support provided. Engagement with potential partners has been known to take up to six months to complete—against a backdrop of agribusinesses having to commence pre-seasonal activities before new commitments and obligations have been finalised. The protracted period of planning has helped to avoid mistakes and reduce risks but has had inevitable consequences in the ability of the programme to deliver scheduled interventions on time and to budget.

In part, the robustness of the planning process has been determined by the nature of the market systems approach, which emphasises the agribusinesses being in control of their development while the programme facilitates those changes. The programme team and its composition has also influenced how effectively that process was undertaken.

As part of the review leading to the request for the two-year extension, MADE undertook a series of internal assessments covering team performance and operational procedures. It was concluded that time was being lost through having to align agribusiness workplans to specific, pre-determined market value chains, when the reality was that most businesses, and indeed most farmers, grow a range of commodities to suit market needs and opportunities on a changing basis over time. It was therefore agreed that the four-commodity tactic would be replaced by a more appropriate non-commodity-aligned strategy. It was also concluded that partner selection would begin in advance of the start of the new season, in order to define the scope of work earlier and avoid planning activities encroaching into the planting season.

Lesson Learned #5: Good ideas need to be effectively delivered and reported

In the past, the programme has been inconsistent in submitting reports to the client and managing the implementation of activities. During Year 5, the programme strengthened its technical management by introducing new tools and processes. These include collaborative annual planning workshops, activity-based planning (workplan and budgets), clear designation of responsibilities and backstopping for activities, calendars for reporting DFID deliverables, and quarterly "pause and reflect" workshops. These new business processes have been adopted in a re-iterative manner to ensure effective delivery of the programme. The programme has tested tools and processes using trial and error, and discussed these on a quarterly basis to determine, as a team, how effective they have been. This has led to improved business processes that take into consideration feedback from all team members and are effective for ensuring improved programme delivery.

It was also concluded that the team structure needed to be realigned away from commodity specialism towards one that is more discipline focused. It was also agreed that former cross-cutting activities, including learning and monitoring, should be absorbed as part of the market development team's responsibilities. These structural changes have also resulted in the appointment of a dedicated operations manager in the role of Deputy Team Leader, and a specialist M&E Manager. The Year 5 team structure is discussed in greater detail later in this report.

To improve reporting and align the revised objectives of the extension phase with the log-frame, no fewer than 28 changes were made at various results levels, informed by lessons learned from the first phase of the programme. At the outcome level, three income-based indicators were added to the existing indicators on sales/turnover and systemic change: number of smallholder farmers and small-scale entrepreneurs in MADE target markets experiencing positive income change; number of SHFs experiencing income increases over [redacted]; and average income (£) increase per SHF experiencing positive income change.

This will enable the programme to better understand the depth of benefits delivered to clients, which is more accurately reflected in evaluation of income change than simple sales/turnover. At the output level, the existing indicator on evaluation reports and IE outputs was replaced with three Value for Money (VfM) indicators: management cost per facilitation; facilitation cost per beneficiary; and amount of additional private sector investment leveraged. Other key changes included the revision of impact weighting scores: Output 3 (market system rules and practices) was revised upwards from 15% to 25%, while Output 4 (VfM) was revised downwards from 20% to 10%.

SECTION 3. PROGRESS TOWARDS REINFORCING, WIDENING, AND MAINSTREAMING IMPACT

This section of the report presents the overall progress achieved towards reinforcing MADE gains and widening the adoption of promoted models and methods, to ensure sustainability beyond the life of the programme.

REINFORCING MADE'S IMPACT BY SELECTING HIGH-POTENTIAL PARTNERS AND SUPPORT ENTERPRISES

Leveraging lessons learned in Year 4 on the need to deepen relationships with stronger, more commercially viable single agribusinesses and/or associations of firms with aligned interests, in Year 5, MADE adopted a more extensive and rigorous partner selection process. A call for expressions of interest (EOIs) was published in the media over a period of two weeks and resulted in 149 EOIs. 60 lead businesses and 52 support enterprises were shortlisted, using selection criteria that favoured firms and consortia with high turnover, wide outreach and a high level of ambition. Following a rigorous due diligence exercise, three regional partner exploration workshops were held for the shortlisted lead firms to outline and discuss joint obligations and clarify where programme support would be provided (Scope).

The full evaluation process considered a range of factors, including the operational, financial and management capacity of the interested parties and their ability to implement the MADE Advanced Model. Business outreach (districts covered), types and volumes of commodities marketed (crops), the range of inputs and services on offer, and the ambition and willingness to work with strategic partnerships (support enterprises) were also considered.

33 prospective partner businesses, aligned with 20 support enterprises contributing to outreach, were found to have the capacity and desired motivation needed for partnership with MADE during the extension phase. While diverse in their capacity, business models and value chains, all of the selected lead firms expressed their willingness to adopt, invest and implement the Advanced Model.

13 of the lead firms chose to work with enterprises under formal support arrangements in order to enhance the range of inputs and services supplied to their affiliated SHFs. As an example, the partnership between [redacted] (a partner lead firm) and [redacted] (its support enterprise) brought together a supplier of assorted agro-inputs and chemicals (hybrid maize seed, pesticides and fertiliser) with a mechanisation services provider offering ploughing, harrowing and threshing services. By working together, the two firms were able to expand their business reach from 3,500 to 4,500 SHFs and improve productivity and profitability.

A summary of the 33 lead businesses and 20 support enterprises chosen during the Year 5 partner selection process is set out in Table 1 below. Outreach targets for the lead and support enterprises are shown in Table 2. Full details of the partner firms and their support enterprises are set out in Annex 1.

Table 1: MADE Year 5 partners Outreach (Direct and Indirect)

LEAD PARTNERS	DISTRICT	SHF OUTREACH				
		TOTAL CLAIMED	RELATED TO MADE			
			TARGET	ACTUAL		
				MALE	FEMALE	TOTAL
[redacted]	Tamale	400	1,100	-	-	-
[redacted]	Bolga	7,213	1,000	825	83	908
[redacted]	Wa	3,100	2,200	1,362	915	2,277
[redacted]	Tamale	4,200	1,048	467	480	947
[redacted]	Sandema	4,500	2,000	1,379	962	2,341
[redacted]	Kwame Danso	13,000	3,000	1,709	1,291	3,000
[redacted]	Tamale	1,080	1,000	619	353	972
[redacted]	Wa	9,000	4,000	2,517	1,410	3,927
[redacted]	Walewale	15,000	1,000	735	276	1,011
[redacted]	Tamale	1,030	2,000	1,028	942	1,970
[redacted]	Techiman	4,067	1,000	531	470	1,001
[redacted]	Gushegu	3,160	1,000	691	299	990
[redacted]	Kumasi	650	4,050	3,072	1,229	4,301
[redacted]	Wa	600	1,200	702	1,771	2,473
[redacted]	Walewale	4,300	3,000	2,142	835	2,977
[redacted]	Garu	2,800	1,000	714	397	1,111
[redacted]	Tamale	4,500	2,600	1,984	526	2,510
[redacted]	Tumu	-	3,400	2,235	1,110	3,345
[redacted]	Karaga	2,340	3,090	1,492	1,553	3,045
[redacted]	Tamale	3,136	1,600	1,340	374	1,714
[redacted]	Accra	1,000	1,000	496	506	1,002
[redacted]	Tamale	1,500	1,300	400	963	1,363
[redacted]	Kpassa	970	2,500	1,206	893	2,099
[redacted]	Wa	390	2,000	1,417	644	2,061
[redacted]	Tamale	4,415	3,000	1,338	1,684	3,022
[redacted]	Yendi	4,500	2,000	1,311	681	1,992
[redacted]	Navrongo	722	2,400	652	1,891	2,543
[redacted]	Tamale	3,000	3,000	2,006	250	2,256
[redacted]	Bolga	1,560	2,400	1,751	738	2,489
[redacted]	Kintampo	2,091	3,000	2,239	759	2,998
[redacted]	Buwka	2,000	1,000	586	329	915
[redacted]	Tamale	4,500	2,000	1,464	338	1,802
[redacted]	Tamale	2,000	1,000	573	416	989
	TOTAL	**112,724**	**66,888**	**40,983**	**25,368**	**66,351**

[2] Partner was dropped as a partner, as they were unable to provide data and submit milestone report as agreed on their grant agreement.

Table 2: Year 5 support enterprises' contribution to outreach

SUPPORTING ENTERPRISES	NEW/ EXISTING	AFFILIATED LEAD FIRM	SHFS
[redacted]	New	[redacted]	400
[redacted]	Existing	[redacted]	1,000
[redacted]	Existing	[redacted]	600
[redacted]	New	[redacted]	403
[redacted]	New	[redacted]	785
[redacted]	Existing	[redacted]	1,000
[redacted]	New	[redacted]	400
[redacted]	Existing	[redacted]	600
[redacted]	New	[redacted]	700
[redacted]	New	[redacted]	1,000
[redacted]	Existing	[redacted]	600
[redacted]	Existing	[redacted]	1,000
[redacted]	Existing	[redacted]	754
[redacted]	Existing	[redacted]	1,000
[redacted]	New	[redacted]	400
[redacted]	Existing	[redacted]	400
[redacted]	New	[redacted]	400
[redacted]	New	[redacted]	1,000
[redacted]	New	[redacted]	482
[redacted]	New	[redacted]	1,417
TOTAL			**14,341**

In addition to the formal arrangements entered into by lead firms to secure selection against MADE's partnership criteria (with support enterprises contributing to outreach and Advanced Model status), most of the lead firms have been encouraged, with facilitation from the programme, to work closely with other businesses to overcome service, resource and market access constraints. By the end of Year 5, MADE partner firms reported informal support arrangements (marketing partnerships) with 36 other businesses, ranging from mechanisation service providers ([redacted]), financial service providers ([redacted]ks), wholesale market outlets ([redacted]) and agro-input dealerships ([redacted]).

Through these formal and informal partnerships, the lead partner firms have been able to expand their out-reach, more readily source complementary inputs and services and offer a more comprehensive integrated package of inputs and services to SHFs. A full list of services provided by the lead firms as part of their commitment to delivering against the three Advanced Model (see Figure 1) bundles is shown in Table 3.

Table 3: Staged reached in Advanced Model disaggregated by partners

ADVANCED MODEL LEVEL		
A	B	C
[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]
	[redacted]	[redacted]

made
MARKET DEVELOPMENT FOR NORTHERN GHANA

		[redacted]

The result of having only one firm in the A stage and 20 in C stage exceeded the programme's expectations outlined in the Extension Business Plan. The programme expected to take the full two years of the extension to have 10 partners in C stage, with a main concentration on partners in B stage, and 6 partners remaining in A stage. However, the programme has in one year of the extension exceeded these targets. This highlights the market adoption of the Advanced Model, especially at the premium level (stage C). In addition, this showcases that partners are successfully utilising partnership and network facilitation promoted by MADE. See table 4.

Table 4: Staged reached in Advanced Model disaggregated by year

YEAR	STAGE	ADVANCED MODEL LEVEL		
		A	B	C
4	Baseline	19 partners (58%)	14 partners (42%)	0
5	Achieved	1 partner (3%)	11 partners (34%)	20 partners (63%)
6	Originally Expected	6 partners (18%)	17 partners (52%)	10 partners (30%)

Total investment leveraged by the selected partners over the period was [redacted] (validated figure) against a projected [redacted]. MADE co-invested [redacted] in support of the above partner firms during Year 5. See Table 5 below.

Table 5: MADE support and partner co-investment disaggregated by year

YEAR	BUDGETED		ACTUAL	
	MADE CO-INVESTMENT	PARTNER INVESTMENT	MADE CO-INVESTMENT	PARTNER INVESTMENT
1	[redacted]	[redacted]	[redacted]	[redacted]
2	[redacted]	[redacted]6	[redacted]	[redacted]
3	[redacted]	[redacted]	[redacted]	[redacted]
4	[redacted]	[redacted]7	[redacted]	[redacted]
CUMULATIVE TOTAL 1-4	[redacted]	[redacted]8	[redacted]	[redacted]
5	[redacted]	[redacted]	[redacted]	[redacted]
Year 5 adjusted with 85%[3]				[redacted]
VALIDATED Y5				[redacted]
CUMULATIVE TOTAL Y5				[redacted]

Partner investment in Year 5 increased by 45% compared to Year 4, despite reduction of number in MADE partners. This reflects the selection process undertaken by MADE in Year 5, which emphasised the need for scale and the additional outreach secured by support enterprise.[4]

Perhaps more important was the total area of land under cultivation. Farm size was an important consideration in the decision over outreach capacity during partner selection. In Year 5, lead firms were encouraged to work with smallholder farmers with a minimum of two acres of land available for planting. For the same level of outreach (number of SHFs), Year 5 firms were in fact operating at twice the productive output compared to partner firms in Years 3 and 4, when average farm size was between one and two acres. This demonstrates a deepening of the relationship and ability for partners to increase their input provisions to their existing farmers. The 10% increase in land use beyond that

[3] Verified % of SHFs receiving inputs and services from the partners

[4] The budgets for Year 5 Lead Firms include costs associated with support enterprises

budgeted during the scoping sessions (see Section 5 - Results) understates the real scaling up of ambition achieved by the 33 lead firms and their support enterprises in Year 5.

BUILDING AGRIBUSINESS CAPACITY

Engagement with MADE partners throughout the first four years of the programme revealed a number of operational constraints and capacity limitations, which could pose a threat to sustaining and expanding the impact of the market systems approach after the MADE programme has closed. For example, deployments of interventions which require long-term investment (e.g. irrigation and mechanisation) are hindered by the propensity for short-term business planning. To encourage partners to adopt longer term and more ambitious growth plans, MADE signed two-year Memoranda of Understanding (MoU) with selected lead partners in Year 5, and launched a series of networking and training interventions aimed at building capacity and improving management systems and processes.

As MADE enters its final year of operations, significant attention is being focused on defining and implementing an exit strategy for the programme, to ensure longer-term sustainability and adoption of interventions designed and implemented in collaboration with partner firms. There is a recognition that the private sector will only fully adopt innovative business models that deliver benefits to SHFs if those models lead to enterprise growth, increased competitiveness and improved profitability. Facilitating growth and development of partner firms has been a key objective of the programme since its inception. MADE has pursued this by designing innovative business models and facilitating access to various business development services.

The emphasis MADE is putting on business growth, productivity and competitiveness during the extension phase stems from a growing acknowledgement that, in order to deliver integrated packages of inputs and services to SHFs, business management capacity must be improved, and investment capital increased. Business growth and diversification require both increased cash flow and improved expertise of business managers, and the effective application of both often requires external technical assistance (TA).

One of the principle indicators of business growth is increased revenue. In Year 5, MADE focused its efforts on supporting its business partners to achieve revenue growth. Baseline data on partners' current levels of revenue earned was collected during the partner selection process. Individual investment targets for each partner were discussed and agreed during finalisation of co-investment agreements and workplans. Only 85% of projected partner investment planned for Year 5 was achieved as a result of some partners' inability to access full credit financing. MADE will take this into account and ensure more realistic budgeting in Year 6. To thoroughly assess the current state of these partner lead firms, to better appreciate the underlining bottlenecks inhibiting their growth, and to chart a path for their longer-term sustainability and competitiveness after MADE, several critical interventions have been initiated and will feature over the remaining life of the programme:

- **Entrepreneurship Training**. To support good management practices at the level of both lead firms and support enterprises, the team commenced discussions and negotiations with a service provider (Empretec) to provide multiple, intensive six-day Entrepreneurship Training Workshops for MADE Lead Firms and Support Firms.
- **Enterprise Benchmarking Competitiveness Assessment**. The team initiated the selection process for a service provider to undertake comprehensive assessment and competitive benchmarking of MADE partners, with the release of TOR and a short-list of service providers, to commence in April 2019 (Year 6, Q1).
- **Provision of Capacity Building Support**. The team published a call for EOI to provide business development support (BDS). Applications were received and 25 firms identified. Evaluation of BDS providers and facilitation of linkage between partners and BDS will be completed in Year 6.
- **Network Facilitation**. The programme organised a Business Network Platform with 104 agribusinesses and allied service providers; it also concluded assessment of seven business networking platforms; MADE will facilitate partner linkages to, and membership of, network platforms during the final year of programme implementation. An MoU was signed with the Ghana Commodity Exchange to build the capacity of MADE's partners in quality control.

- **Provision of Programme Support to Partners**. Partners were supported with pre-season, mid-season and season-ending activities; and MADE partners' participation in exhibitions related to Farmers' Day celebration were facilitated.

BUILDING FARM ADVISORY CAPACITY AND SUSTAINABILITY

The provision of farm advisory services (often referred to as "private extension services" to distinguish them from services provided by the government's extension directorate) is the key element of the Advanced Model, and is required for each of the three bundle levels in order to achieve the SHFs "Seven Rights". Organic business growth and formal and informal joint venture arrangements per se will not ensure that this element is delivered effectively and efficiently, and this area of work falls outside the usual competency of business development advisers engaged to build agribusiness management capacity.

It is also expensive to maintain, since it relies on the availability of many trained field staff working at farm level at ratios of 1:200 SHFs. With an average outreach target of 2,000 SHFs (see Table 1), MADE's agribusiness partners must engage and deploy an average of 10 FEAs/BDAs in order to satisfy programme support commitments. In practice, most partner firms have also had to engage one or more farm advisory managers to supervise their work. This amounts to over 350 farm advisers and farm adviser managers across the 33 lead businesses.

A rapid assessment of partner firms' training needs in November 2018 identified a severe shortage of trained staff capable of undertaking this work and exposed a reliance on MADE support to ensure effective deployment. The two factors identified by businesses as likely to affect their ability to maintain the service after the MADE programme ends were the ability of FEAs to identify reliable out-grower farmers and to ensure a guaranteed return on investment resulting from improved yields and quality of supply. An acceptable return must be both seen and proven.

During the final quarter of Year 5, MADE has engaged with specialist service providers to help design a series of selective training courses aimed at improving the professional capacity of FEAs, with an emphasis on farming as a business enterprise and the development of knowledge and skills to improve community entry, out-grower farmer identification, recruitment and engagement. MADE is also focusing on improving the data collection and management tools needed by FEAs to perform their field duties properly and efficiently. A company has been selected to develop an M-Access tool as a paperless data management system which can be adapted and upgraded to the specific needs of the agribusiness partners. The critical interventions that have been initiated and will feature over the remaining life of the programme include:

- **FEA/BDA Capacity-Building Training.** Service provider [redacted] has been selected to undertake a training needs assessment, develop a curriculum, outline training modules and deliver training to 100 selected FEA/BDAs (three from each partner firm). The curriculum and training modules will be developed jointly by Damongo (under the control of MoFAs Directorate of Extension Services) and the MADE team.
- **Farm Business Management Training.** To support good farm management practices, MADE released TOR for the development of a Farm Business Management Training. By the end of Year 5, a total of 17 proposals had been received, with a service provider to be selected in April 2019 (Year 6, Q1).
- **Data Management Systems.** Service providers to develop an agribusiness data management system to enhance partner information management and build digital credit histories have been shortlisted, with a contract to be executed and tool developed in Year 6.
- **Gender-Sensitive Business Case.** A concept note for a gender-sensitive business case for private sector actors in northern Ghana has been approved and the process is underway to commence implementation of the activities.
- **Return on Investment Study.** A concept note for this work will be produced early in Year 6, with a view to contracting an expert to undertake the work at the end of the 2019 harvest.

In addition to the above, and to further support capacity building of FEA/BDAs, MADE held an orientation session with lead firms to review critical activities to be undertaken by FEA/BDAs within the production cycle, the commercial value of client management and extension services provided by FEAs/BDAs, and ways to incentivise high performance of FEAs/BDAs through monetary rewards such as performance bonuses and commissions.

RAISING AWARENESS OF QUALITY STANDARDS TO IMPROVE SHF ACCESS TO WHOLESALE MARKETS

Much of MADE's early effort was focused on improving the production of agricultural commodities by addressing constraints in SHF access to inputs supplies and services. "Supply push" was seen as a legitimate focus in a climatically challenged region with a single annual cropping season and characterised by subsistence level farming. The development of business models aimed at delivering the "Seven Rights" to enable farmers to extend the acreage under cultivation and improve yields has helped to address some of the supply side constraints, to the point where agribusinesses are now able to secure reliable and increasing quantities of marketable produce. Attention is now turning to market pull and the need to produce wholesale quantities of commodities geared to the needs of the wider market.

MADE is offering its partner firms support in addressing demand requirements by facilitating networking with anchor firms and by raising awareness of options to extend the cropping season through adoption of irrigation and water capture systems, and of the need to adhere to commodity standards, and food safety and quality management requirements. During Year 5, MADE has initiated a number of interventions to improve knowledge and raise awareness, including:

- **Standardisation, Food Safety and Quality Management.** The partnership with the International Institute of Tropical Agriculture (IITA) to promote Aflasafe as a control for aflatoxin in groundnut, maize and sorghum will continue, with demonstration fields and training of field officers to support adoption and use of Aflasafe by farmers.
- **Capturing and Building on Lessons Learned.** Three regional partner review fora were held to capture lessons learned.
- **Promoting Quality Standards.** Three training fora on quality standards were held in Wa, Bolgatanga and Tamale.
- **Mechanisation and Irrigation.** Evaluation of a range of mechanisation and irrigation service providers was conducted, with study tours and further facilitation between MADE partners and service providers to continue in Year 6.

MAINSTREAMING THE MARKET SYSTEMS APPROACH USING A COMMUNICATION AND INFLUENCING CAMPAIGN

The MADE Programme's influencing and communications campaign to mainstream the market systems approach in Year 5 revolved around two main activities:

1. Increased awareness and adoption of the market systems approach;
2. Showcasing success and advocating the market systems approach.

Increased awareness and adoption of the market systems approach

Key outcomes of this activity were the update and distribution of the MADE brochure and snapshots on the rice and groundnut sectors highlighting key programme results and approaches. These communications materials were disseminated to key stakeholders at meetings and events such as the Business Network Platform (BNP) forum and National Farmers day exhibition held in Tamale in December 2018; and regional partner meetings held in the Northern, Upper East, Upper West and Brong Ahafo regions in February 2019. The snapshots were posted on the MADE website to make them accessible to a wider target audience.

Information on MADE's innovative models and approaches promoted through partnerships was shared during engagements with senior government officials of the Ministry of Food and Agriculture at district, regional and national levels, as well as regulatory bodies like the Plant Protection and Regulatory

Services Directorate of MoFA (PPRSD), the Environmental Protection Agency (EPA) and the Food and Drugs Authority (FDA). The programme also participated in key stakeholder meetings and events such as the Ghana Beyond Aid Forum in Bolgatanga and Agricultural Sector Working Group (ASWG) meetings. This helped increase awareness about the programme and its models among the targeted stakeholders, to influence them to adopt the market systems approach.

Showcasing success and advocating the market systems approach

MADE contracted [redacted] during the last quarter of Year 5 to produce a short video, a key tool to be used in showcasing successes made in promoting the market systems development approach to partner businesses. [redacted] in partnership with the MADE Programme team successfully created a storyboard and shooting schedule for filming the video with selected partners and beneficiary SHFs.

The Communications Specialist and Market Development Team developed themes for the documentation of success stories and case studies. Documentation of three success stories was initiated through collaboration with partner lead firms. These success stories and case studies are based on key lessons and successes reported by the partner businesses as a result of adopting the innovative business models MADE promoted to them.

MADE supported three partner firms to exhibit at the annual farmers' day fair held in Tamale, Northern Region, from the 2nd to 7th December 2019. The event allowed the businesses to display their products and services and share with participants the benefits of adopting and investing in commercially viable business strategies such as those promoted by the MADE programme.

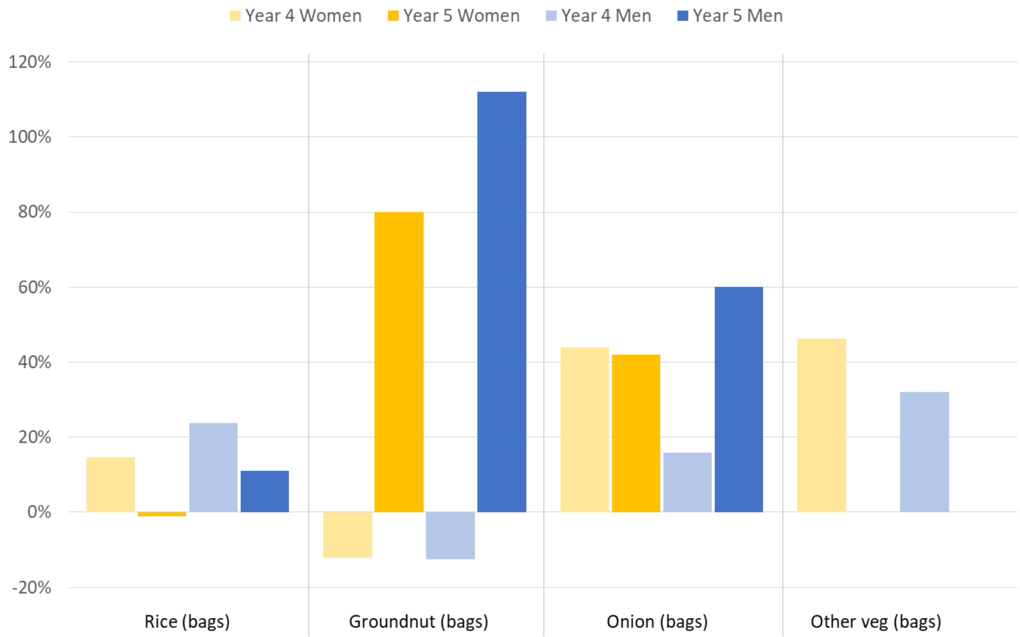
A communication and influencing strategy for Year 6 was developed with input from MADE and Nathan London and submitted to DFID for review and approval. The strategy document articulates key areas, targets, opportunities, messages and communications materials required to progress the MADE influencing agenda. This has yet to be agreed and actioned in Year 5; in Year 6 MADE will focus on producing a clear pipeline of communication outputs and products.

SECTION 4. SHF RESILIENCE, PRODUCTIVITY AND INCOME

This section of the report presents the overall progress achieved towards reinforcing MADE gains in improving the resilience, productivity and income of smallholder farmers.

Significant gains in SHF income and productivity have been observed during the life of MADE. As of the end of Year 5, verified cumulative average yields reported by partner firms had increased by 349% across all commodities. Yield growth and an increase in the average land size under production in Year 5 helped 18,580 SHFs, of whom 6,113 (33%) were women, to raise incomes on average by [redacted] and to generate over [redacted] of additional net income. See figure 2.

Figure 2: Percentage increase in yield disaggregated by sex



During the year, MADE partners provided inputs and services to SHFs to enable them to carry out mid-season activities for the cultivation of their crops. The services and inputs delivered as part of the MADE Advanced Model included:

- Field day trainings on weed control management practices;
- Supplying fertiliser and pesticides;
- Field day trainings on fertiliser application;
- Supervising the timely control of weeds;
- Supporting SHFs to manage incidences of pest and diseases on their farms;
- Monitoring and supervising fertiliser application;
- Supporting SHFs to update data on their crops;
- Carrying out pre-harvest monitoring.

During Year 5, a total of 57,211 SHFs (reached by lead firms and support enterprises) received inputs and services from MADE lead partners. Of these, 30,866 (54%) were new SHFs who had not previously received services from MADE partners; 15,456 (27%) were new SHFs who received climate change coping support (144% of target); and 14,775 (26%) were new SHFs who accessed input credit and /or financial assistance, representing 145% of the overall target for Year 5. Cumulatively, MADE lead partners invested a total of [redacted] in providing critical inputs and services within the pre-season and season-beginning periods (Q1 and Q2). This represents 84.59% of the planned investment of [redacted] across all markets for Year 5.

In the fourth quarter, MADE partners provided harvesting and post-harvesting services to SHFs to enable them carry out end-of-season farm operations. Lead partners and their support enterprises facilitated SHFs access to and use of harvesting services such as farm machinery (e.g. combine harvesters) and equipment (e.g. threshers and shellers), close monitoring and tracking of SHF and partner firm investments in harvesting activities, weighing and bagging of produce in the field, in-kind recovery, buy-back/extra purchases, produce consolidation, and transportation to designated warehouses. Other reported aggregation activities include further drying of aggregated produce, winnowing/cleaning, sorting, grading, re-bagging and supply to output markets.

During year 5, a total of 26,313 SHFs received a range of harvesting and post-harvesting services from 27 lead partner firms and their affiliated support enterprises. Cumulatively, the 27 lead firms invested a total of [redacted] in the provision of these critical services, as summarised in Table 6 below. 40% of the SHFs receiving access to mechanisation services were women farmers.

Table 6: Summary of harvesting services brokerage

MARKET	SERVICE TYPE	NUMBER OF SHF BENEFICIARIES			BUSINESS INVESTMENT	
		MALE	FEMALE	TOTAL	ACRES	VALUE (GHS)
Maize	Shelling	11,373	7,570	18,943	68,905	[redacted]
Rice	Combine/ Threshing	2,554	2,239	4,793	14,211	[redacted]
Soya bean	Threshing	812	537	1,349	3,646	[redacted]
Sorghum	Threshing	1,001	227	1,228	2,269	[redacted]
TOTAL		**15,740**	**10,573**	**26,313**	**89,031**	[redacted]

Recovery of input credit, extra purchases and aggregation activities are still on-going. However, preliminary data indicates that SHFs supplied 77,783.60 metric tonnes of assorted produce[5] to partner firms in Year 5. The programme did not interrogate the budget data in order to determine levels of increase in land area under cultivation. A full study of this and growth in output/productivity will be undertaken in Year 6. This constitutes 64.6% of projected volume of produce to be aggregated for the season. Recovery and extra purchases, including critical value addition aggregation activities will continue until April 2019 (Y6 Q1). The partners have indicated that over 100% of volumes aggregated will be mobilised from the SHFs, following evidence of extra produce as a result of increased productivity experienced by SHFs.

MADE strives to implement a gendered approach to market development. In Year 5, women made up 36% of all the SHFs who experienced higher yields as a result of new or improved models introduced by MADE partners (see figure 2 above). The number of women SHFs experiencing positive income change substantially exceeded the log-frame target, see Figure 3.

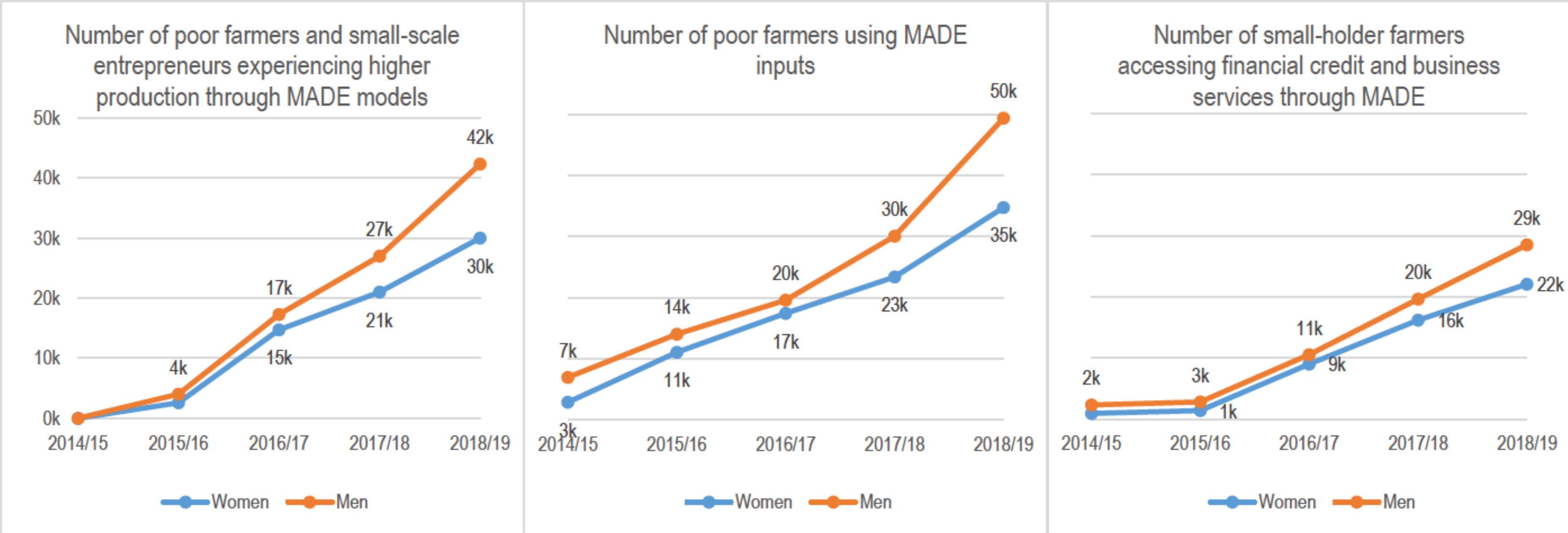
Figure 3: Average income growth per SHF disaggregated by sex

[redacted]

Feedback from MADE partners indicates that they are seeing the commercial benefits of offering services and advice to women SHFs. Women tend to be "first adopters" of new farming practices, resulting in increased yields and productivity and fulfilling commercial agreements they have with MADE partners. While the proportion of female to male SHF outreach appears to have fallen from Year 4 (44%) to Year 5 (33%), the number of female SHFs supported by MADE has continued to exponentially grow. See figure 4. This will be investigated in the Gender Assessment conducted by MADE in Year 6.

5 Maize, rice, groundnuts, sorghum and soybean

Figure 4: Exponential growth of SHF disaggregated by sex



These benefits are likely to encourage existing MADE partners to offer their products and services to an increasing proportion of women SHFs. However, without continued promotion and building of a strong commercial case for the inclusion of female farmers in the mainstream market approach, it is not certain that agribusiness adopting and replicating the MADE core models (crowding-in) will take the necessary actions to ensure these groups of SHFs are included.

As of the end of Year 5, MADE developed a concept note to compile relevant evidence aimed at making a business case for partners to undertake more commercial transactions with women SHFs and adopt more inclusive business practices. The programme plans to compile the required evidence for the above business case in Q1 of Year 6.

As part of the promotion of the Advanced Model, partner firms increased their investment in climate smart agricultural (CSA) practices, which are very useful in on-farm cost reduction, including enhancing crop performances and improving the quality of harvested produce aggregated and supplied to output markets. The increase in the investment in CSA practices as part of the package of inputs and services delivered to SHFs is enhancing the return on investment of both the agribusinesses and their affiliated SHFs. In Year 5, a total of 36,787 SHFs reported to have invested in varied CSA practices, representing 55% of the total outreach recorded by the 33 lead firms and their affiliated support enterprises.

To ensure there is readily available information on varied and successful CSA practices and sustained investment on selected CSA practices by partner firms, the programme worked closely with the partner firms and other development actors[6] to document existing CSA practices suitable for the NSEZ towards mitigating the negative impacts of climate change.

The CSA practices documented covered both commonly practiced and non-practiced practices, including how these practices are rolled out and their benefits to soil and water conservation for improved on- and off-farm productivity and profitability. This document has been shared with partner lead firms. In Year 6, the programme will consciously work with the partner firms to introduce CSA practices that are not already practiced but readily accessible and affordable to their affiliated SHFs. CSA practices will feature in the selected partner firms' work-plans and budgets for the 2019/2020 business season.

6 [redacted]

SECTION 5. MEASUREMENT AND RESULTS MONITORING

Following approval of the extension phase, the programme log-frame was revised to align with the objectives of this phase, introducing changes at various results levels to incorporate lessons learned during the initial phase.

At the outcome level, three income-based indicators were added to the existing indicators on sales/turnover and systemic change: number of smallholder farmers and small-scale entrepreneurs in MADE target markets experiencing positive income change; number of SHFs who experience income increase over £80; and average income increase (£) per SHF experiencing positive income change.

These changes are intended to offer a better understanding of the depth of benefits delivered to clients, which is more accurately reflected by income change than simply sales/turnover.

At the output level, the existing indicator on evaluation reports and IE outputs was replaced by three VfM indicators: management cost per facilitation; facilitation cost per beneficiary; and amount of additional private sector investment leveraged. These indicators are intended to measure the extent to which the programme is being delivered at value for money.

Other key changes include the revision of impact weighting scores: Output 3 (market system rules and practices) was revised upwards from 15% to 25%, while Output 4 (VfM) was revised downwards from 20% to 10%.

Table 7 below shows the full results from Year 5 of implementation, with the relevant analysis.

Table 7: Year 5 Log Frame

RESULTS AND INDICATOR STATEMENTS	EXTENSION BASELINE[7]	YEAR 5 CUMULATIVE		YEAR 5 ACTUAL[8]	ANALYSIS[9]
		TARGET[10]	RESULT[11]		
OUTCOME -To improve incomes and agricultural yields of poor farmers and small-scale rural entrepreneurs in northern Ghana through systemic change in target markets					
Outcome Indicator 1a Number of smallholder farmers and small-scale entrepreneurs in MADE target markets experiencing positive income change	48,220* (21,073)	57,500 (25,500)	65,868 (26740)	17,648 (5,667)	From the crop survey, 74% (68%) of the respondent SHFs achieved positive income increase. Based on our ToC, this percentage was applied to the number of SHFs experiencing increased yield (Outcome 3) to determine the indicator result. Information from the key informant interviews support this result, with over 88% of responses from MADE agribusiness partners confirming that SHFs achieved more income in the 2018/19 season compared to the previous year. FEA/BDA support, use of more/quality inputs, better market access and prices were highlighted as key factors.
Outcome Indicator 1b Number of SHFs who experience income increase over £80	31,061* (11,739)	40,000 (18,500)	46,487 (16,615)	15,426 (4,876)	Crop survey results show that 64% (58%) of the surveyed SHFs recorded income increase of over [redacted]. This percentage was then applied to the number of SHFs experiencing increased yield (Outcome 3) to determine the result of the indicator.
Outcome Indicator 2 Average income increase (£) per SHF experiencing positive income change	[redacted]	[redacted]	[redacted]	[redacted]	Income increases per SHF with positive income change averaged [redacted] for all crops. The cumulative indicator result was then determined by subtracting the 2015 baseline value of [redacted] from the Y5 result. Male SHFs performed better ([redacted]) than female SHFs ([redacted]). Farmers cultivating maize, groundnut and other vegetables performed best, with average income increase of [redacted] and [redacted] respectively.
Outcome Indicator 3 Number of poor farmers and small-scale entrepreneurs who show, respectively, higher sales[12] and higher turnover (volume of production) as a result of new or improved models	48,164 (21,059)	59,500 (26,500)	72,092 (29,404)	23,928 (8,345)	2018/19 crop season survey results show that 82% (79%) of surveyed farmers achieved positive increase in yield compared to 2017/18 season yield performance. This percentage was applied to the validated number of farmers benefiting from MADE's improved models-SHFs receiving any of the various inputs or services to determine the indicator result. Generally, cultivated land sizes increased by 10%. From the key informant interviews, over 80% of the FEAs/BDAs affirmed that their SHFs recorded increased yields, which they attributed mostly to the provision of integrated inputs, GAP advisory support and favourable climatic conditions. Responses from SHF FGDs also align with this result - *"I have realised*

7 Year 1-4 achieved results
8 Sex disaggregation by female in brackets
9 See full calculations/details in Y5 Results summary sheet attached
10 Sex disaggregation by female in brackets
11 Sex disaggregation by female in brackets
12 Information only available on higher yields and sales of SHFs. Information on partner businesses unavailable.

introduced with facilitation by MADE					*an increase in the yields of my soya beans now. Due to the support from* [redacted]*, I have learnt new techniques that have improved my yields considerably".*
Outcome Indicator 4 Number of instances of progress towards systemic change (see MADE's definition of systemic change)	17	18	32	15	Data for this indicator was sourced from field reports from the MDS and key informant interviews with lead firms and support enterprises. Following desk review and triangulation by the MDMs and MLS, a total of 15 instances of systemic change (8 adapt, 4 expand, 3 response) were certified for inclusion in Y5 (see Annex 3 for full list of systemic changes captured). This result further supports the maturing stage of MADE-piloted intervention models. Agribusiness firms are investing adapted versions of the model to new markets and regions. Several peer agribusiness firms having seen value are crowding in and working with support enterprises. Non-competing market actors are also changing their practices in response to the improvements in the market system.
OUTPUT 1: CORE - Selected rural market systems work more effectively for poor farmers and small-scale rural entrepreneurs. Impact Weight: 40%					
Output Indicator 1.1 Number of market actors facilitated by MADE changing their business practices and/or forming new partnerships in markets facilitated by MADE (support enterprises in brackets)	68	75 (9)	77 (11)	9 (11)	MADE signed contracts with 33 lead firms in Y5 to implement the Advanced Model. 31 of these businesses demonstrated enough evidence (from milestone reports, field assessments and financial records) of changing their business practices by adopting and implementing various components of the Advanced Model. Of the 31 lead firms, 9 were engaged by MADE for the first time. To enhance their ability to successfully implement the Advanced Model, the 31 lead firms engaged a combined total of 56 firms as support enterprises (20 of which were facilitated by MADE to contribute directly to their outreach numbers, the other 36 were engaged directly by the lead firms to support them with other services). Of the 20 support enterprises facilitated by MADE, 11 had no previous working relationship with MADE.
Output Indicator 1.2 Number of poor farmers who use new or improved inputs as a result of facilitation by MADE	53,495 (23,388)	66,000 (28,000)	82,670 (33,909)	29.175 (10,521)	Data on new SHFs receiving new or improved inputs (seed, herbicide, NPK, urea, inoculant, TSP, SA, pesticide, organic manure) from agribusiness partners was subjected to multiple layers of validation as follows: First, data was stripped of duplicates within each individual partner records and across partners and sectors, bringing the total number of unique SHFs reached to 31,464 (11,344). Next, an average validation percentage of 77% (73%) was determined (halfway between the % of SHFs receiving inputs as contained in partner milestone reports and % verification from the annual survey) and applied to the number of unique SHFs to obtain the indicator result.
Output Indicator 1.3 Number of poor farmers supported by MADE to cope with the effects of climate change / ICF Indicator	47,784 (19,831)	58,500 (26,000)	63,240 (26,145)	15,456 (6,314)	Support for climate change adaptation/mitigation based on Y5 implementation covers the provision of improved seeds, inoculant and organic manure to SHFs. The same validation process used in Output 1.2 was applied to this indicator. After the identification and deletion of duplicates within each individual partner records and across partners and sectors, the total number of unique SHFs supported to cope with the effects of climate change came to 26,740 (9,929). A validation % of 58% (64%) was determined (halfway between the % of SHFs receiving climate change support as contained in milestone reports and % verification from the annual survey) and applied to obtain the status of the indicator.

OUTPUT 2: SUPPORTING - Supporting functions to effective markets strengthened. Impact Weight: 25%					
Output Indicator 2.1 Number of SHFs accessing financial, credit, and/or business services through MADE support	35,809 (16,175)	46,000 (21,000)	50,618 (22,054)	14,809 (5,879)	This indicator counts the number of SHFs receiving input credit and and/or financial services. The total number of SHFs in this category came to 27,243 (10,910) after rigorous data cleaning to remove duplicates within each individual partner records and across partners and sectors. A validation % of 62% (65%) was determined (halfway between the % of SHFs receiving services as contained in milestone reports and % verification from the annual survey) and applied to Y5 result.
Output Indicator 2.2 Number of new or improved services or products being provided to smallholder farmers or small-scale entrepreneurs as a direct result of MADE's facilitation	31	31	34	3	MADE introduced commercial partnership through adoption of support enterprises as a component part of the Advanced Model. This is aimed at supporting lead firms increase their service offering and reach out to more smallholder farmers. Specific services rendered by MADE in this regard include identification of viable support enterprises, provision of draft MoU templates, structuring of partnership agreements, relationship building/management. A total of 20 formal commercial partnership arrangements between lead firms and support enterprises were facilitated in Y5. MADE partners were also introduced to various Business Network Platforms for the purposes of networking, access to finance, market access and capacity-building opportunities, resulting in a further 36 informal arrangements. Lastly, Aflasafe was introduced as part of the crop protection package provided to SHFs cultivating groundnut and maize by partner agribusiness firms.
Output Indicator 2.3 Percentage of surveyed market actors (who do not receive facilitation through MADE) who report positive perceptions of relevant business models supported by MADE	84%	85%	88%	92%	From a pool of 61 non-MADE supported agribusinesses (compiled mostly from responses to EOI floated by MADE in Y5), 20% were selected and interviewed to determine their perception towards MADE's promoted models. Eight of the firms expressed knowledge/usefulness of the Advanced Model and have implemented some of the components, albeit with adaptations. Three firms admitted not knowing about the model, but on having it explained appreciated its usefulness and expressed willingness to implement it on their own. One of the firms interviewed had no knowledge of the model and did not express any willingness to implement unless backed with support from MADE. See working definition for Output 2.3 for detailed methodology.
OUTPUT 3: RULES - More effective rules and practices of market system in selected sectors. Impact Weight: 25%					
Output Indicator 3.1 Number of changes in regulation, policy and informal market rules brought about as a result of the programme	17	20	22	5	Five more changes in informal market rules were achieved in Y5. The use of binding agreements between MADE lead firms and their support enterprises in the form of supplier credit agreements was adopted by MADE partners. Others include the issue of performance contracts to FEAs; promotion of strategic commercial partnerships among agribusinesses leading to increases in investment in the delivery of integrated package of inputs and services to SHFs; introduction of more responsive SHF selection criteria that allows agribusinesses to identify and work with more productive and responsive SHFs; introduction of inputs and services bundling and delivery to partner agribusinesses to effectively and efficiently serve as "one-stop shop" for inputs and services delivery to SHFs.

Output Indicator 3.2 Level of satisfaction of surveyed market actors with key aspects of commercial relationships facilitated by MADE	High	High	High	High	To measure levels of satisfaction among surveyed market actors concerning key aspects of commercial relationships facilitated by MADE (formality, contract adherence, service provision, repeat engagement and trust), 43 agribusiness firms were interviewed (including 23 MADE-supported lead firms). A 5-point Likert Scale was used to identify and rank agribusiness firms' perception of each aspect into 5 rating cohorts of very unsatisfied, unsatisfied, neutral, satisfied and very satisfied. Out of the possible 30 points, results showed a combined average rating score of 23.1 points (Lead firms - 23.9 points, non-MADE supported enterprises - 22.1 points). According to [redacted] *supplied us over 2,600 litres of weedicides and pesticides under mutually agreed terms in the 2018/2019 season and all the informal agreements have been properly adhered to without any issues. We have worked with them without any problem. Regarding* [redacted] *and* [redacted]*, we have worked with them in the areas of ploughing, harrowing and threshing services without any major challenges and both parties mutually benefit from the collaboration".* See working definition for Output 3.2 for detailed methodology.
OUTPUT 4: PROGRAMME - Programme is being delivered at value for money. Impact Weight: 10%					
Output Indicator 4.1 Management cost per facilitation (intervention fund) £ spent	[redacted]	[redacted]	[redacted]	[redacted]	This result is calculated using the VfM figures from Year 4. The management fees do not change, while we have not spent our intervention fund at the rate budgeted.
Output Indicator 4.2 Facilitation (intervention fund) cost per beneficiary (cumulative)	[redacted]	[redacted]	[redacted]	[redacted]	The cost per beneficiary has decreased by [redacted] this year. This is a positive move, as we are spending less to achieve the planned interventions.
Output Indicator 4.3 Amount of additional private sector investment leveraged	[redacted]	[redacted]	[redacted]	[redacted]	A total of [redacted] was leveraged as additional investment from 33 lead firms engaged in Y5. This amount represents the total co-investment to the funds provided by MADE for the implementation of the Advanced Model. In Y5, MADE budgeted a total of [redacted] as support ceiling for the partners who proposed to invest [redacted] as counterpart funding. However, evidence (from financial reports and milestone reports/payments, contracts with FEAs/BDAs, MoUs with support enterprises, etc.) showed that the partners drew 98% of MADE budget and met their proposed investments in the Advanced Model activities. This figure was further validated by applying the verified percentage of farmers who received inputs and services (85%) on the total amount leveraged.

SECTION 6. PROGRAMME MANAGEMENT

There was a significant shift in staffing during Year 5, which also led to a change in the programme management approach compared with previous years. During Year 5, the programme team focused heavily on learning lessons, and actively introduced course correction as necessary to match requests for changes to strategic direction proposed by the partners, as well as the client. The programme management team, both at HQ and in the field, also focused on creating more mainstream business practices, which led to more timely delivery of the programme and key reporting to the client.

Overall, there were still gaps in achieving deliverables on time, and a key challenge faced this year was around delayed agreement of scope. Seeing that scope, time and budget are the three pillars of delivering a programme, the lag in planning also led to delays in delivery and difficulties in meeting the agreed budget. The key priority for Year 6 will be to apply all the lessons learned from Year 5 to ensure that the programme is delivered on time, within budget and successfully achieves all its outcomes. Below is a summary of progress in the key functions of programme management: financial management, operational management, technical management, human resources, and risk and compliance management.

FINANCIAL MANAGEMENT

During this year, the programme budgeted [redacted] and spent [redacted], 67% of the planned amount. Most of the variance is due to the Intervention budget, where the programme spent just [redacted] (52%) out of the total [redacted]. Table 8 below shows a summary of spending from Year 5.

Table 8: Summary of spend to-date

BUDGET LINE	EXTENSION BUDGET	YEAR 5				EXTENSION BALANCE[13]
		BUDGET	ACTUALS	VARIANCE (GBP)	VARIANCE (%)	
FEES	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
REIMBURSABLES	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
INTERVENTION	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
TOTAL	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

This shortfall in spending is attributed to two factors; one, as discussed above, is the delay in carrying out scope, and the other is that the team did most of the work internally. The delay in delivering the scope is attributed to the implementation being halted due to the process of finalising the Extension Business Plan, as no MoUs or Partnership Agreements were signed with partner firms until Y5 Q2. In addition, once the team started to implement activities, internal consultants were used, both in the field and at HQ, to deliver facilitation and planned assessments. This method of delivering was chosen because the team is familiar with the programme and there would not be a need to undergo a potentially lengthy procurement process. However, during the Q3 "pause and reflect" exercise, the team highlighted the need to move towards contracting service providers, both independent consultants and firms, to support with the delivery of the planned programme activities (see more details under Technical Management). This shift has proved successful in ensuring that activities are simultaneously delivered in time, by experts in the field.

In Year 6, the programme plans on closely monitoring the spending and ensuring activities are carried out based on planned timeline. The Y6 budget was put in place closely with the headquarter team and lags were included to allow for potential delays in delivery. In addition, the programme plans on providing a more detailed variance report on an activity level to the client monthly to allow for them to accompany the process closer.

13 The balance will be considered when completing the Year 6 Work planning Exercise. Please refer to the submitted Budget for Y6 details.

Fees

Fees are set in quarterly amounts; any variance is associated with either missed deliverables or key performance indicators (KPIs) during the quarter. Table 9 gives a breakdown of the fees for Year 5.

Table 9: Breakdown of fees invoiced in year 5

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
Fee Expenditure	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Deliverables Achieved	5/9	7/9	8/9	4/8	24/35
Percentage of KPI	75%	100%	80%	76%	82.75%
Amount invoiced to client	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

As the programme experienced delays in meeting deliverables during Year 5, Nathan Associates and DFID agreed on the following process:

The quarterly fee invoice is considered in two parts, 95% linked to achievement of deliverables and 5% linked to achievement of KPIs. Regarding achievement of deliverables, 50% of those 95% are payable automatically at the end of the quarter; the remaining is to be paid based on completion of agreed deliverables. Therefore, for each deliverable that MADE does not complete, a proportion of the 45% (half of 95%) value of the fees for the quarter is withheld. For example, if the quarter has 9 deliverables and MADE fails to complete 3, 15% of the value of the fees will be withheld. Once each deliverable has been completed, Nathan will inform DFID of its completion, and once DFID agrees that it has been completed, Nathan will submit an invoice for the value withheld for that deliverable and submit it at the same time as the regular monthly grant invoice. Quarterly deliverables and/or the time frame for their delivery can be amended with agreement from DFID.

Reimbursables

Reimbursables are invoiced on a quarterly basis, and costs associated with this were flat lined in the Year 6 budget, without considering the high and lows of expenditure in relation to implementation of the programme. See Table 10 below for the breakdown by quarter of the Reimbursable Budget.

Table 10: Breakdown of reimbursables invoiced in year 5

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
Budgeted Expenditure	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual Expenditure	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variance (GBP)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variance (%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

While the variance is high in some quarters, the overall variance for the year is of 20% over the budgeted amount. The biggest takeaway from this year is the need to budget the reimbursables in conjunction with the overall programme delivery; this has been considered for the Year 6 work planning and budgeting exercise. In addition, expenses were higher than expected as the programme expanded from one expatriate staff member to a team of seven individuals who relocated to Tamale to implement this programme. This meant that the programme had unexcepted relocation costs, flights and housing allowances to cover during this year.

The programme is aware of the current high-level of spend in the reimbursable budget line and is taking appropriate measures to track this in Y6 to ensure that the budget is not overspent. This includes closely monitoring the budget, providing financial updates to the client on a monthly basis, and closely looking at weather costs are more in-line to be expensed in the intervention budget. For instance, now that the budget is activity-based, we can link travel for consultants to activities and charge accordingly.

Intervention

The Intervention Budget covers all costs associated with the technical delivery of the programme, so the majority of variance in this budget relates to the delay in delivery of programme activities discussed above. Therefore, the programme spent only 48% of the budget amount allocated for intervention this year (52% variance). See Table 11 below for a breakdown of intervention costs for Year 5.

Table 11: Breakdown of Interventions invoiced in Year 5

	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	TOTAL
Budgeted Expenditure	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Actual Expenditure	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variance (GBP)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Variance (%)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Another major issue for this year concerned the budgeting process, which followed a flat-line approach for each quarter without accounting for the timeline of delivering activities. This was a major gap identified in Q2, during the programme's first "pause and reflect" meeting. Based on this finding, the programme manager worked closely with the team to develop an activity-based budget to budget for and track expenditures based on the scope of work. This tool was adopted in Q3 and allowed the team to provide more accurate reforecasting to the donor on a monthly basis[14] and to better understand its spending. A comprehensive analysis was presented to the client and senior management during the annual "pause and reflect" meeting in February 2019. This analysis also led to a closer budgeting exercise for Year 6.

OPERATIONAL MANAGEMENT

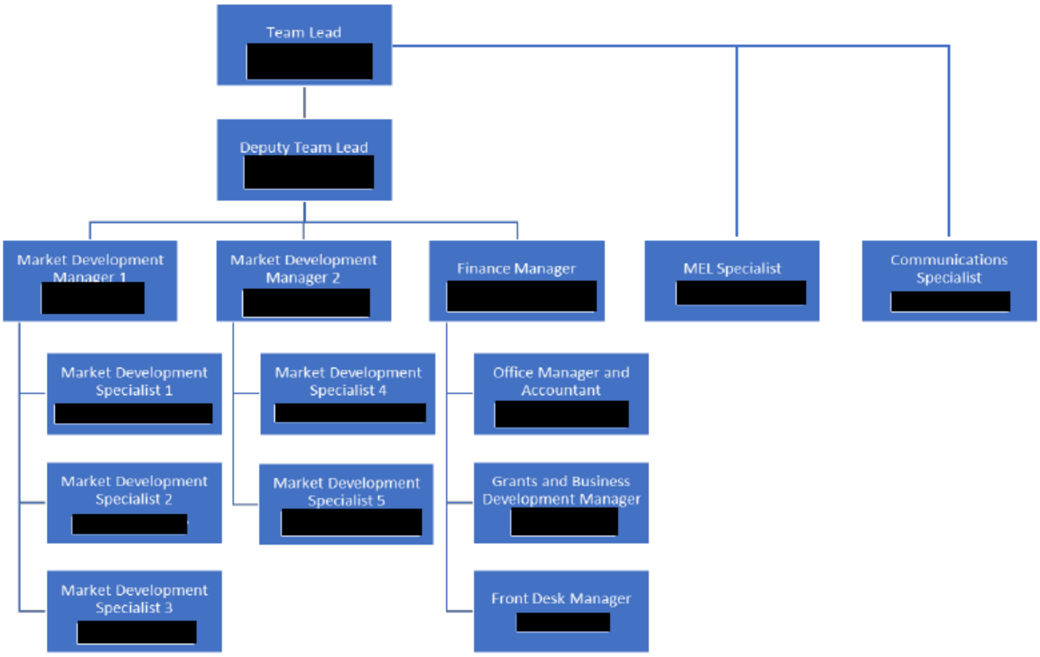
The programme is being effectively operationalised to ensure that the correct support is available in the right place.

Organisational Structure

In line with MADE's redefined focus during the extension phase, several key operational changes were made. These include a satellite operation in Accra to support the communications and influencing campaign. The team leader and the communications specialist split their time between the Tamale office and Accra. The newly recruited deputy team leader manages the day-to-day operations in Tamale. In addition, MADE's Market Development Team was restructured, see Figure 5 below. Also, with the appointment of the new deputy team leader, bank accounts were updated to add the her as a signatory to the accounts.

14 [redacted]

Figure 5: Year 5 organisational structure



Effective Implementation

Although there were substantive changes in local team structure and composition, the programme continued to receive the appropriate internal and external support to ensure effective implementation. To ensure smooth transition and effective delivery of planned work, programme staff with specialist technical and operational capacities, including [redacted] stepped in to support the team during key brainstorming and strategic sessions, to fill gaps within the team.

In addition, Nathan Associates have filled technical and operational gaps by identifying internal staff in London who can provide support for the delivery of key implementation activities. For instance, [redacted] were brought in to assist the MADE team in specific areas where local expertise was not available. [redacted] developed the M-Access concept note, worked through the methodology and are now deploying the tool that will be rolled out in Year 6. While there was no M&E specialist in post, [redacted] provided backstopping support to the M&E function once he had stepped down as programme manager. Katherine supported the development of the gender concept note and methodology and will work on the Y6 scheduled work under this approved methodology.

Table 12: Headquarter-based backstopping technical support

ROLE	NAME
Technology and Innovations Specialist	[redacted]
Technology and Innovations Specialist	[redacted]
Gender Specialist	[redacted]
Gender Specialist	[redacted]
Monitoring and Evaluation Specialist	[redacted]

In addition, the team procured service providers to fill operational and technical gaps to ensure effective implementation. See Table 13 below for a breakdown of service provisions procured during Year 5.

Table 13: Breakdown of service provision in year 5

SERVICE PROVIDER	CONTRACT NUMBER	TYPE OF CONTRACT		CONTRACT CEILING (£)	SPENT TO DATE (FEB 2019)	SCOPE SUMMARY
Damongo Agri College	228-S28	Firm	1 February 2019 to 3 June 2019	[redacted]	[redacted]	The college undertook a training needs assessment of FEAs and BDAs and then developed a training-of-trainers course which will be delivered in Year 6 to approximately 100 FEA/BDAs of partner lead firms. The aim is to improve community and SHF engagement, introduce appropriate extension methodologies and demonstrate best practices with the potential to improve on-farm productivity. There is planned work that will continue in Year 6.
Holly Krueger	228-ISC-42a	Independent Consultant	21 August 2018 to 16 February 2019	[redacted]	[redacted]	The consultant benchmarked MADE's Y4 results against other market systems development programmes using the Value for Money (VfM) Framework.
Image-AD	228-S30	Firm	29 March 2019 to 31 January 2020	[redacted]	[redacted]	MADE identified effective and reliable data management as one of the key challenges faced by partner firms. Following a tender process, Image-AD was selected as the service provider that will develop a tool to assist partner agribusinesses to efficiently collect data and utilise information for their individual business needs. This work will be planned to commence in Year 6.
Knowledge and Skills	228-S29	Firm	14 February 2019 to 31 July 2019	[redacted]	[redacted]	The consulting firm is engaged in the enterprise benchmarking and diagnostics assignment, with responsibility for managing business assessments and assessing the quality of the roadmaps developed by the BDS providers based on the analysis of the SCOPE Insight tool to ensure their relevance and acceptability.
Mateo Cabello	228-ISC-45	Independent Consultant	23 May 2018 to 01 September 2018	[redacted]	[redacted]	The consultant led a political economy analysis to understand the potential for MADE to increase the interest and receptiveness of a wide range of stakeholders to support the use of the market

						systems approach in agricultural development, and to advocate and facilitate for its integration into policy, regulatory and programme debates and actions.
Michelle Stern	228-ISC-46	Independent Consultant	20 March 2019 to 28 June 2019	[redacted]	[redacted]	The consultant will lead in Year 6 the collaborative process of creating a gender-sensitive business case for private sector actors in northern Ghana for the MADE programme. During Y5 Michelle was selected.
Rebecca Smith	228-ISC-45-A1	Independent Consultant	30 April 2018 to 30 September 2019	[redacted]	[redacted]	The consultant is providing on-going technical support to the MADE communications officer.
SCOPE Insight	Licensing Agreement	Firm	13 February 2019 to 30 August 2019	[redacted]	[redacted]	The consulting firm is engaged in the enterprise benchmarking and diagnostic assignment. The firm is responsible for providing their assessment tool and are tasked with training the in-country implementors in order to identify gaps and recommend a set of actions to improve business performance and competitiveness of MADE agribusiness partners.
Lema Concepts Africa	228-SC-002-2019	Firm	11 February 2019 to 1 April 2019	[redacted]	[redacted]	The consulting firm is producing a short video to capture and highlight the innovation in business models implemented over the past 4 years resulting in the MADE Advanced Model. The video showcases the overall benefits this model brings to small-scale rural enterprises and smallholder farmers.
Empretec Ghana	228-SC-003-2019	Firm	1 April 2019 to 30 April 2019	[redacted]	[redacted]	The selected firm will conduct an entrepreneurship training workshop for MADE partner firms as part of efforts to build skills and bring about behaviour change. The workshops are built on the United Nations Trade and Development entrepreneurship's training model to expose businesses to core entrepreneurship competencies.

TECHNICAL MANAGEMENT

During this year, the programme strengthened its technical management by introducing new tools and processes. These include collaborative annual planning workshops, activity-based planning (workplan and budgets), clear designation of responsibilities and backstopping for activities, calendars for reporting DFID deliverables and quarterly "pause and reflect" workshops.

Once the business plan was approved, the programme manager and chief programme adviser facilitated the first "pause and reflect" meeting with the Ghana Team, to plan delivery of the programme's scope of work. This resulted in the team collaboratively putting together their Year 5 Annual Workplan, Year 5 Results Framework, Templates for Reporting, Updated Deliverables and Revised Log frame. For the past three quarters, the team has responded positively to this recurring activity, which takes place on the last week of each quarter. During these meetings the team presents updates on progress in implementing the activities, their successes and any constraints. This meeting allows cross-collaboration and learning between staff at all levels. The meetings are deliberately held on the last week of the quarter and help prepare the team with necessary material for the drafting of the quarterly reports, which are submitted 15 working days after the end of each quarter.

The last "pause and reflect" meeting was held in the week of 18 February 2019 and coincided with the end of Year 5 of the programme. For the first time, the programme director and DFID SRO participated in these meetings. Their presence helped the team to focus on scope and to consolidate activities for the final year of the programme, by reviewing the work accomplished in the extension to date.

HUMAN RESOURCES

During this year, there were numerous changes in the team, both in the field and at headquarters. In Ghana, the team added a new team leader, deputy team leader, M&E specialist and communications specialist. In London, the programme manager, programme director and programme accountant also changed. See below the revised table of staffing as of the end of Year 5.

Table 14: Revised MADE staffing as of Year 5 Quarter 4

ORIGINAL EXTENSION TITLE	REVISED TITLE	INDIVIDUAL OCCUPYING ROLE	LOCATION
Team Leader		[redacted]	Tamale/Accra
Operations Manager	Deputy Team Lead/Chief Operating Officer	[redacted]	Tamale
Lead Market Development - Input Dealer Model	Market Development Manager 1	[redacted]	Tamale
Lead Market Development - Aggregator Model	Market Development Manager 2	[redacted]	Tamale
Market Development Specialist 1	Market Development Specialist 1	[redacted]	Tamale
Market Development Specialist 2	Market Development Specialist 2	[redacted]	Tamale
Market Development Specialist 3b	Market Development Specialist 3	[redacted]	Tamale
Market Development Specialist 4b	Market Development Specialist 4	[redacted]	Tamale
Mechanisation and Irrigation Specialist	Market Development Specialist 5	[redacted]	Tamale
Finance Manager		[redacted]	Tamale
Entrepreneurship & Grants Manager		[redacted]	Tamale
Accountant & Office Manager		[redacted]	Tamale
Monitoring, Learning and Dissemination Specialist	Monitoring and Learning Specialist	[redacted]	Tamale

Information Officer	Communications Specialist	[redacted]	Tamale/Accra
Programme Director		[redacted]	UK
Chief Programme Advisor		[redacted]	UK
Programme Manager		[redacted]	UK
Agricultural M4P Expert		[redacted]	UK

COMPLIANCE AND RISK MANAGEMENT

Compliance

The programme team based in Ghana is closely monitored and guided by the Nathan Associates London team to be compliant with DFID requirements and local laws. Table 15 below highlights the key programme areas of compliance during Year 5.

Table 15: Key developments and progress in compliance

FOCUS AREA	KEY DEVELOPMENTS
Partner due diligence	A due diligence summary report was completed for 33 agribusinesses in July 2018. The report includes key findings and recommendations that were considered by the team leader when approving the final list of selected partners. This initial due diligence was followed up with periodic visits by the programme's grant and finance team to verify the existence of the partners' business policies, systems and procedures to support operational activities. Partners were also taken through contract administration, to highlight their and MADE's responsibilities as outlined in the grant agreement/MOU. Partners also received training on completing the financial claim report template. This was to enable partners to track the payments they receive to fulfil their work plan and budget.
Partner monitoring	MADE conducts milestone-based data verification of partner performance against grant agreement criteria. To receive payments based on the agreement, partners submit milestone reports, which are verified within a period of 30 days. On an-on-going basis assigned Market Development Specialists track progress of the partners, with oversight and guidance from their respective Market Development Managers. The MDMs conduct random sample verifications throughout the year to accompany progress. In addition, the Monitoring and Learning Specialist leads a team of 55 enumerators to conduct an end-of-year validation exercise of the data gathered throughout the milestone reporting, which is then shared with the client in the Annual Report.
Safeguarding and risk management	A "Speak Up" poster was placed in the office to provide guidance to all staff on how to report known or suspected violations of Nathan's code of business conduct, anti-bribery, anti-modern slavery, safeguarding or other policies, laws or regulations. This poster provides details of the Nathan hotline and a direct number to DFID. This poster is placed in a visible place in the DFID Ghana MADE Programme office. The "Speak Up" poster in the MADE office was changed based on DFID's updated hotline ethics and compliance poster. This enables concerns to be reported to DFID's counter fraud and whistleblowing unit at reportingconcerns@dfid.gov.uk or +44(0)1355843551. The DFID Supplier Partner Handbook was shared with MADE team members and partners. The programme's grant and finance team discussed relevant points in the handbook with partners, and partners signed the Nathan code of conduct in one of the periodic visits.
External financial audit	Audit of the programme's finances for Years 3 and 4 was conducted by KPMG, selected through a competitive bidding process. The audit commenced on 03 October and concluded in December 2018.
Tracking of programme assets	MADE programme asset register was updated as at end of Year 5, with additional assets purchased and changes due to asset rotation in the MADE office.
Country registration and company tax	MADE Programme complied with the following country registration and tax: • A Year 5 draft financial report was filed with the Register General Department.

	• A Year 5 Q1-4 company self-assessment form was completed and paid to Ghana Revenue Authority at the start of every quarter. • A monthly withholding tax was deducted and paid to Ghana Revenue Authority.
Fraud	There were no identified instances of fraud that have occurred in Year 5.

Risk Management

The programme's risk register was updated during the year in line with its proactive management of both perceived and unintended risks, and in response to DFID comments including during the Year 4 annual review. A new risk description was included to mitigate the risks associated with the programme's lead partners being unable to recruit, manage and retain trained and qualified FEAs/ BDAs. This was considered important, given the role of the FEAs/BDAs in promoting the use and adoption of quality inputs and services and adherence to GAPs required for achieving increased productivity by SHFs. The rate of change[15] in composition of FEAs/ BDAs at partner level, the timeliness of their replacements when required and the transparency with which partner firms report such incidences could pose a minor risk for the smooth implementation of the programme. In addition to the above, some risk impacts were re-defined and an additional column for comments on new and old risks included. Annex 1 provides further details of these changes.

[15] There has been minor change to the initial cohort of FEAs/BDAs recruited by the programme's partners since the beginning of Year 5. Some FEAs/BDAs have moved on to new opportunities, and at least one FEA was reported to have have been replaced by the partner lead firm following the death of the incumbent.

SECTION 7. VALUE FOR MONEY

To assess the extent MADE is maximising the use of its resources, the programme has adopted the DFID "4E" approach to assessing Value for Money (VFM), which measures *Economy, Efficiency, Effectiveness* and *Equity*. Over the course of the programme MADE has identified, reported and amended its VFM indicators. In addition, in 2016 and 2018, MADE contracted an external consultant to benchmark its programme performance including Value for Money (VFM) in comparison to other similar market development programmes.

In Q1 Y6, the programme engaged an external consultant to carried out an internal VfM Assessment. The objective of this assignment was to evaluate, benchmark and report on MADE's Year 5 VFM performance, drawing from the benchmarking assessments conducted in 2016 and 2018 and using the MADE-specific VFM indicators. See Annex 2 for full report.

During Year 5, MADE continued its on-going efforts to maximise impact and benefits to SHFs in the Northern Savannah Ecological Zone by ensuring the optimal use of financial resources. To assess the extent MADE was maximising the use of resources, the programme adopted the DFID "4E" approach to assessing Value for Money (VfM), which measures Economy, Efficiency, Effectiveness and Equity.

ADHERING TO VFM FRAMEWORK

MADE embeds the VfM Framework into management practices, and intervention design and implementation. Below are examples of how MADE has taken these areas into account during Year 5.

Economy

MADE achieved *economy* (purchasing the right quality at the right price) by using open tendering processes. RFPs/RFQs were advertised in local media and held open long enough to ensure full competition. Evaluation committees comprising a complement of technical and other cross-functional staff were convened to ensure rigorous technical analysis of proposals. Proposal evaluations considered technical competencies and price. Negotiations were undertaken with service providers to achieve more favourable pricing. The end result was the selection of technically-sound service providers at prices deemed to be competitive and reasonable.

Efficiency

During Year 5, MADE achieved *efficiency* (how efficiently the project delivers its outputs) by leveraging co-investment with MADE partners, facilitating commercial partnerships and promoting the Advanced Model. MADE co-invested with partners to extend farm advisory services, enabling the project to leverage private investment to increase SHF outreach. MADE also facilitated commercial partnerships between its partners (as "lead firms") and other agribusinesses (as "support enterprises"), which enabled the programme to leverage the partnerships to expand SHF outreach. On-going promotion of the Advanced Model enabled MADE to deliver more comprehensive bundles of goods and services to SHFs without significantly increasing the cost of interventions.

Effectiveness

MADE achieved *effectiveness* (inputs are achieving desired outcomes) through promotion of the Advanced Model and assuring the "Seven Rights" for SHFs. During year 5, the programme engaged the services of [redacted] to deliver targeted training to selected FEA/BDAs and their managers on good agricultural practices, environment and climate smart practices, gender, and SHF selection. This training, coupled with other capacity-building support from programme partners such as [redacted] and [redacted], is expected to improve the effectiveness of partner engagement with their SHF affiliates and to result in an increase in productivity, profitability and resilience.

Equity

MADE promotes inclusive market system development by encouraging partners, support enterprises and other market actors to understand and adopt inclusive practices. The principles of fairness and impartiality were mainstreamed into all programme activities and engagements, including with partner lead firms. Programme partners also continue to be sensitised on the need to include gender and social inclusive practices in their business operations. SHFs in hinterlands and 'difficult terrains' usually have difficulty in accessing quality inputs – improved seeds, plant protection and nutrition products. MADE worked with input dealers to increase their sales outlets and site them closer to these 'hard to reach' communities. This has led to a reduction in transportation cost incurred by farmers in purchasing supplies. It has also increased the adoption and use of quality inputs by SHFs and the attendant increases in yield and income. During this year, the programme ensured gender was included as a core module for the training of FEAs/ BDAs by [redacted].

BUILDING MADE CAPACITY INTO THE VFM FRAMEWORK

During the year, MADE participated in a DFID-sponsored training on VfM. The knowledge and information gained is helping MADE with on-going efforts towards continuous improvement in the quality and cost effectiveness of its delivery. In the last quarter of the year, an external consultant was hired to undertake a VfM study, to benchmark MADE VfM against other market systems programmes. Key findings of the VfM benchmarking study were as follows:

- MADE out-performed the group in three of the four measurement areas: *economy*, *efficiency* and *effectiveness*.
- MADE trailed the group in the area of *equity*.
- MADE is leading its peers in three out of six *efficiency* indicators.
- Ghana MADE is ranked among the top programmes on three out of four *effectiveness* indicators.
- Although performing slightly below its peers, Ghana MADE has performed relatively well (44% F; 56% M) on *equity,* and above business case expectations (15% F; 85% M).

SECTION 8. ANNEXES

Annex 1: Value for Money Assessment Y5
Annex 2: List of Cumulative MADE Systemic Changes
Annex 3: Response to Year 4 Annual Review Recommendations

ANNEX 1: VALUE FOR MONEY ASSESSMENT

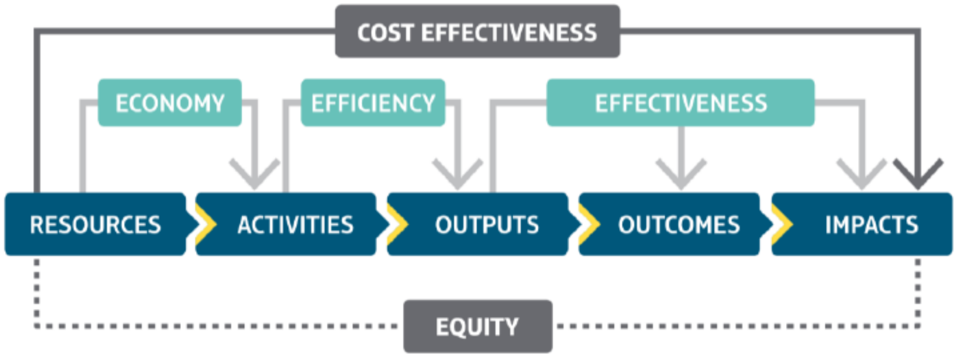
To conduct this study, the external consultant combined a review of programme documents with interviews with key programme staff.[16] The consultant also worked closely with the MEL Specialist and Programme Manager to confirm the list of current VFM indicators, determine the correct calculations and compile the data required for the internal assessment. The assignment was carried out between April and May 2019 and included a one-week field mission in Ghana. The initial VFM findings were shared with the MADE Team Leader, Chief Programme Advisor, Programme Manager and Senior Reporting Officer at DFID; their inputs have been incorporated into this draft report.

VALUE FOR MONEY INDICATORS

This section presents the VFM framework and definitions, the MADE standard VFM indicators and the proposed additional indicators for each 'E' in the framework. As noted above, following recommendations from the 2018 external benchmarking exercise (presented in January 2019), MADE agreed to adopt additional VFM indicators and benchmark its progress against previous years. These indicators are noted in the tables below along with comments regarding challenges to calculating the indicator for this study.

The VFM framework depicted below (see Figure 6), illustrates the ways the four VFM Es, *Economy, Efficiency, Effectiveness* and *Equity* relate to a programme's resources, activities, outputs, outcomes and impacts[17].

Figure 6: VFM Framework



Economy: Are programme inputs (goods and services) being procured at the appropriate quality and price?

Table 16: Economy indicators summary

INDICATOR	CALCULATION	EXISTING/NEW	COMMENT
Percent management cost to overall cost	Total cumulative management fees / total fee + reimbursable costs to date	Existing	
Percent management cost to intervention funding cost	Total cumulative management fees /	Existing	

[16] The study findings should be considered as comprehensive; however, due to the change in technical approach and consequently programme partners and sectors at the beginning of Year 5, it was difficult to provide meaningful sector-level analyses for some indicators. Another limitation of the study findings is that the data provided for this analysis has not be independently verified by a third party.

[17] Department for International Development (2011), *DFID's Approach to Value for Money (VfM), Retrieved on Mary 16, 2019 from:* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/49551/DFID-approach-value-money.pdf

	committed intervention funding		
Percent of intervention fund committed to total intervention fund budget	Total committed intervention funding/ intervention fund budget	Existing	
How well does the implementation structure drive down costs	Qualitative assessment	New	Aspects of this indicator have been reported in previous annual reports
Savings achieved as a result of implementation structure	Addition of all savings attributed to implementation structure	New	Information not available at the time of reporting

Efficiency: Are inputs adequately being converted into outputs?

Table 17: Efficiency indicators summary

INDICATOR	CALCULATION	EXISTING/NEW	COMMENT
Management costs for the intervention	Management cost / Market actor changing business practice	Existing	Due to the change in technical approach it is no longer possible to report on this indicator at a sector level
Cost per market actor changing business practices per market	Total programme costs/number of changes in business practices	Existing	
Intervention fund cost per market actor change	Total actual costs for market interventions / number of actors who changed business practices	Existing	Due to the change in technical approach it is no longer possible to report on this indicator at a sector level
Overhead (management cost) per beneficiary	Total overhead costs/ no. of farmers accessing inputs and or services	Existing	
Total spend per beneficiary (Average cost per smallholder farmer accessing/ using new or improved services)	Total programme costs/ no. of farmers accessing inputs and or services	Existing	
How the additional services and resources are driving down costs of inputs and business services for poor producers, across selected regions (Upper West, Upper East, Northern)	Summation of estimated bundle savings per sector	Existing	Programme did not make different cost savings estimations by region instead by sector.
Budget variance	Percentage of programme spend – percentage of programme completion	New	
Delivery against planned timeframe	Qualitative assessment taken from annual review	New	Annual report not available at the time to include in report

Effectiveness: Are outputs from an intervention achieving the desired outcome (i.e. reduce poverty)?

Table 18: Effectiveness indicators summary

INDICATOR	CALCULATION	EXISTING/NEW	COMMENT
Percent increase in yields per integrated package of services	Percent yield increase from Year 4 to Year 5 per sector/per package	Existing	Yield information on packages only available for Year 5
Cost per £ of additional income generated	Total programme costs/Total average income	Existing	
Amount of additional resources leveraged from private-sector market actors within the markets being facilitated).	Total value of private sector investment	Existing	
Firm Growth: number of firms with increased sales	Total number of firms reporting increased sales	Existing	Information not available at the time of reporting
Firm Growth: Net annualized increase in sales amongst firms	Total value of net annualized increase in sales amongst firms	Existing	Information not available at the time of reporting
Cost per average income beneficiary	Total programme costs/Total number of beneficiaries experience an increase in income	New	
Private sector leverage ratio	Total programme spend/total private sector investment	New	DFID recommendation to calculate ratio in the following way: Total private sector investment/total programme spend

Equity: Are programme benefits being distributed amongst all, including the most marginalised?

Table 19: Equity indicators summary

INDICATOR	CALCULATION	EXISTING/NEW	COMMENT
Total spend per beneficiary (Female/Male)	Total programme spend/ No. of women accessing inputs/services Total programme spend/No. of men accessing inputs/services	Existing	This indicator was used to track women targeted programme interventions and is no longer relevant to the current technical approach. It is recommended not to include in this VFM analysis
Percent increase in yields per sector	Percent yield increase from Year 4 to Year 5 per sector	Existing	
How the additional services and resources are driving down costs of inputs and business services for poor producers	Summation of estimated cost savings from purchasing the bundle	Existing	This indicator was used to track women targeted programme interventions and is no longer relevant to the current technical approach. It is recommended not to include in this VFM analysis
Percentage of new partnerships/activities that contribute to improved equity	No. of new partnerships that contribute to improved equity/total number of new partnerships	New	Due to the change in technical approach, this indicator is no longer relevant. It has been replaced with the last two indicators listed in this table
Percent female beneficiaries accessing inputs/services	No. of women accessing inputs and services/Total		Indicator for external benchmark

	no. of programme beneficiaries accessing inputs/services		
Percent female beneficiaries with increased income	No. of women with improved incomes/Total no. of programme beneficiaries with improved incomes		Indicator for external benchmark

VALUE FOR MONEY YEAR 5 ANALYSIS

Economy

In this reporting period, MADE decreased *the percentage of management costs to overall programme costs (1)* from 11% in Year 4 to 10% in Year 5. However, due to the slower than anticipated intervention fund spent (see Figure 7), the *percent of management costs to intervention funding cost (2)* and *percent of intervention fund committed to total intervention fund budget (3)* respectively have increased.

Figure 7: Year 5 intervention fund

[redacted]

MADE tracks and regularly reports on the overall programme budget. However, since the indicators related to cost savings were introduced in January 2019, the programme was not explicitly tracking progress on these specific indicators throughout Year 5.

Nonetheless, there is evidence to support that the programme has continuously identified measures to reduce costs in both procurement and the implementation of the technical approach, in addition to implementing Nathan Associate's standard procurement policy. For example, the programme has balanced technical and financial considerations in the procurement of the M-Access system; opting for a system with fewer technical functionalities that is less costly and more adapted to the capacity of the target users. Another example is the programme's decision to use short-term contract drivers in lieu of hiring two new full-time drivers, reducing daily expenditure from [redacted] to [redacted]. These are just a few of many examples provided during the assessment.

Table 20: Economy indicators results

	INDICATORS	Y4	Y5	% CHANGE
1	% management cost to overall programme cost	11%	10%	-13%
2	% management cost to intervention funding cost	15%	16%	9%
3	% of intervention fund committed to total intervention fund budget	40%	48%	20%
4	Savings achieved as a result of implementation structure*	NA	NA	NA

5	How well does the implementation structure drive down costs *	NA	Meeting expectations	NA

	Positive trend	*	New indicator
	Negative trend	+	Business case indicator
NA	Not available		

Efficiency

The majority of MADE's *Efficiency* indicators continued a positive downward trend, a result of the significant increase in outreach and lower relative growth in expenditures (see Figure 8). Two indicators, *total spend per beneficiary* (10) and *overhead per beneficiary* (9) illustrate this point with a 28% and 19% reduction respectively.

Table 21: Programme spend and outreach

INDICATORS	YEAR 4	YEAR 5	% CHANGE
Total programme spent	[redacted]	[redacted]	[redacted]
Total programme outreach	[redacted]	[redacted]	[redacted]

The *intervention fund cost per market actor change* (8) rose slightly by 4%, most likely reflecting the change in implementation approach, which provided more concentrated support to a reduced number of partners. The *budget variance (12)*, the difference between the remaining budget and time remaining on the programme, remained at 18%. As a point of comparison, the average budget variance in the 2018 external benchmarking study was 13.9% but with a range between 0.68% and -31.67% and five out of the nine programmes assessed were outside a standard 10% variance. *The delivery against planned time frame (11)* assessment is taken from the annual review, which is not yet conducted for Year 5 and therefore it is not possible to report against at this time.

Table 22: Efficiency indicators results

	INDICATORS	Y3	Y4	Y5	CHANGE Y4-Y5
6	Management costs for the intervention per market actor change+	[redacted]	[redacted]	[redacted]	-1%
7	Cost per market actor changing business practices	[redacted]	[redacted]	[redacted]	-12%
8	Intervention fund cost per market actor change	[redacted]	[redacted]	[redacted]	4%
9	Overhead (management cost) per beneficiary+	[redacted]	[redacted]	[redacted]	-19%
10	Total spend per beneficiary (access/use)	[redacted]	[redacted]	[redacted]	-28%
11	How the additional services and resources are driving down costs of inputs and business services for poor producers, across selected sectors. +	NA	See Figure 11	See Figure 10	Savings increased in 2 out of 3 sectors
12	Budget variance*	-39%	-18%*	-18%*	0%
13	Delivery against planned timeframe*	Meeting or exceeding expectations	Modestly underperforming expectations	NA	NA

	Positive trend	*	New indicator
	Negative trend	+	Business case indicator
NA	Not available		

made
MARKET DEVELOPMENT FOR NORTHERN GHANA

In Year 5, MADE introduced the Bundle Model, which offers different packages of inputs and services to smallholder farmers (SHF) (see Figure 1).

The indicator (11) estimates the SHF cost savings of using the bundle, instead of seeking out individual inputs and services on their own. By offering farmers a bundle of services instead of requiring them to seek out individual inputs and services on their own, MADE estimates that there are four main areas of cost savings;

1) Searching: costs associated with researching or asking about varieties of inputs and services;
2) Opportunity: costs associated with time; time spent at the market, rather than on their farms;
3) Transportation: costs associated with traveling to the market to procure inputs and services;
4) Communications: costs associated with phone credit for contacting/calling vendors to request and coordinate services (e.g. tractor services).

Though this indicator focuses on cost savings of the Bundle Model, it is important to highlight other and perhaps more important benefits of the bundle model which include the provision of in-kind credit to many bundle buyers including women and access to and use of a diverse range of crop specific yield enhancing inputs and services which were previously not available in a timely fashion or often completely unavailable to many MADE farmers. There is also evidence that women have significantly benefitted from the increased 'affordability' (i.e. availability of credit) and accessibility of the bundled inputs and services most notably in the areas of access to improved seeds and timely mechanization services.

To calculate the Year 5 savings, MADE applied the Year 4 estimates of cost reductions from the four main drivers, searching costs (4%), opportunity costs (6%), transportation costs (5%), and communication costs (3%) were applied to the Year 5 crop budgets. Since the same cost savings reductions have been applied in Year 4 and Year 5 the difference in cost savings is a function of the average cost of production (see Table 23). Total estimated cost savings increased in onion and other vegetable sectors by 217% and 59% respectively and decreased slightly in onions by 3%.

Because this indicator only provides an estimate of cost-savings and does not fully capture the non-monetary benefits of the bundle, it is recommended that MADE reviews and proposes an alternative indicator in advance of the next VFM assessment to better capture the full benefits of the Bundle Model.

Table 23: Year 5 bundle savings

SECTOR	SEARCHING SAVINGS	OPPORTUNITY SAVINGS	TRANSPORT SAVINGS	COMMUNICATION SAVINGS	TOTAL SAVINGS
Groundnut	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Maize	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Onions	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other Vegetables	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Rice	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Sorghum	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Soybean	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
% Cost Reduction	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Table 24: Bundle savings change

SECTOR	YEAR 4	YEAR 5	% CHANGE
Groundnut	[redacted]	[redacted]	[redacted]
Maize	[redacted]	[redacted]	[redacted]
Onions	[redacted]	[redacted]	[redacted]
Other Vegetables	[redacted]	[redacted]	[redacted]
Rice	[redacted]	[redacted]	[redacted]
Sorghum	[redacted]	[redacted]	[redacted]
Soybean	[redacted]	[redacted]	[redacted]

Effectiveness

MADE leveraged over [redacted] in private sector resources in Year 5 (see Figure 12). Private sector investment in Year 5 exceeded the combined investments from Years 1-4. This increase in private sector investment suggests a strong commitment to the business model proposed by the programme. This point is illustrated by a recent survey of Lead Firms and Support Enterprises conducted by MADE which revealed that all current partners stated that they would continue the new business model for at least the next two years.

Table 25: Partner firms supplying services as part of the Advanced Model

YEAR	BUDGETED		ACTUAL	
	MADE CO-INVESTMENT	PARTNER INVESTMENT	MADE CO-INVESTMENT	PARTNER INVESTMENT
1	[redacted]	[redacted]	[redacted]	[redacted]
2	[redacted]	[redacted]	[redacted]	[redacted]
3	[redacted]	[redacted]	[redacted]	[redacted]
4	[redacted]	[redacted]	[redacted]	[redacted]
5	[redacted]	[redacted]	[redacted]	[redacted]

This significant mobilization of private sector resources has led to a further lowering of the *cost per additional income generated (15)* from [redacted] to [redacted] and a reduction in *the private sector leverage ratio (20)* from [redacted] to [redacted]. As points of comparison, in the 2018 benchmarking exercise, the lowest cost per additional income generated was [redacted] (KMAT programme[18]) and the best private sector leverage ratio was [redacted] (PEPE programme). The *cost per average annual income change (19)* decreased from [redacted] to [redacted], a 18% decrease from Year 4. Note that information on *firm growth (17) and net annualised increase in sales (18)* was not available at the time of this report.

Table 26: Effectiveness indicators results

	INDICATORS	Y4	Y5	Y4-Y5 CHANGE
14	Percent increase in average yields per sector/package	See Figure 10 & 14	See Figure 10 & 14	Average yield has increased
15	Cost per £ of additional income generated	[redacted]	[redacted]	[redacted]
16	Cumulative amount of additional resources leveraged from private-sector market actors within the markets being facilitated+	[redacted]	[redacted]	[redacted]
17	Firm Growth: number of firms with increased sales	[redacted]	[redacted]	[redacted]
18	Firm Growth: Net annualized increase in sales amongst firms	[redacted]	[redacted]	[redacted]
19	Cost per average annual income change	[redacted]	[redacted]	[redacted]
20	Private sector leverage ratio*	[redacted]	[redacted]	[redacted]
20a	£ private sector leverage per £ spent (inverse of indicator 19)	[redacted]	[redacted]	[redacted]

	Positive trend	*	New indicator
	Negative trend	+	Business case indicator
NA	Not available		

Evidence that MADE interventions are resulting in positive behaviour changes at the farmer level is found in the yield improvements in the groundnut (93%), onions (60%) and rice (4%) sectors (see Table 27). Because of the change in sectors in Year 5, there is no comparison data available for the maize, sorghum and soybean sectors.

18 Benchmark programmes reported on cost per total NAIC and not total average income as reported MADE (as required by the log frame).

Table 27: Average yield per sector

SECTOR	UNIT	Y3	Y3-Y4 % CHANGE	Y4	Y4-Y5 % CHANGE	Y5
Groundnut	100 kg bag	6.84	-12%	6	93%	11.57
Maize	100 kg bag	-	-	-	-	21.38
Onions	120 kg bag	11.6	29%	15	60%	23.97
Rice	100 kg bag	9.25	19%	11	4%	11.46
Sorghum	100 kg bag	-	-	-	-	9.49
Soybean	100 kg bag	-	-	-	-	8.79
Other veg		30.28	38%	41.74	-	-

An examination of the results of the different bundles per sector (see Table 28) shows that except for onions where there was an 11% decrease in average yield, there were improvements in the average yield in groundnut, maize, rice, sorghum, and soybean sectors. SHF that applied the premium bundle had the highest average yield, except for onions, but the greatest relative increase in yield resulted in applying the medium bundle; a finding which merits further exploration and understanding.

Table 28: Yields per acre

CROPS	UNITS	YIELDS/ACRE PER TYPE OF BUNDLE				
		BASIC	% CHANGE B-M	MEDIUM	% CHANGE M-P	PREMIUM
Groundnut	100 kg bag	8.8	36%	12.0	17%	14.0
Maize	100 kg bag	-	-	21.0	4%	21.8
Onions	120 kg bag	-	-	25.3	-11%	22.6
Rice	100 kg bag	10.6	10%	11.7	4%	12.1
Sorghum	100 kg bag	8.2	20%	9.8	8%	10.6
Soybean	100 kg bag	7.7	18%	9.0	7%	9.7

Equity

MADE promotes inclusive market system development by encouraging Lead Firms, Support Enterprises and other market actors to understand and adopt inclusive practices. MADE used 3 indicators to measure *Equity* and it was proposed in the 2018 benchmarking exercise that the programme add an additional indicator on the *percentage of new partnerships or activities contributing to improved equity*. During this review, the consultant found that two out of the original three indicators, *average spend per beneficiary* and *how the additional inputs and services are driving down costs*, are no longer as relevant to the programme and its aims to improve equity because of the shift in technical approach. Further, the additional proposed indicator on percentage of partnerships proved to be less informative than desired.

During this assessment, MADE carried out in parallel a comprehensive gender assessment to better understand motivations and obstacles of Lead Firms and Support Enterprises to improve gender outcomes. This assessment is particularly timely given the small decline in both percentage of female beneficiaries and average income beneficiaries. It should be noted that while the programme has had a small decline in the percentage of female beneficiaries (access/use) and average income beneficiaries, total outreach has increased (see Table 29). It should also be noted that the current percentage of female beneficiaries is still considerably above the target established in the 2013 business case of 15%.

Table 29: Cumulative number of female beneficiaries

INDICATORS	YEAR 4	YEAR 5
Female beneficiaries: Access/Use	[redacted]	[redacted]
Female beneficiaries: average income	[redacted]	[redacted]

Table 30: Equity indicators results

	INDICATORS	Y4	Y5	% CHANGE
21	% Female beneficiaries	44%	41%	-5%
22	% Female average income beneficiaries	44%	41%	-5%
23	% increase in yields per sector/package (M/F)	See Figure 18	See Figure 18	Average yield has increased across in 2 out of 3 sectors for women and 3 out of 3 sectors for men

	Positive trend	*	New indicator
	Negative trend	+	Business case indicator
NA	Not available		

In Year 5, women experienced on average a yield increase of 80% in groundnuts and 42% in onions and a 1% decrease in rice, which is within the margin of error. In Year 5, men experienced on average a yield increase of 112% in groundnuts, 60% in onions and 11% in rice. In Year 4, women experienced on average a yield increase of 14.53% in rice, 43.87% in onions and 46.21% in other vegetables. They experienced on average a 12.06% decrease in groundnut yields. During the same time period, men experienced on average a yield increase of 23.7% in rice, 15.93% in onions and 31.98% in other vegetables. Men experienced on average a 12.47% decrease in groundnut yields. Refer to Figure 2.

Initial findings from the on-going Gender Assessment has found that; while many businesses prefer to engage with women because they are better clients, social, cultural and economic issues are a dominant barrier. As a result, as businesses expand their outreach, they are likely to bring onboard more men than women.

CONCLUSION

The results of the Year 5 assessment demonstrate that MADE continues to represent good VFM. Out of the 18 benchmarked VFM indicators, MADE had a positive directional trend in 13 (72%), a neutral change in 1 (6%) and a negative directional trend in 4 (22%). *Efficiency* and *Effectiveness* were the strongest categories for the programme though the programme had positive VFM indicators in all categories. In the *Economy* category, it has lowered the percentage of its management costs to overall programme costs. With regards to *Efficiency*, it has lowered its management costs for the intervention per market actor change, cost per market actor change, overhead per beneficiary and spend per beneficiary (access/use). In the effectiveness category, it has lowered the cost of generating a £ of income per beneficiary and the cost per income beneficiary. It has also mobilized an impressive amount of private sector investment which has improved its already strong leverage ratio. With regards to *Equity*, the absolute number of women participants has risen, though the percentage of female beneficiaries against male participants has reduced by 5%. Women have also experienced significant yield increases in two out of the three reported upon sectors. Going forward, a continued focus on economy, with respect to spending the budgeted intervention fund and curiosity with the equity findings will be important to maintaining a strong VFM performance.

ANNEX 2: LIST OF YEAR 5 INSTANCES OF SYSTEMIC CHANGES

Table 31: Instance of Systemic Change (Adapt)

#	DESCRIPTION OF SYSTEMIC CHANGE
1	Engagement of more FEAs above the required number
2	Instituted a reward scheme for every extra bag purchased after the in-kind recovery to incentivize all FEAs and nucleus farmers (commissions, etc)
3	Application of business model to new markets
4	"Rolling-out" practice changes in new geographies
5	Investment in the provision of additional inputs and services (threshing, the business introduced rice cutters for harvesting rice fields, produce transport services etc)
6	Investment and subscription in Ghana Commodity Exchange (GCX) as medium of market for produce of smallholder farmers
7	The use of lead famers has been an adaptation the business used. The lead farmer had to be part of an FBO. The chairman n secretary is assumed as the lead farmers. The secretaries attend meetings on behalf of the FBO. These individuals are community based and were able to easily monitor the farmers.
8	Investing Reaching more farmers beyond contract provision (inputs to SHFs, motorbikes, laptops for FEAs, etc)
9	Investment in knowledge and skills development of the sales agents-i.e. first-hand information about the inputs been sold

Table 32: Instance of Systemic Change (Expand)

#	DESCRIPTION OF SYSTEMIC CHANGE
10	8 non-MADE firms adopting the FEA model
11	1 non-MADE firm adopting the commercial partnership
12	11 non-MADE firms adopting the bundling of inputs and service

Table 33: Instance of Systemic Change (Respond)

#	DESCRIPTION OF SYSTEMIC CHANGE
13	[redacted] is providing credit services to MADE supported firms ([redacted]) at 25% interest rate (as against 48%) for inputs and 30% for equipments based on evidence of organised network of outgrowers recieving inputs and services and estimates of expected aggregation. [redacted] partnership arrangement with [redacted] enabling sourcing of short-term facility to pay customers upon submission of proof of supplies delivered to [redacted]. The interest rate is 26% p.a. lower than the 30% for production loan facility
14	[redacted] is providing input credit supplies to [redacted] (fertilizers and weedicides) farmers as a result of evidence of established structures - network of SHFs, records of inputs and services supplied, monitoring of investment by FEAs
15	[redacted] now offering better price premium for paddy to [redacted] as a result of improved quality of paddy produced

Table 34: Instance of Systemic Change per Year

YEAR 4	YEAR 5	
CUMMULATIVE	RESULT	CUMMULATIVE
17	15	32

ANNEX 3: RESPONSE TO YEAR 4 ANNUAL REVIEW

OVERALL RECOMMENDATION

Given the context that the programme operates in, it is vital that MADE is seen as a step on a much longer journey and should position itself during the remaining time available to ensure it supports the building blocks for long-term impact. MADE should identify and prioritise partner businesses with the potential to achieve transformational scale, to help them to map out a growth pathway, and to take the first steps along this. The next stage will all be about investment, finance and innovation into businesses with the drive and capacity to reach millions of farmers.

Based on the hard commercial and financial data / intelligence that MADE should now be able to gather and appraise, it should now be possible to analyse and segment the partner businesses that it works with. While continuing to work with all the planned partner businesses as outlined in its business plan, for those seen as having a higher scaling potential, appetite for growth, capacity for innovation, openness to alternative investment and finance options, and superior management, MADE should support them to develop longer term growth pathways that could take them to the scale needed to begin to impact the wider rural population.

MADE Year 5 Response

MADE has identified and prioritised partner businesses with the potential to achieve transformational scale, to help them to map out a growth pathway, and to take the first steps along this. The annual partner selection process has year-on-year raised the bar for qualifying firms to receive support from the programme. The selection criteria adopted has favoured businesses working alone or within commercial partnerships that have the necessary scale and ambition to deliver against a growing range of bundled service requirements. Output and outcome results for target beneficiaries have shown a year-on-year rise in yields and income reflecting improvements in business performance.

In Year 5 MADE continued to support partner firms to further raise their management capacity. In Year 6, a benchmarking exercise will be undertaken to segment partners and based on findings help identify areas for improvement and to set out pathways for future development and growth.

RECOMMENDATION 1

MADE to explore investment and finance possibilities in more depth for the businesses, and to form new relationships within the investment and financing ecosystem, especially innovative new investment and financing models by November 2018.

MADE Year 5 Response

MADE adopts an annual business planning process with its selected partner firms. During this process MADE ensures that partners meet the minimum requirement to access commercial loans. However, most of our partners would be unable to meet the repayment terms. Network facilitation (with apex dealers and commodity exchanges) is introducing opportunities for value chain financing and by working with support enterprises, lead firms can share credit risk.

RECOMMENDATION 2

MADE should scope options for establishing an innovation interface, scanning for relevant innovations, and feeding intelligence into the innovation ecosystem by January 2019.

MADE Year 5 Response

MADE is looking at innovation in different levels and at implementation. For instance, by January 2019 MADE had designed and submitted a Concept Note to DFID around the creation of M-Access, an innovative data collection tool that is market viable and business-driven. This work has begun and will be completed in Y6. For Y6, MADE is planning a series of field demonstrations to raise awareness of innovative mechanisation and irrigation technologies.

RECOMMENDATION 3

MADE to review the data generated by partner businesses, including its quality, use by the partners, and the range of their management information systems that are employed. MADE should:

(i) Identify gaps and deficiencies in both the data being generated and collected and the systems used to collate and analyse the data;
(ii) Appraise commercial benchmarking systems being used in agricultural value chains in other developing and developed economies, both for the underlying management information architecture of the systems, the data benchmarked, and the uses to which this benchmarking is applied, engaging with developed economy expertise where this does not exist in the development sector;
(iii) MADE to then review and consider local actors and potential partners in the data marketplace through which to build the necessary architecture and data utilization amongst its partner businesses.

MADE Year 5 Response

Partner data verification and validation is a core function of the MADE programme. Field enumerators are hired to verify partner milestone reporting against contractual obligations. A new electronic data management tool is being rolled-out across all MADE's partner agribusinesses to allow the capture of real time transaction data directly from the field.

The benchmarking exercise will help identify limitations in operational management capacity and key areas for capacity building.

RECOMMENDATION 4

MADE to start developing and/or strengthening new relationships to establish the building blocks of a much wider, scalable and transformational theory of change by October 2018.

MADE Year 5 Response

The drive towards transformational change is being taken up by agribusiness partners without MADE's direct facilitation. The forming of commercial partnerships with support enterprises to realise the 7-rights and achieve wider uptake of the premium bundle was initiated by the businesses themselves.

RECOMMENDATION 5

The hard commercial, financial, markets, value chains intelligence that MADE is now deriving from its activities should be disseminated into the wider business, investment ecosystem. This will demonstrate the nature and level of opportunity in the North, encouraging both new entrants with the capacity and resources to go to scale, and the entry of supporting innovative business that complement the core MADE promoted activities by January 2019.

This is therefore a critical point, as the higher potential businesses that are providing these functions begin to emerge from the wider pool of partner businesses, and begin to turn their attention to embedding, further developing to their own needs, and then significantly scaling the functions.

MADE Year 5 Response

Evidence of marketable produce being available is spilling out along the value chain and attracting interest from apex firms such as [redacted] and [redacted]. We are seeing changes in production patterns to reflect these new demand opportunities. Changing quality requirements are also impacting on agricultural practices and further supporting the adoption of private sector extension services.

MADE continues to facilitate links with apex enterprises to encourage this intelligence sharing.

RECOMMENDATION 6

MADE needs to develop a robust financial, commercial understanding of the market viability of these functions and businesses providing them by December 2018.

MADE Year 5 Response

Organic growth and diversification amongst a small number of MADE's agribusiness partners is continuing but there is evidence of greater emphasis to the development of commercial partnerships, bringing together enterprises with complimentary interests. This allows a widening of outreach and a focus on core expertise. Many of the support enterprises selected in Y5 were mechanisation service providers. MADE is supporting this development through its partner selection process and is monitoring the success of these partnerships through the monitoring of milestone performance obligations

RECOMMENDATION 7

MADE should begin to develop growth pathways for the high potential businesses that could ultimately take the supported functions to a much greater scale and outreach by January 2019.

MADE Year 5 Response

The aim of the benchmarking exercise launched in Y5Q4 is to assess functionality and identify key areas for improvement. In Year 6, BDAs are to be appointed to work with each of the partner firms to address identified constraints and to set out realistic strategic plans for future growth.

RECOMMENDATION 8

MADE should ensure that they are aware of relevant innovations in the marketplace elsewhere in Ghana and the wider world, that these are not moving ahead of or rendering obsolete the programmes strategy, and that MADE activities are enhancing and not harming the expansion of viable innovations by October 2018.

MADE Year 5 Response

Many agribusinesses receive support from an assortment of sources – some of which have conflicting strategies. Improved engagement is planned for Years 5 and 6 with two of the key donors funded programmes ([redacted] and [redacted]) to allow a sharing of intelligence, ideas and databases. Collaborative programmes are also being planned with MoFA to help align the public and private sector extension services.

RECOMMENDATION 9

In this instance, MADE does fulfil more of a market function role, developing the systems and supporting the modelling and decision-making process, introducing appropriate planning and decision tools to its partner businesses that can utilise the management information and benchmarking systems. This could especially be targeted at the businesses segmented as being high potential. Business advisory services could be brought along on this journey, building their capacity in parallel.

MADE Year 5 Response

MADE has carefully avoided taking on a market function role. Growth and capacity building initiatives which are outlined as part of the partner selection process are private sector led with MADE's role one of facilitation. The benchmarking exercise which has been offered to partner firms in Y5 will bring in local business development advisory firms to work on the production of road maps and help identify priority capacity building needs. The aim is for these BDA firms to accompany the development of agribusinesses and build their own appreciation of agribusiness needs at the same time.

RECOMMENDATION 10

MADE should take an active role in preparing and disseminating market intelligence and bringing potential investment and financing stakeholders or innovators along on the MADE pathway, even if this is only part of a longer-term journey for them by January 2019.

MADE Year 5 Response

MADE brings about market intelligence sharing by encouraging the development of networks across the value chain. Access to market intelligence is an issue and efforts such as the development of M-Access tool for use by FEAs is designed to address this. A role of preparing and disseminating intelligence, which would have to end when the programme closely, would not be sustainable.

RECOMMENDATION 11

MADE identifies formal rules that are limiting innovation expansion, and scope opportunities for engagement by November 2018.

MADE Year 5 Response

No formal market rules have been identified that that are likely to limit innovation and market development. Rules that govern produce quality requirements are in place and have to be adhered to if northern agribusinesses are to trade successfully. Through its network facilitation efforts MADE is introducing channels through which these rules can be disseminated.

RECOMMENDATION 12

MADE to start to benchmark its VfM results against other market development programmes by October 2018.

MADE Year 5 Response

An external benchmarking exercise against other market development programme was undertaken and results shared with DFID by October 2018.

RECOMMENDATION 13

MADE to develop a strategy of engagement and partnership with key stakeholders in Northern Ghana and the agricultural sector by September 2018.

MADE Year 5 Response

MADE conducted and submitted a Political Economy Analysis to DFID by July 2018. This assessment highlighted MADE´s low public profile as well as the narrow level of engagement with other stakeholders, mostly public ones but also development actors, which was identified as a key weakness of the programme.

MADE was unable to achieve the recommendation of engaging and partnering with key stakeholders by September 2018. However, the programme is putting an emphasis on this for Y6. During the Gender Assessment, MADE interviewed and recommended numerous areas of collaboration with stakeholders; activities are being developed for Year 6.

In addition, key stakeholders have been contacted and are attending pause and reflect meetings with MADE senior staff to share intelligence and consider joint initiatives. The first meeting was held in Y6 Q1, therefore cannot be accounted for in Y5 results.

RECOMMENDATION 14

MADE and DFID to review the objectives, purpose and structure of the Advisory Committee to ensure alignment and relevance with the Year 5 Business Plan by September 2018.

MADE Year 5 Response

It was agreed to disband the Advisory Committee and introduce a more formalised quarterly planning session (Pause and Reflect) bringing together key stakeholders and provide strategic steering to the programme.