

Commercial Agriculture Portfolio Review: Final Report

Expert Advisory Call-Down Service

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EXECUTIVE SUMMARY

Objective of the review

The objectives of this portfolio review were to i) Provide an analysis of DFID's existing commercial agriculture portfolio in terms of geographies, programme type and approach, level of intervention, intended beneficiaries and results achieved; ii) Identify gaps in the existing portfolio relative to DFID's commercial Agriculture policy framework and Economic Development Strategy; and iii) Identify emerging trends and lessons learned regarding commercial agriculture approaches to development to recommend ways in which the design and implementation of future commercial agriculture programming can be improved.

Methodology

The review was divided into two phases: i) an inception phase, during which the existing database of DFID commercial agriculture programmes was improved and updated to include all relevant information for programmes (information gathered from DevTracker) included in the commercial agriculture portfolio review and a ii) "deep dive" phase which included a more in-depth desk review of documents, primarily business cases and annual reviews, complemented by interviews with DFID programme officers and advisers representing their respective country missions or head office departments.

Key Findings on the portfolio

The portfolio is composed of 65 current programmes representing 2.44 billion GBP in total DFID budget. The geographical spread is as follows:

- Africa: 15 Countries and 11 regional initiatives, 45 Programmes, 1.14 billion GBP budget. There is a particularly strong presence in East Africa, which has 22 programmes and 542 million GBP in budget;
- Asia: 5 countries, 11 programmes, 852 million GBP budget (of which 3 Afghanistan programmes represents 470 million GBP); and
- Global/multi-country: 9 programmes: 4 with an exclusive focus on Africa and Asia, 442 million GBP budget.

The primary channel used by programmes in the portfolio is working through the Private sector, followed by Associations. If one adds financial institutions to these, then 73 percent of the programmes in portfolio are channelling through private businesses.

The most commonly used tools are direct delivery/facilitation and grants (used in 94 percent and 72 percent of programmes, respectively). Challenge funds and loan/equity are used in around a quarter of programmes, while catalytic funds are the least often used tool (13 percent of programmes use them).

The major primary programme subsets found within the portfolio account for 52 percent of programmes:

- Value Chain: focus on inputs (28 percent of portfolio). If within the subset of Value Chain, the focus on outputs is added, then Value chain as a whole represents 33 percent of the portfolio.
- Agribusiness Investment: 19 percent of the portfolio.

DFID contributes 35 percent of total funds to all multilateral programmes (1.21 Billion GBP out of 3.48 billion GBP). However, there is large variance in the actual percentage of funds contributed, ranging from 9 to 85 percent. On average, DFID contributes 51 percent of the funds to multilateral programmes in which it participates.

Most programmes (40 out of 65) focus solely on domestic markets. Only 3 programmes (4 percent) focus exclusively on export and regional markets. This domestic market focus holds true across all three major geographic zones (dynamic, intermediate and hinterland zones, as defined in the agriculture framework).

The preferred Value Chains supported by the programme are:

- Inputs: Improved access to agricultural inputs, including ameliorated seeds, fertiliser, pesticides, vaccines and artificial insemination;
- Livestock: Found across all geographies (fourth most common value chain in Africa, second in Asia and in Global focused programmes); and
- Maize: Due to the strong number of programmes focused on East and South Africa (25 out of 65 programmes) where Maize is the dominant staple crop and which is widely traded.

Regarding outcomes/outputs, most programmes expect to report on number of small holder farmers with improved productivity or linkages (44 out of 65) but the numbers drop on most other outputs such as net additional income provided, SMEs whose productivity or linkages have improved, amount of investment stimulated, number of jobs created, and number of business created (25, 22, 19, 16, and 4 programmes respectively).

Top line estimates of the cost of providing services to smallholder farmers by subset of commercial programming:

- Value chain programmes are the most cost efficient at 88 GBP per beneficiary. This is supported by anecdotal evidence when examining programmes with completed PCRs.
- Agribusiness investment programmes are the second most efficient at 100 GBP per beneficiary.

Conclusions and recommendations: key gaps and best practices for the future

Main gaps in the framework

Several gaps or weaknesses exist in the overall programme implementation and application of DFID's EDS and Agriculture framework, recognising all the while that most of these programmes started before these strategies were elaborated. These include:

1. Defining the target beneficiaries in most of the programmes is a challenge, as the emphasis is on the level of poverty, not on the potential for the individuals to drive commercial agriculture.
2. Geographic targeting also can affect the selection of value chains with lower opportunities, because they need to achieve results in terms of target numbers. Programmes rarely emphasise the three geographic zones relating to infrastructure, markets, and opportunities;
3. Research into the value chains and market systems is not sufficient and mostly carried out only during Inception Period, and not updated during implementation at regular intervals.
4. Not enough Political Economy Analysis is done and most emphasis national level analysis not sector level.

Main gaps in programming

Agricultural finance. Probably the most significant gap in the commercial agriculture portfolio is around agricultural finance. While long term investment is important, it is the ability of the hundreds of thousands of targeted farmers to access the working capital to buy seeds, inputs, pay for labour, rent tractors, that are the binding constraint.

Land tenure. While DFID is making steady progress on helping many countries to register land and get title deeds to farmers, there is less focus on linking registration with the services need to make it most productive. Introducing supporting initiatives, as exist on LIFT in Ethiopia, will speed up the economic use of the land titles and stimulate commercial agriculture.

Lateral linkages in DFID projects. DFID lateral linkages between projects between projects are weak. There are challenges aligning the incentives across project implementers to stimulate real coordination and synergy to address the binding constraints at all functional levels. This also includes coordination and linkages within DFID's own portfolios (i.e. governance programmes linking to economic growth).

Output buying linkages. Even though the market drives demand, projects based on establishing effective output buying market linkages are rare. There are some programmes based on outgrower schemes, but they typically target a small number of outgrowers. When there is an effective commercial outgrower scheme for a widely traded commodity, including embedded input supply and extension services, it tends to service a small number of SHFs, with an emphasis on making the best ones bigger.

The missing middle. There is a gap in programming effectively focusing on the missing middle for agricultural transformation. This is often due to i) the challenges of identifying the “missing middle” in the structure of the value chains, the technologies that are needed to drive increased efficiency and productivity, but also to the ii) challenges of financing and building the capacity of those “missing” companies and functions.

Better inclusion of women in programmes. There is anecdotal evidence that though programmes set targets to ensure that women represent 40 percent of all beneficiaries, in practice programmes in the portfolio struggle to meet this target. Of the programmes funded, only 21 out of the 64 have explicit targets for women.

Recommended best practices for commercial agriculture programming.

Good analysis of the whole system. There is general agreement that projects must understand the nature of the problem being fixed and its specific context before embarking on applying a solution. Three main types of analysis:

- Understanding the whole value chain, its structure and the markets it serves, including all the channels taking the product to those specific markets, will inform projects of where target clients are situated within the value chain and identify the priority constraints binding growth, and key points of leverage;
- Deeper specific market system analysis is required to understand why a constraint is not being solved; and
- Good political economy analysis (PEA) which goes beyond the PE at the national level down to the PE within the specific value chain, highlighting the governance structures and power relationships.

Using points of leverage to maximise outreach. Identifying and applying services through the right points of leverage within the value chain (be they economic nodes, formal policy or social norms, or focus on a geographic region) is critical for most efficient and cost-effective impact on large numbers of emerging farmers.

Using lead firms. Projects prioritise their delivery through larger agribusinesses to leverage access to large numbers of target clients. Successful partnerships require a sound value proposition for sustainability. Agricultural input companies dominate the lead firms, but other lead firms may include financial institutions, equipment suppliers, or service providers which are supporting the specific point in the value chain.

Establishing a clear value proposition. Building buy-in from institutional partners who will potentially deliver the solutions into the future Clear identification of the value proposition. A sound value proposition is needed for reaching sustainability and scale, tied to business modelling. An important element in establishing the value proposition is sound business modelling, which is often a weakness in projects.

Use of proper due diligence. With a reliance on lead firms as partners to drive sustainable interventions, it is imperative that projects carry out due diligence to determine a projects suitability to serve as a partner. Programmes are applying more stringent due diligence analysis to ascertain firms' capacity and commitment to following through on the intervention.

Facilitation and use of Co-facilitators. DFID projects are increasingly playing the role of facilitator, working outside of the direct market transactions (unless they invest in a social investor) needed to grow commercial agriculture opportunities. As facilitators have time bound interventions and need to achieve results, they need to carefully select their partners, working with strong value propositions. In many cases, the projects are also using co-facilitators to be able to deliver in hard to reach environments or to leverage their own scarce resources.

Importance of cross cutting services. Sectors providing services that cut across many value chains, such as agro-inputs or food processing, can address binding constraints for several value chains simultaneously. Though the emphasis of reach many smallholders with viable services.

Effective use of Monitoring and Results Measurement (MRM). MRM, often used synonymously with M&E, is a critical component that is weak on most projects. Good MRM starts with the clear understanding of the desired results and then monitors against them. The Donor Committee on Enterprise Development (DCED) standards for MRM are based on the use of results chains, which explicitly lay out the theory of change and the elements needed to measure progress on the theory of change.

Clearly defining and harmonising indicators is important. At present DFID programmes have varying definitions between what is an "output indicator" and what is an "outcome indicator", which makes it difficult to compare across projects. Very frequently DFID programmes define systemic change as an output, when this is an outcome.

Focus on reachable markets. Domestic markets are much easier to reach than international markets, which have much more stringent standards and trade criteria. In addition, competing with international competition for domestic markets usually means working under a "price umbrella", where local suppliers are competing with the Cost Insurance Freight cost locally compared to the Free on Board price for exports. Therefore, being able to compete effectively for the local market is the starting point, and then export.

While the majority of the DFID projects are in Africa, the emphasis on responding to the needs of domestic markets also holds true in the portfolio in Asia. DFID's recent focal countries in Asia have been Afghanistan, Nepal, Bangladesh, Pakistan, and Myanmar, countries with large underserved domestic markets.

Flexible programming to support innovation. DFID's funding is providing much innovative work in the field of commercialising agriculture to the benefit of SHFs. DFID is setting new standards for target numbers of beneficiaries who can be reached and funding the innovations by contractors and other implementing partners to effectively reach those beneficiaries. DFID should continue its use of relatively flexible programming to deliver on large targets which will continue to facilitate future innovations.

ACRONYMS

Acronym	Full Name
A2F	Access to Finance
AECF	Africa Enterprise Challenge Fund
AGU	Aga Khan University
AI	Artificial Insemination
ASAP	Adaption for Smallholder Agricultural Programme
ASAL	Arid and Semi Arid Lands
AWEF	Arab Women's Economic Foundation
ARTF	Afghan Reconstruction Trust-Fund
AgDevCo	Africa Agriculture Development Company
BIF	Business Innovation Facility
BSP	Business for Shared Prosperity in Burma
CAADP	Comprehensive Africa Agriculture Development Programme
CASA	Commercial Agriculture for Smallholders and Agribusiness
CDC	UK's Development Finance Institution
CPP	Crop Protection Products
CSA	Climate Smart Agriculture
DANIDA	Danish International Development Agency
DCED	Donor Committee for Enterprise Development
DFID	Department for International Development
DRC	Democratic Republic of the Congo
ECA	Mozambique Agricultural Marketing Company
FI	Financial Institutions
FSD	Financial Sector Deepening Trusts
GAFSP	Global Agriculture and Food Security Programme
GAP	Good Agricultural Practices
GEMS	Growth and Employment in States Programme
HQCF	High Quality Cassava Flour
IMSAR	Improving Market Systems for Agriculture in Rwanda
KAP	Knowledge Attitudes and Practices
KMT	Kenya Markets Trust
LIFT	Land Investment for Transformation (Ethiopia)
MADE	Market Development
MAP	Kenya Market Assistance Programme
M4P	Making Markets Work for Poor
MFI	Monetary Financial Institutions
MNC	Multinational Corporation
MPS	Marginal propensity to consume
MRM	Monitoring and Results Management
MSD	Market Systems Development
NAIC	Net Attributable Income Change
NGO	Non-Governmental Organisation
NMDP	Nepal Market Development Programme
NU-TEC	Northern Uganda: Transforming the Economy through Climate Smart Agribusiness
NUTSEM	Livelihoods and Food Security Trust Fund for Burma

PCR	Programme Completion Review
PEA	Political economy analysis
PIMS	Promoting Inclusive Markets in Somalia
PMDP	Palestine Market Development Programme
PEPE	Private Enterprise Promotion Ethiopia
PEPZ	Private Enterprise Programme in Zambia (PEPZ)
RED	DFID Research and Evidence Division
SEED	Social Enterprise for Economic Development
SHF	Small Holder Farmers
SME	Small Medium Enterprises
SPV	Special Purpose Vehicle
USAID	United States Agency for International Development
VC	Value Chain

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1 INTRODUCTION

In line with DFID's Agriculture Policy Framework and recently launched Economic Development Strategy (EDS), commercial agriculture has been defined as a priority area for DFID interventions. A review of DFID's commercial agriculture portfolio has been requested to help build the business case for the Commercial Agriculture for Smallholders and Agribusiness (CASA) programme. In addition, the objectives of the portfolio review were to- i) Provide an analysis of DFID's existing commercial agriculture portfolio in terms of geographies, programme type and approach, level of intervention, intended beneficiaries and results achieved, ii) Identify gaps in the existing portfolio relative to DFID's commercial agriculture policy framework and Economic Development Strategy, iii) Identify emerging trends and lessons learned regarding commercial agriculture approaches to development.

This section highlights key elements of DFID's Conceptual Framework on Agriculture (2015) and DFID's Economic Development Strategy (2017) focusing on the common elements in both that has been taken into consideration while reviewing the current portfolio of commercial agricultural programmes.

1.1 Key elements of the DFID Agriculture Policy Framework and Economic Development Strategy

This section sums up the key ideas found within the 2015 DFID Agriculture Policy Framework and DFID's 2017 EDS. The three main concepts guiding the Agriculture Framework are:

1) A three-pronged livelihood strategy which emphasises i) "promoting agricultural transformation focused on commercialisation and agro-industry development" i.e. "Stepping up" (Ref: Figure 1), ii) "facilitating a long-term rural-transition from subsistence agriculture to off farm jobs" i.e. Stepping out" (Ref: Figure 1), and iii) Investing in subsistence agriculture as a holding strategy i.e. Hanging in (Ref: Figure 1). Since these transitions to Stepping up and Stepping out will take time and will not be able to include everyone at the same time, support must be provided for those individuals who remain in subsistence agriculture who are "Hanging in."

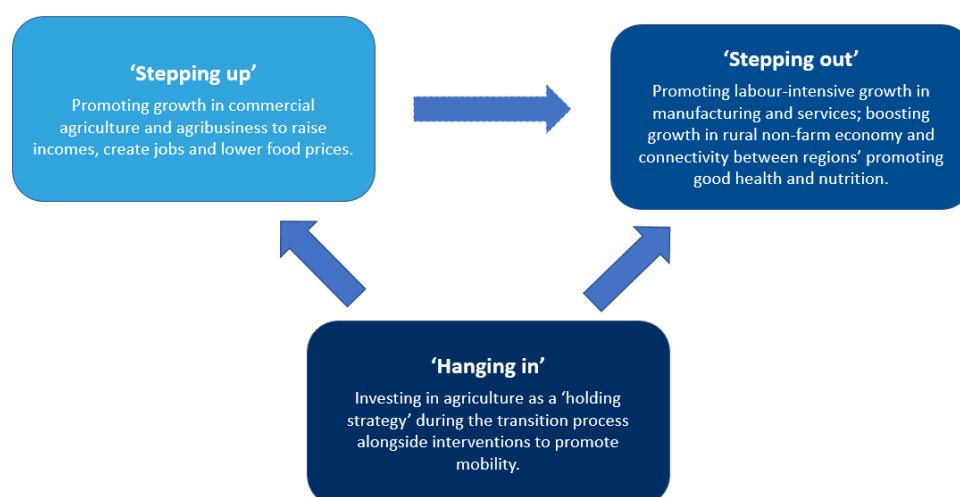
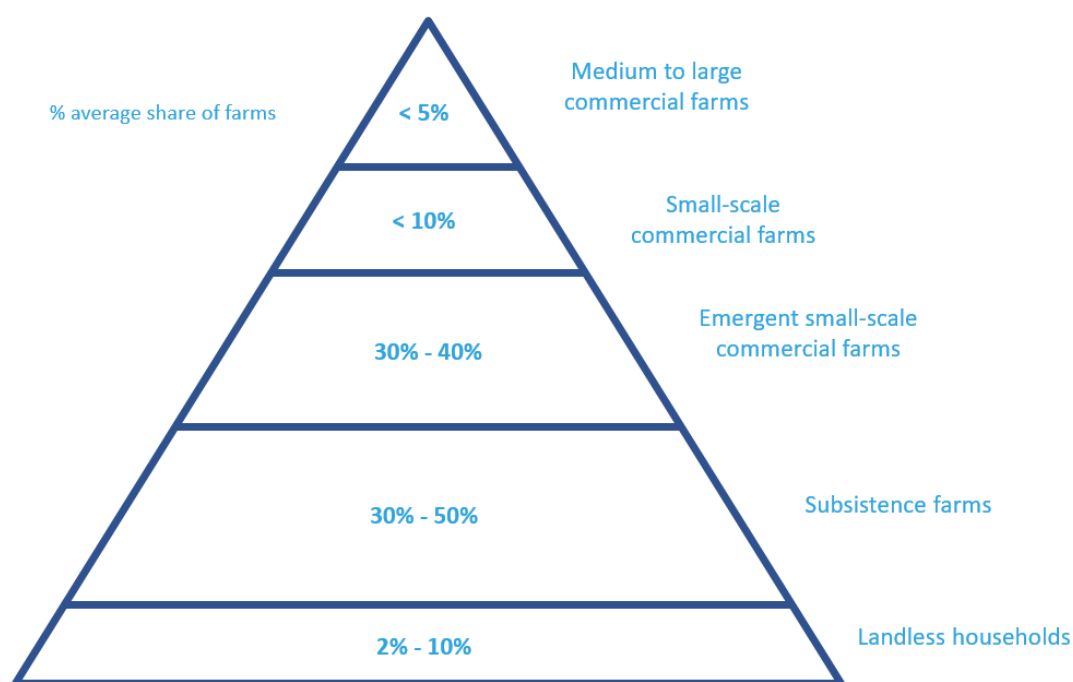


Figure 1: Economic and Livelihood Strategies, DFID's Conceptual Framework on Agriculture

2) A clear segmentation of farmers and rural households by typology of farming business. This segmentation is represented in Figure 2. In DFID's framework, some key conclusions are drawn from this segmentation are:

- Only a small number of commercial farms are medium or large;
- This small number of large, medium, and commercial farms are the most productive and active in local and international markets;
- The emergent small scale commercial farms are both an opportunity for productive growth, but are often a challenge for development; and
- There is a significant number of subsistence farming households that are unlikely to “turn farming into a profitable business”, at least in the short term and there is a need for continued support to



them during the transition period.

Figure 2: Indicative model of farm/rural household segment, DFID’s Conceptual Framework on Agriculture

3) Key role of geographical location in successful commercial agriculture, and that across the globe, agriculture occurs in one of three zones, as explained in the figure 3.



Figure 3: Geographical Zones as identified in DFID's Conceptual Framework on Agriculture

These three core concepts are complemented by three cross cutting themes: improved nutrition, improved climate resilient and climate smart approaches, and increased gender inclusion. The framework also acknowledges that all parts of the framework are dependent on what it calls “Getting the Basics Right,” or having a proper business enabling environment and access to appropriate technology.

These concepts have also been replicated in DFID's 2017 EDS strategy as can be seen below¹:

- *Boosting agri-business; financing agriculture infrastructure and promoting commercially-viable agriculture by transferring knowledge and inputs to smallholder farmers and linking them to markets (Stepping-up as referred to in DFID's Agriculture Framework);*
- *Helping farmers and their families to have opportunities and jobs outside of their farms, and supporting SMEs in rural areas (Stepping out);*
- *Supporting subsistence farmers, without other economic opportunities, to avoid hunger, malnutrition and extreme poverty (Hanging in); and*
- *Encouraging commercial approaches that reduce the cost of nutritious diets. DFID will also take steps to “empower women and prevent them from being stuck in low return activities” and to “promote responsible agriculture investments.” (Cross cutting themes).*

The commercial agriculture portfolio review must therefore take these elements into account when analysing DFID's current programmes.

1.2 Critical questions to address in this review

This portfolio review focuses on commercial agriculture, which, as per the Agriculture Framework and EDS mentioned above, indicates that it should focus on programmes which primarily support “Stepping Up” and, to a certain extent, support “Stepping Out”.

The current review attempts to answer the following critical questions: How are existing commercial agriculture programmes supporting the Stepping Up and Stepping Out goals?

- What is the scale of farms and scale of agribusinesses to be prioritised? This is especially important given that the framework acknowledges that a significant portion of individuals currently involved in subsistence farming will not be able to become commercially viable.
- What are the institutional arrangements to be promoted to ensure greatest benefits from investments to large numbers of small scale farmers? This implies looking at how systemic change is occurring through commercial agriculture programmes. It also means trying to identify the “emerging small-scale farmers” in “intermediate zones” identified within the frameworks.
- Which value chains or related agribusiness investments are likely to have the largest impact in the long run? Again, one must keep in mind here not only which farmer segment one is focusing on, but also the cross cutting priorities mentioned in the EDS.
What are the risks from prospective agribusiness investments that need to be prevented or mitigated?

¹ Section 3 ‘Our sector priorities and commitment to inclusion’ of DFID Economic Development Strategy, 2017. All non-italicized elements added by the authors

The next sub-section outlines the methodology used to undertake this review.

1.3 Methodology

The current review was divided into two phases: an inception phase and a “deep dive” phase. During the inception phase, the authors worked with DFID to improve and update the existing database of DFID commercial agriculture programmes to include all relevant information for programmes included in the commercial agriculture portfolio review. This was done primarily through a literature review of programme documents found on DevTracker². The preliminary portfolio, as well as the database structure was presented to DFID in an inception report and approved for use.

The “deep dive” phase included a more in-depth desk review of documents, primarily business cases and annual reviews, complemented by interviews with 18 DFID programme officers and advisers³ located throughout the globe representing their respective country missions or head office departments. These interviews focused on addressing the key questions mentioned in the previous sub section, while also identifying best practices and lessons learned⁴ from a set of 24 programmes (Annex 2), and validating the information in the database.

1.4 Report Structure

This report is structured thus:

- Section 1: introduction;
- Section 2: sets definitions of key terms and concepts;
- Section 3: presents a general overview of the portfolio using the updated database, a detailed review of various sub-sectors identified in the portfolio and finally presents key findings ending with notable omissions in the dataset;
- Section 4: section discusses key statistics, general findings, and key lessons learned for each of the seven core primary subsets of commercial agriculture identified; and
- Section 5: summary of findings, key conclusions and recommendations

² <https://devtracker.dfid.gov.uk/>

³ Refer to Annex 3

⁴ Please refer to Annex 2 of the Inception Report for interview guide used during the Deep Dive phase.

2 KEY ELEMENTS OF COMMERCIAL AGRICULTURE

2.1 Definition of commercial agriculture

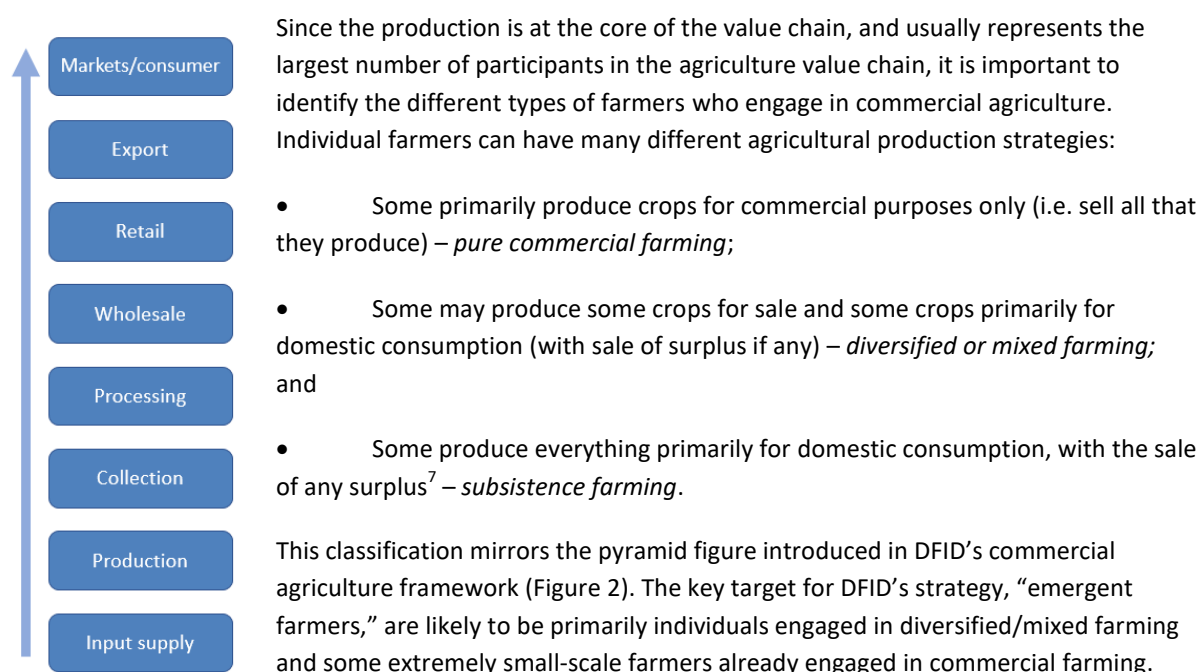
DFID's Conceptual Framework on Agriculture focuses on agricultural transformation (emphasis on increasing commercialisation and agro industry) and rural transitions (people moving out of agriculture into off-farm jobs). Promoting agricultural transformation and rural transitions therefore require a dynamic and context-specific approach to agriculture, with agriculture programmes and policy integrated into economic development strategies.

Within this context we are adopting the following definitions of commercial agriculture:

Commercial Agriculture is agricultural production that is produced with the intent to sell. Therefore, a **Commercial Farmer** is one who plants at least one crop (or raises an animal) with the primary intent to sell the harvest and is investing in agricultural inputs and services⁵ to increase productivity of that crop. Since in practice it is hard to measure and individual's intent, one can use the criterion that the commercial farmer must willingly seek⁶ to sell at least fifty percent of his/her production.

Commercial agriculture is represented by a value chain comprised of a series of functions (Figure 4) - take crop (or animal) from production to collection/aggregation, to processing, to marketing/distribution and eventually retail to consumer. All the actors in the value chain from the aggregation point to consumption are involved in commercialisation. A defining characteristic of the commercial actors **within the core value chain** is that they take actual ownership of the product.

Figure 4: Functions in a Value Chain



⁵ In economic terms, so representing both capital and labor.

⁶ Not out of a position of duress, but as an intentional plan to generate income.

⁷ Many subsistence farmers are often forced to sell part of the harvest to meet cashflow requirements, but then buy back in the future when prices are higher.

2.2 Definition of “Stepping up”

Farmers can be categorised in various ways- depending on the land available and the financial resources to purchase inputs, as well as the opportunities for marketing and linkages within the value chains. As previously mentioned a farmer can be completely disengaged from commercial agriculture, partially engaged, or fully engaged. Depending on this level of engagement and the production constraints, the farmer will choose the value chain in which she will be involved.

Assuming the farmer engages at least partially in commercial agriculture, his/her success is dependent not only on existing capital and labour but an array of supporting services such as input supply (seed, fertilisers, and crop protection products (CPP)), farm mechanisation, extension, processing equipment, transport services, and pricing information. It also requires an enabling policy environment which provides rules within which the sector can operate efficiently. All these items can help increase the productivity and profitability of a farmer.

The farmer’s output must be sold to be a commercial farmer (as per the previous section’s definition). The marketing channels through which the farmer’s crops/animals flow from the farm-gate to the final consumer will vary based on a variety of factors, including the end market targeted (and quality of production demanded), the relationships developed by the farmers with aggregators and traders targeting those markets, and the technologies being used in production or processing.

The farmer can achieve a better commercial position within this system by improving their productivity along several different complimentary but mutually exclusive dimensions. These are:

- Process upgrading: improving their processes to become more efficient and productive;
- Product upgrading: producing a differentiated product to fit a higher value market;
- Functional upgrading: changing the functions they perform in the value chain, either by shifting entirely from one function to another, or by integrating numerous functions inside their business;
- Channel upgrading: shifting from a lower value-added channel to a higher value added channel for the same product (differentiated by the technology they are using or the market they are targeting).

Therefore, agricultural transformation is focusing on shifting production typologies from low input – low output (low productivity) subsistence farming to higher input – high output (higher productivity) farming which can be more profitable to the farmers and increase their competitiveness. This is the core process involved in the goal of “stepping up”.

Programmes that engage in agricultural transformation will typically start with commercially active farmers who already understand the business, but who can benefit from one of the main types of upgrading available. As noted in the DFID Commercial Agricultural Framework, it is very difficult to generate agricultural transformation by working with the poorest of the farmers (subsistence farmers), as they often face binding constraints (such as lack of land) to take advantage of one of the forms of upgrading.

The implication of this, however, is that a good commercial agriculture programme should be primarily involved in the Stepping up aspect of the framework. In turn, a commercial agriculture portfolio that assists in this upgrading can be deemed an effective one.

3 DFID'S COMMERCIAL AGRICULTURE PORTFOLIO

The projects in DFID's commercial agriculture portfolio have been recorded into a database to facilitate DFID programme management and tracking. This database, which was provided by DFID and last updated in 2015, contained 59 programmes, of which 36 had a project end date later than 2015. As per DFID instructions, the database was expanded and programmes were added to the database only if the programmes specifically allocated 2 million GBP of budget were allocated to commercial agricultural activities⁸.

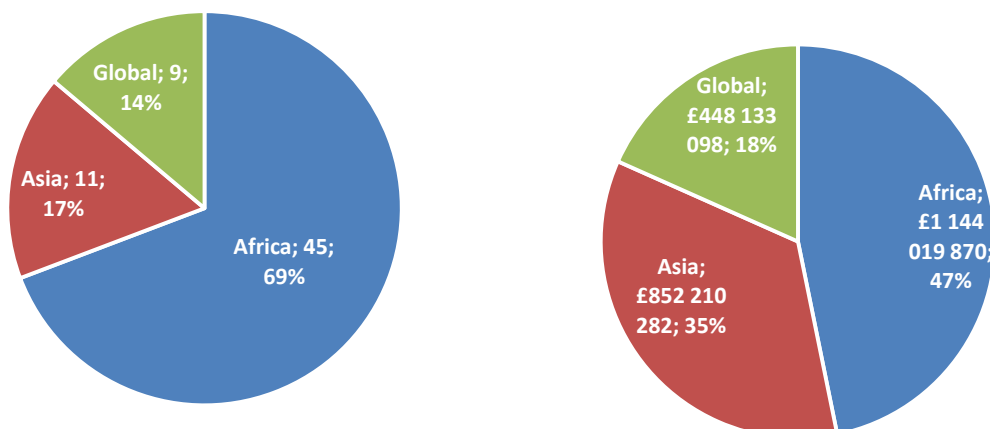
The current portfolio is composed of 68 programmes with end dates later than 2015. Of this 68, three programmes have not yet started (SHARPE, CASA, and LINKS). This section relies on the data of the 65 programmes which are currently active. Nine of these programmes are extensions of other programmes, and out this nine, four have programme completion reports (PCRs) on-hand which will be used when discussing outcomes.

3.1 Essential statistics

3.1.1 Geographical Distribution

The portfolio covers 24 distinct countries, either through a dedicated country programmes or through multi-country initiatives. Figure 4 provides a detailed breakdown.

Figure 5 Portfolio geographic distribution by number of programmes and DFID Budget



Under Asia there are 11 dedicated programmes in five countries (Afghanistan, Bangladesh, Myanmar, Nepal, and Pakistan). Under Africa there are a total of total of 33 programmes, and 12 regional/multi-country initiatives covering 15 countries. The Global⁹ category covers nine programmes, four of which focus exclusively on the African and Asian continents.

⁸ There are quite a few programmes, such as the Palestine Market Development Programme and the Arab Women's Enterprise Fund, with smaller components among a larger portfolio, that are carrying out interventions which are generating good lessons learned for commercial agriculture, but which are not included due to the small scale of the total programme investment in commercial agriculture.

⁹ See Annex 1 for the definition of the categories.

Though most programmes are based in Africa (69 percent of programmes), they only receive 36 percent of funding. This is due to two factors:

- Three programmes in Afghanistan, which have a combined budget of 470,930,000 GBP (or 15 percent of total budget allocated to all programmes). The Afghan Reconstruction Trust-Fund 2014-2017 (ARTF) programme by itself has a budget of 428 million GBP, or 13.5 percent of total DFID budget within the sample. If Afghanistan were removed from the portfolio, the Asian programmes' budget would be 14 percent of total.
- Global initiatives are primarily large programmes with multiple donors involved, and therefore command large amounts of funding.

Since Africa has the most programmes and the largest number of countries participating, it would be helpful to better understand the geographical allocation on the continent. Table 1 provides this breakdown.

Table 1: Distribution of programmes within Africa (using DFID defined regions)

	East	West	South	Central	Multi zone	Total
Number of programmes	22	7	6	1	9	45
% of Africa total	48.89%	15.56%	13.33%	2.22%	20.00%	100.00%
Budget	£542,442,635	£171,084,977	£83,037,333	£102,500,000	£244,954,925	£1,144,019,870
% of Africa total	47.42%	14.95%	7.26%	8.96%	21.41%	100.00%

Approximately 62 percent of programmes and 54 percent of budget is allocated to East and South Africa regions. There are historical and linguistic antecedents which help explain this distribution, which is also found when looking at more regional initiatives funded by DFID.

Table 2 provides a more detailed examination of the amount budgeted by country and region. These are the budgeted amounts and do not show the actual amount spent on the project. In addition to the CDC and Afghanistan programmes previously mentioned, global endeavours receive the third largest amount of money. This is followed by Ethiopia, Nigeria, and Rwanda. It should be noted that those three African countries also have some of the longest lasting programmes in the portfolio.

Table 2: Number of Programmes by specific geographic location, total budget for all programmes, average budget per programme, and rural poverty rate.

Location	# of programmes	Total Budget	Avg Budget per programme	Rural poverty Rate ¹⁰
Afghanistan	3	£470,930,000	£156,976,667	38.3%
Global	5	£348,924,099	£69,784,820	N/a
Nigeria	3	£133,064,981	£44,354,994	52.8%
Rwanda	6	£132,586,898	£22,097,816	48.7%
Ethiopia	2	£126,556,431	£63,278,216	30.4%
Myanmar	2	£125,000,000	£62,500,000	52.0%
DRC	1	£102,500,000	£102,500,000	64.9%
Ghana, Malawi, Sierra Leone, Mozambique, Rwanda, Uganda, Tanzania, Zambia	1	£99,563,651	£99,563,651	50.0%
Bangladesh	3	£97,239,993	£32,413,331	35.2%
Tanzania	6	£94,959,988	£15,826,665	33.3%
Nepal	2	£91,040,289	£45,520,145	27.4%
Kenya	2	£76,195,665	£38,097,833	49.1%
Pakistan	1	£68,000,000	£68,000,000	35.6%
Africa	4	£48,000,000	£12,000,000	N/a
Uganda	1	£48,000,000	£48,000,000	22.4%
Zambia	3	£46,049,999	£15,350,000	77.9%
Malawi, Mozambique, Tanzania, Zambia, Zimbabwe	1	£38,000,000	£38,000,000	61.8%
Africa & Asia	1	£37,000,000	£37,000,000	N/a
Kenya, Uganda, Tanzania, Rwanda, Burundi, Zimbabwe, Zambia, Mozambique and Malawi	1	£36,252,694	£36,252,694	56.3%
Myanmar, Malawi, Nigeria	1	£32,279,000	£32,279,000	53.8%
Kenya, Nigeria, Zambia, Uganda, Vietnam	1	£24,999,999	£24,999,999	44.2%
Sierra Leone	2	£20,499,996	£10,249,998	66.1%
Ethiopia, Kenya, Tanzania, Uganda and Rwanda	1	£19,000,000	£19,000,000	33.7%
Ghana	2	£17,520,000	£8,760,000	37.9%
Zimbabwe	1	£16,697,334	£16,697,334	84.3%
Burkina Faso, Ghana, Nigeria and Niger	1	£15,138,580	£15,138,580	48.4%
Kenya, Tanzania, Uganda	1	£15,000,000	£15,000,000	34.9%
Rwanda, Ethiopia	1	£13,380,050	£13,380,050	39.6%

10

Rural Poverty data is taken from the World Bank based on the most recently recorded data. See <http://data.worldbank.org/indicator/SI.POV.RUHC?end=2015&start=2015&view=map&year=2015> Exceptions are Myanmar and Somalia, which are estimated based on UNDP (<http://www.mm.undp.org/content/myanmar/en/home/countryinfo.html>) and IFAD (<https://www.ifad.org/documents/10180/d17d09e6-81c0-4f40-9f11-1c62e9bf7635>) respectively. For all multi country programmes, rate is estimated based on World Bank data when possible. For certain programmes this was not possible due to lack of details

Location	# of programmes	Total Budget	Avg Budget per programme	Rural poverty Rate ¹⁰
Malawi	1	£13,290,000	£13,290,000	56.6%
Somalia	1	£13,000,000	£13,000,000	51.0%
Ethiopia, Tanzania, Ghana, Malawi, Burkina Faso and Zambia	1	£8,000,000	£8,000,000	47.3%
Mozambique	1	£7,000,000	£7,000,000	56.9%
Bangladesh, Kenya, South Africa	1	£4,930,000	£4,930,000	53.8%
South Sudan	1	£3,763,603	£3,763,603	55.4%
Grand Total	65	£2,444,363,250	£35,676,629	

The country involved in the largest number of programmes is Tanzania (six country Programmes, and included in six regional programmes), followed by Rwanda (six country and part of four regional programmes). Zambia, and Kenya participate in seven programmes, though with a different number of country specific and regional programmes (three country and four regional and two country and five regional, respectively). Nigeria is fifth with three in country specific programmes and its inclusion in three regional endeavours.

The average programme budget is approximately 35.6 million GBP, though this covers a spectrum of budgets ranging from 3 million to 430 million GBP. A more accurate view is given by the median budget for the portfolio, which is 20 million GBP. Since using average DFID budget per country would allow one to see how DFID is spending its money and each country, the table below does that by eliminating regional and global spend. Given its role as a strong outlier, Afghanistan is also eliminated. The results are as follows.

Table 3: Country specific comparison of average budget per programme

Country	# programmes	Average budget	poverty level ¹¹
DRC	1	£102,500,000	64.90%
Pakistan	1	£68,000,000	35.60%
Myanmar	2	£62,500,000	52.00%
Ethiopia	3	£50,185,477	30.40%
Uganda	1	£48,000,000	22.40%
Nepal	2	£45,520,145	27.40%
Kenya	2	£38,097,833	49.10%
Nigeria	4	£33,266,245	52.80%
Bangladesh	3	£32,413,331	35.20%
Rwanda	6	£22,097,816	48.70%
Zimbabwe	1	£16,697,334	84.30%
Tanzania	6	£15,826,665	33.30%
Malawi	1	£13,290,000	56.60%
Somalia	1	£13,000,000	51.00%
Africa	4	£12,000,000	N/a
Sierra Leone	2	£10,249,998	66.10%
Ghana	2	£8,760,000	37.90%
Mozambique	1	£7,000,000	56.90%

¹¹ The official poverty rate in rural areas (persons living outside of metropolitan areas). Rural poverty refers to poverty found in rural areas, including factors of rural society, rural economy, and rural political systems that give rise to the poverty found there.

Country	# programmes	Average budget	poverty level ¹¹
South Sudan	1	£3,763,603	55.40%
Adjusted Portfolio AVG		£33,300,269	

The adjusted average portfolio project budget is approximately 33.3 million GBP, which is closer to the median budget for the portfolio. The countries receiving an above average amount of money per project (excluding Afghanistan) are DRC, Pakistan, Myanmar, Ethiopia, Uganda, Nepal, and Kenya. The length of certain programmes, such as the 11-year Private Sector Development Programme in DRC, explains some of the higher than average budget observed.

3.1.2 Classification by Primary Subset of Commercial Agriculture

The segmentation of the portfolio across subsets of commercial agriculture should reflect both the goals of the programme and the logic of the intervention by highlighting the issue that the programme is hoping to address. These subsets are defined in Annex 1. However, at the request of DFID, the value chain subset (see Annex 1) has been subdivided to reflect programmes that focus primarily on inputs (seeds, fertiliser, fodder, etc.) to *push* production and outputs (end market linkage, warehousing, outgrower schemes, etc.) to *pull* production. Since all programmes are multidimensional, they were subdivided based on a primary and a secondary subset of commercial agriculture, as can be seen in Table 4.

Table 4: Portfolio distribution of Primary and Secondary subsets of commercial agriculture¹² found in the 58 portfolio programmes

Subset of commercial agriculture	Primary	Secondary
Value Chain: input focus	19	13
Agribusiness Investment	13	14
Enabling Environment	7	16
Access to Finance	6	9
Infrastructure	6	4
Research	5	1
Value Chain: output focus	4	4
Climate Smart Agriculture	4	2
Land Tenure	3	1
N/A (The CASA project had not defined this information at report drafting)	1	4

The primary focus of programmes is dominated by two subsets which combine to represent approximately 47 percent of the portfolio:

- Value Chain: input focus Development (28 percent of portfolio),
- Agribusiness Investment (19 percent of the portfolio)

A detailed analysis of each subset is done in section 4.

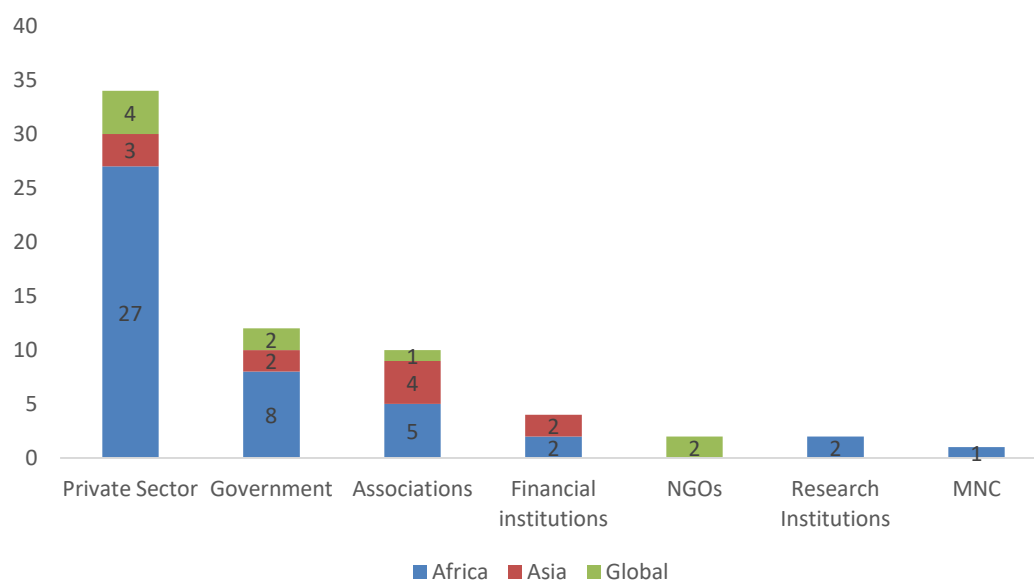
3.1.3 Preferred Delivery Channel

The analysis identified seven broad channels (see annex 1 for description) through which projects work: Associations, Government, Financial Institutions, Non-Government Organisations, Research Institutions, Multi-National Corporations (MNCs), and Private Sector. A channel is the vector through which change will arrive to

¹² Subsets are defined in the Annex 1

small holder farmers, and differs from a programme implementer. For example, the Africa Agriculture Development Company (AgDevCo) is a financial institution implementing the programme that provides funds to local Private Sector businesses to achieve results. Other programmes may be working through financial institutions or through a Government MDA to deliver the results.

Figure 6: Preferred channels used by programmes in the portfolio



The term “private sector” was deemed to be quite broad in this context, due to the large variance in size found within the different firms that the programmes work with. At first the term “Small and Medium Enterprise (SME)” was used, but this has a very specific connotation, which did not fit with all the actors one encounters in the same programme. Indeed, in Nigeria, many programmes work through a mix of very large (multinational), large local companies (multimillion GBP), and other local SMEs as their partners, depending on the intervention. The size of the firm the programmes work with is usually a function of the firm’s desire to work with the programme, as well as the availability of firms active at the designated intervention’s point of leverage in the value chain.

The Private Sector is the most common channel used in the portfolio, used in in 55 percent of programmes. DFID programmes seem to prefer using the private sector as the delivery channel, as evidenced by:

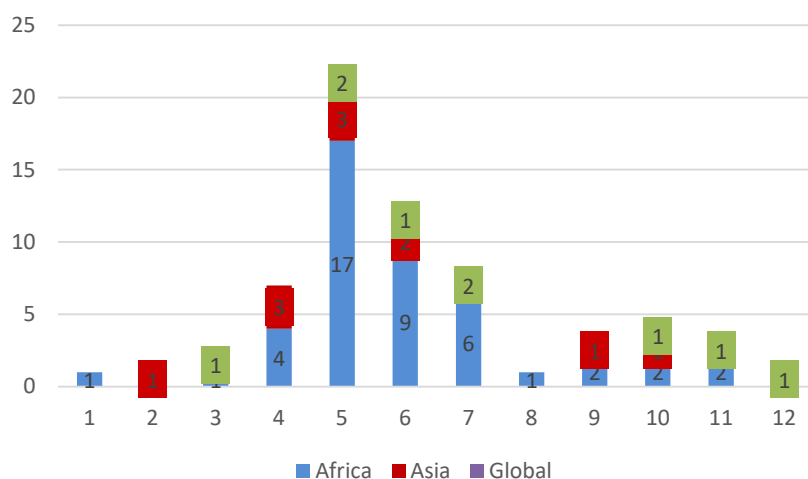
- How DFID contributes funds to large multilateral programmes. For example, DFID ensured that the clear majority of its funding for the Global Agriculture and Food Security Programme (GAFSP) went to the programme’s Private Sector Window rather than the Public Sector one.
- How it encourages the Private sector to conduct research. This is seen directly through the use of “Pull Grants” (such as in the AgResults: Innovation in Research and Delivery programme) and the use of certain Catalytic funds (such as in the AGRI- TECH CATALYST programme).
- How DFID supports the use of challenge funds. These are a form of action research, in which provision of capital is given to a company to try an innovative approach or business model.

It should be noted that there is only one programme explicitly focused on multinational corporations (MNC) within the portfolio (Global Value Chain). However, there are other programmes which work with MNCs such as Market Development Programme (MADE) Nigeria which is working with PZ Cussons, Wilmar, and Syngenta,

among its total list of partners. Even BIF Phase 2 has broadened its partner type to any private businesses, in contrast to BIF 1 when the programme focused on MNCs. This could be an indication of a general implementation shift away from MNCs to a more pragmatic approach of working with whichever company is most willing and able to reach targets.

3.1.4 Programme Length

Figure 7: 65 portfolio programmes organised by length (in years) and by major geographic region



The most common programme length is five years, followed by six and seven years. Together, these represent 65 percent of all programmes in the sample. It should be noted that in the portfolio, 12 programmes were awarded time extensions ranging from 6 to 48 months by DFID. A further nine programmes are the second phase of a previous programme. If these were to be counted as form of programme extensions, then nearly one third of all programmes have received a form of time extension.

Table 5 shows the length of programmes by primary subset of programming. It is interesting to note that Agribusiness Investment programmes enjoy the longest time horizon, with 50 percent (6 out of 12) of their programmes lasting 7 years or more. In contrast, value chain programme with a focus on inputs only have 22 percent (4 out of 18) that last that long.

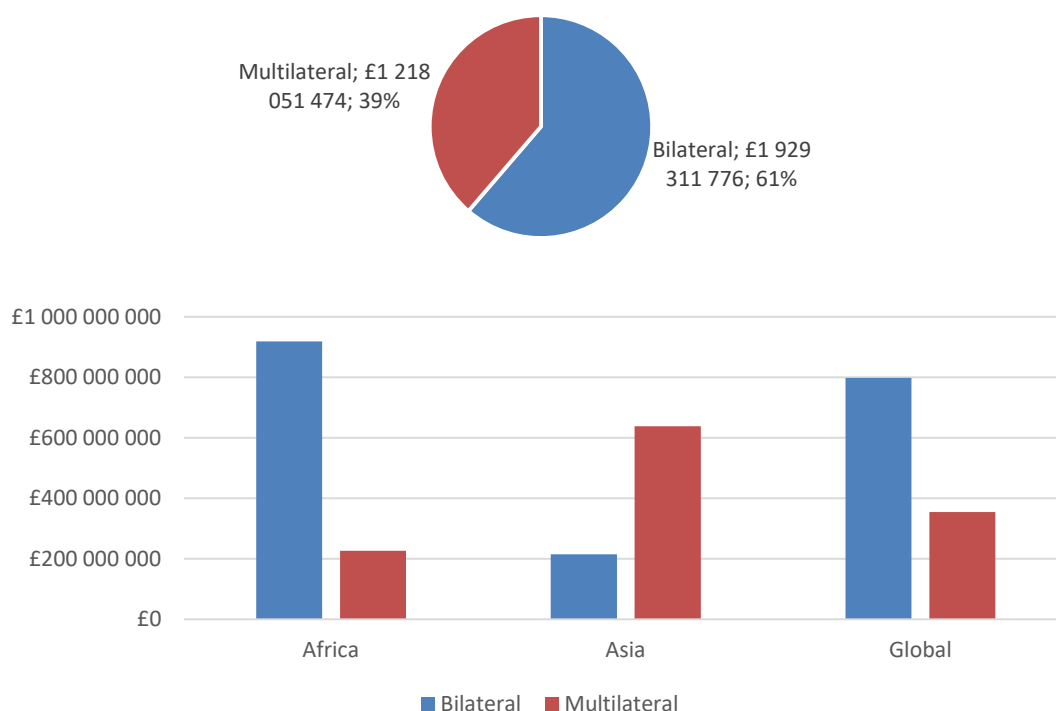
Table 5: Length of programme by subset

	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs	11 yrs	>11 yrs
Access to Finance				1	1	1	2		1			
Agribusiness Investment					4	2	3			1	1	1
Climate Smart Agriculture					1	1	1			1		
Enabling Environment				1	1	2	1			2		
Infrastructure			1		4	1						
Land tenure					2				1			
Research	1				3						1	
Value Chain: input focus		1		5	5	3	1	1	1		1	
Value Chain: output			1		1	2						

	1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs	11 yrs	>11 yrs
focus												
Grand Total	1	1	2	7	22	12	8	1	3	4	3	1

3.1.5 Bilateral and Multilateral Funding

Figure 8: Breakdown of DFID budget for multilaterally and bilaterally funded programmes in GBP (overall and by geography)



As explained in Annex 1, a programme that is defined as Multilateral is one that is funded by DFID and at least one other entity. This entity can be a Development Finance Institution (like the World Bank), another government (donor), or an institution like a private sector foundation. This means that a project that DFID co-funds with United States Agency for International Development (USAID) or Danish International Development Agency (DANIDA) in a single country will be classified as multilateral, as will a programme managed by the World Bank that operates in numerous countries and DFID is but one of many donors. In some of these cases, DFID is the lead partner in the funding as in Promoting Inclusive Markets in Somalia (PIMS) while in others, it is primarily providing funding into the programme's broader basket of funds.

DFID undertakes global endeavours primarily through multilateral funding and co-funds 23 of the 65 programmes. In Africa and Asia, most of DFID's programmes are bilaterally funded. This is not fully demonstrated in figure 8 which shows that multilateral funding is higher than bilateral in Asia. This is because the second largest programme budget in the portfolio, Afghanistan Reconstruction Trust Fund ARTF, is multilaterally funded. If it were to be excluded, bilateral funding in Asia would be greater than multilateral.

The amount that DFID provides to multilaterally funded programmes varies greatly, ranging between 9 percent and 85 percent of total budget. On average, DFID contributes 51 percent of total funding going multilateral programme budgets it is supporting¹³ (Table 6).

Table 6: Comparison of DFID budget contribution to total budget of multilaterally funded programmes

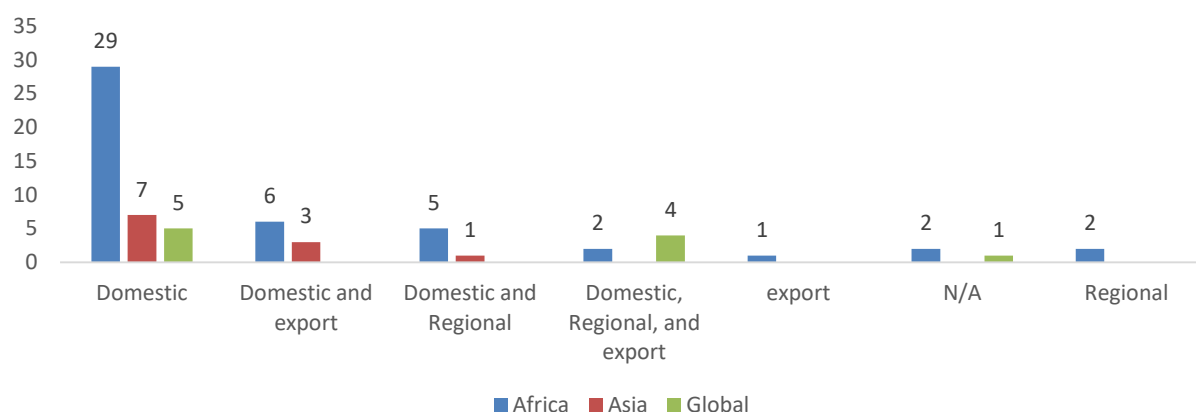
Programme Title	Total Programme Budget	DFID Contribution	as % of Total
Supporting Nutrition in Pakistan (SNIP)	£68,000,000	£80,000,000	85%
Promoting Inclusive Markets (PIMS) in Somalia	£13,000,000	£15,400,000	84%
Southern Agriculture Growth Corridor Programme	£42,000,000	£60,830,000	69%
Africa Enterprise Challenge Fund (AECF) AAW	£21,000,000	£31,000,000	68%
Afghanistan Reconstruction Trust Fund, 2014-2017	£428,000,000	£635,000,000	67%
Adaption for Smallholder Agricultural Programme (ASAP)	£150,024,099	£230,000,000	65%
Improving access to agricultural markets in Sierra Leone	£10,500,000	£16,960,000	62%
The Comprehensive Africa Agriculture Development Programme (CAADP)	£10,000,000	£16,679,316	60%
Rwanda Land Tenure Regularisation Programme	£31,400,000	£53,220,339	59%
Livelihoods and Food Security Trust Fund for Burma (NUTSEM) phase 2	£100,000,000	£172,000,000	58%
Katalyst Phase III - Agribusiness for Trade Competitiveness Project	£11,959,999	£22,000,000	54%
Comprehensive Agriculture and Rural Development Facility Phase ii	£30,000,000	£56,000,000	54%
Tanzania Land Tenure Support Programme	£4,950,000	£9,400,000	53%
"MSINGI" – Developing Competitive Industries in East Africa	£15,000,000	£30,000,000	50%
Tanzania Agribusiness Window - Africa Enterprise Challenge Fund	£19,799,995	£40,000,000	49%
Beira Agricultural Growth Corridor (BAGC)	£7,000,000	£14,383,546	49%
Cotton Sector Development Programme	£10,939,998	£24,656,000	44%
Clinton Health Access Initiative (CHAI)	£13,380,050	£38,000,000	35%
Access to Finance in Rwanda (phase 2)	£10,500,000	£31,000,000	34%
AgResults: Innovation in Research and Delivery	£24,999,999	£75,500,000	33%
Pro poor Growth Programme - Zimbabwe	£16,697,334	£63,100,000	26%
Enhanced Integrated Framework (EIF) Trade for Least Developed Countries Development Phase 2	£38,000,000	£274,500,000	14%
Global Agriculture and Food Security Programme (GAFSP)	£136,000,000	£1,500,100,000	9%
Grand Total	£1,218,051,474	£3,489,729,201	35%

¹³

The multilateral programme Enabling the Business of Agriculture, in which DFID provides funding to the World Bank, has been omitted due to the inability to determine the total programme budget.

3.1.6 Market Focus and Value Chains

Figure 9: Portfolio breakdown of market focus by region



The majority of programmes (56 percent) are focused exclusively on the domestic market. The number is likely higher, since the programmes that work on domestic and other markets are most likely to service primarily the domestic market. Three programmes out of 68 (four percent) focus exclusively on export or regional markets.

This is particularly true in Africa, where intra-regional trade is the lowest in the world (18 percent of exports are to other countries on the continent compared to 52 percent in Asia)¹⁴. This low intra-regional trade is seen as a strong impediment to inclusive economic growth in Africa¹⁵.

Looking at the specific value chains supported in each major geographic zone provides a more revealing breakdown. The following three tables provide that breakdown based on the three top value chains identified for each programme. This identification was done by examining the programme documents, and where possible¹⁶, validating data with the DFID country offices and department heads. Still, this was not possible for all programmes. Ten programmes (15 percent) didn't have any information concerning the specific value chains they worked in.

Table 7: Breakdown by major geographic zone of value chain supported and by programme market focus

AFRICA

Value Chain	Domestic	Domestic & Export	Domestic & Regional	Domestic, Regional, & Export	Export	Regional	Total
Inputs	7	2	3	1	0	0	14
Maize	6	2	2	0	0	0	10
Rice	6	2	1	0	0	0	10
Livestock	7	0	0	0	0	0	8
Poultry	4	1	1	0	0	0	7
Soy	4	1	1	0	0	0	6
Coffee	1	2	0	0	1	0	4
Aquaculture	2	0	0	0	0	1	3
Cotton	2	0	0	1	0	0	3

¹⁴ WTO, 2014, https://www.wto.org/english/res_e/statistics_e/world_region_export_14_e.pdf

¹⁵ Numerous, including all of the OECD's "African Economic Outlook" publications since 2014.

¹⁶ This was not possible for 10 programmes which didn't have any information concerning specific value chains they worked in.

Value Chain	Domestic	Domestic & Export	Domestic & Regional	Domestic, Regional, & Export	Export	Regional	Total
Dairy	3	0	0	0	0	0	3
Sunflower	1	1	0	0	1	0	3
Horticulture	3	0	0	0	0	0	3
Cassava	1	0	1	0	0	0	2
Cocoa	0	1	0	1	0	0	2
Potatoes	1	1	0	0	0	0	2
Sesame	2	0	0	0	0	0	2
Beans	0	0	1	0	0	0	1
Honey	0	0	1	0	0	0	1
Oil palm	1	0	0	0	0	0	1
Tea	0	1	0	0	0	0	1
Sorghum	0	0	1	0	0	0	1
Pigeon peas	0	1	0	0	0	0	1
Pulses	0	0	0	0	1	0	1
Total	51	15	12	3	3	1	89

ASIA

Value Chain	Domestic	Domestic and export	Domestic and Regional	Domestic, Regional, and export	Export	Regional	Total
Horticulture	2	2	1	0	0	0	5
Livestock	2	1	1	0	0	0	4
Inputs	2	0	0	0	0	0	2
Poultry	1	1	0	0	0	0	2
Wheat	2	0	0	0	0	0	2
Aquaculture	1	1	0	0	0	0	2
Dairy	1	0	1	0	0	0	2
Beans	1	0	0	0	0	0	1
Maize	0	1	0	0	0	0	1
Oil palm	1	0	0	0	0	0	1
Potatoes	1	0	0	0	0	0	1
Pulses	1	0	0	0	0	0	1
Cotton	1	0	0	0	0	0	1
Total	16	6	3	0	0	0	25

GLOBAL

Value Chain	Domestic	Domestic and export	Domestic and Regional	Domestic, Regional, and export	Export	Regional	Total
Maize	2	0	0	0	0	0	2
Livestock	1	0	0	1	0	0	2
Horticulture	1	0	0	0	0	0	1
Oil palm	0	0	0	1	0	0	1
Pigeon Peas	1	0	0	0	0	0	1
Sugar	1	0	0	0	0	0	1
Cassava	1	0	0	0	0	0	1
Inputs	1	0	0	0	0	0	1
Total	8	0	0	2	0	0	10

The three most supported value chains in the portfolio are agricultural inputs (17), livestock (14) and maize (14). Though these three value chains are supported in all three geographic areas, it is their prevalence in African programmes that makes them the most common in the portfolio.

Focus on Inputs: Low productivity hurts competitiveness for both domestic and export markets, and low-quality inputs is a key constraint to achieving higher productivity. Thus, focusing on building effective markets for inputs (seeds, fertilisers, CPP, etc.) by addressing their quality, their packaging, their pricing, their marketing, and their distribution channels will have wide ranging benefits. Hence, we see the focus on inputs as a value chain supported by programmes across all commodities. It also coincides with the target of assisting farmers to ‘step up’ assuming there is demand for their specific output. Improved access to inputs is key to “upgrading” of farmers, which is a core driver of commercial agriculture. Focus on inputs also indicates a strong proclivity within the portfolio towards two types of upgrades- a) Process upgrading (e.g. by having higher yields) and b) product upgrading (with crops resistant to certain bacteria, or larger simply products that are larger in size and command a higher price). Inputs also provide an excellent point of leverage to reach large numbers of target beneficiaries across all the commodity value chains.

Focus on livestock: Livestock is widely owned by target DFID beneficiaries and serves both as a productive asset generating a steady flow of income from sale of meat, milk or other by-products, but also a source of savings and long-term wealth accumulation. The key is how that asset is being used and how to maximise return on the asset by boosting productivity.

Focus on maize: Maize is the dominant food crop across many of the countries in DFID’s highest concentration of programmes (Eastern and Southern Africa). While it is a subsistence crop to many farmers, it is also the most widely traded food crop in which farmers will invest to produce, hence its importance in the portfolio.

3.1.7 Output/Outcomes and Beneficiaries

A brief mention should be made about the genesis of the following categories. An output is “a specific, direct deliverable under the control of the programme,” while an outcome is a result that comes around due to the programmes outputs.

The original database provided by DFID included the three following sub-sheets:

- **Output indicators¹⁷:** this was a list of all the indicators, without values, used by DFID programmes
- **Outcome indicators:** this was a list of outcomes listed for 39 programmes, some with target numbers associated, others not. Some outcomes were simply target percentages to be achieved. There was no clear indication if numbers presented were always targets or if some were actual numbers achieved.
- **Standardised indicators:** A list of indicators that seems to have been gathered from other institutions such as the World Bank.

Organised in this fashion, the data was difficult to understand, organise and compare and was not helpful to undertake a data driven portfolio analysis. The vast number of output and outcome indicators highlighted the variability with which each project would define what it was trying to achieve.

To remedy this, the current database limits itself to a smaller but more focused number of key target outcomes:

¹⁷ An output is “a specific, direct deliverable under the control of the programme,” while an outcome is a result that comes around due to the programme’s outputs. DFID, *Guidance on using the revised Logical Framework*, 2011

- **Number of smallholder beneficiaries who will adopt new practices and increase their sales, when possible disaggregated by gender.**
- **Average income uplift per beneficiary.**
- **Number of agricultural linked SMEs which will show increased productivity (through improved inputs, better processes, or new technology), access to new customers (through new channels, product mix, or linkages).**
- **Number of new jobs supported through programme, when possible disaggregated by gender.** This includes Full Time Equivalent jobs.
- **Number of new businesses created/supported through programme.**
- **Amount of investment stimulated.**

Since many programmes are still in implementation, it is premature to discuss this assessment of achieving outputs/outcomes and beneficiaries across programmes in too much depth. This report also examines publicly reported data, and does not evaluate the accuracy of reported outcomes. Therefore, the information in this section is best viewed as anecdotal, indicating potential trends within the portfolio which are subject to change as programmes are added, eliminated, expanded, or modified.

Table 8 below provides an indication of the general targets the portfolio hopes to reach.

Table 8: Recorded targeted outputs/outcomes for the entire portfolio by major geographic area

Continent	Target # of smallholder farmer (n*=44)	Total Net Attributable Income Target (n*=24)	Target #of Agricultural linked SMEs (n*=22)	Target # of new jobs supported (n*=17)	Target # of new businesses created (n*=6)	Target amount of investment stimulated (n*=22)
Africa	21,974,793	£1,480,272,948	301,308	492,789	109	£1,388,636,952
Asia	3,323,221	£268,687,218	12,000	247,951	2,090	£26,302,182,625
Global	8,189,867	£21,395,985	20,209	4,923	0	£0
Grand Total	33,487,881	£1,770,356,151	333,517	745,663	2,199	£27,690,819,576

*n= number of programmes which included a similar target in their Logframe.

In numerous logframes, items that here are listed as outcomes were identified as outputs, and vice versa. Annex 1 provides details on how outputs and outcomes targets are calculated and compared across the portfolio

Most programmes in the commercial portfolio do not focus on “stepping out.” Only 16 (23 percent) of programmes provided targets for new job creation, which is at the heart of the “Stepping out” component of the framework. Similarly, only six focus on creating new businesses, which would be able to absorb smallholder farmers unable to reach the threshold to be commercial producers.

Table 9: Recorded targeted outputs/outcomes disaggregated by gender by major geographic area

Continent	Target # of smallholder farmer (n*=44)	Target # of women smallholder farmer (n*=21)	Target # of new jobs supported (n*=17)	Target # of new jobs supported for women (n*=10)
Africa	21,974,793	4,657,879	492,789	57,788
Asia	3,323,221	339,055	247,951	116,527
Global	8,189,867	381,217	4,923	738
Grand Total	33,487,881	5,378,151	745,663	175,054

Though most programmes do report on gender and social inclusion (see Figure 12) they do not necessarily report target numbers for the main outputs identified in this report. For example, only half the programmes which report a target number of smallholder farmers also report a women specific target.

Since most programmes are still in implementation and many of the output numbers are not recent, the most accurate numbers can be found in examining programmes with Post-Completion Reports (PCRs). The current portfolio has twelve programmes with PCRs:

- Nine which have ended: AECF South Sudan, AgDevCo Greenfield Ghana, Beira Agricultural Growth Corridor (BAGC), Coastal Rural Support Programme (CRSP), Development of Agricultural Rural Markets Project in Zambia, Rwanda Agriculture delivery grant, Strengthening the Agriculture Sector in Afghanistan (SASA) The Comprehensive Africa Agriculture Development Programme (CAADP), and Trade in global value chains initiative
- Three which have moved on to a new phase. For these programmes (BIF1, Katalyst II, AFR 1), data for the new phase has been used in the rest of the analysis. However, since the original programmes are closed, their data is used for this table¹⁸.

Table 10: Comparison of target vs actual outputs for 12 closed programs in the portfolio

	# small holder (n=9*)	Net attributable income (n=3)	Number of SMEs supported (n=6)	# jobs (n=2)	# new businesses (n=1)	investment (n=2)
Target	1,092,802	£192,182,178	140,133	737	8	£6,539,356
Actual	1,591,404	£168,595,883	8,450	853	6	£11,322,320
% achieved	146%	88%	6%	116%	75%	173%

*n= number of programmes within the 12 identified above which used similar indicators.

SASA had no target of smallholder farmers listed but supported an actual of 7,228 smallholder farmers.

The number of farmers who improved productivity or new linkages exceeds the target, even though actual numbers were reported for only 9 programmes and targets were reported for 8. However, this is not necessarily true for target incomes, though the sample size is small and skewed by the fact that one of the three programmes closed early. Of the other two, Katalyst II fell short of its income target by 14 percent, though it exceeded its number of farmers adopting, while BAGC more than doubled target outreach while also exceeding total income target by 165 percent. To put this into perspective, it is easier to look in terms of benefits per small holder (Assuming a 1 to 1 correlation between the two categories) as shown in Table 10.

Table 11: SHF Adopting and Incomes GBP per smallholder farmer target compared to actual

Programme	Target # SHF	Actual # SHF	Target total	Actual	Target	Actual
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¹⁸

Date for CARD F phase 1, Afghanistan is not usable for the purpose of this exercise.

	Adopting	Adopting	income	income	GBP/Person	GBP/Person
BAGC	41,862	102,131	£2,322,000	£8,063,038	£55	£79
Katalyst	250,000	311,801	£185,000,000	£160,000,000	£740	£513

A final point to examine here is to look at results from on-going programmes versus their targets.

Table 12: Progress towards reaching outcome targets by region

	Africa	Asia	Global	Grand Total	% Complete
Target # of smallholder farmer (n=38)	19,988,793	1,657,098	8,020,648	29,666,539	
Actual # of smallholder farmer (n=38)	14,693,546	1,258,982	5,047,788	21,000,316	70.90%
Target # of women smallholder farmers (n=21)	4,657,879	339,055	381,217	5,378,151	
Actual # of women Smallholder farmers (N=21)	1,403,781	63,730	118,959	1,586,470	29.50%
Net Attributable Income Target to small holders (n=18)	1,161,972,214	268,687,218		£1,430,659,432	
Actual Net Attributable Income (N=18)	£430,719,667	£111,548,431	£0	£542,268,098	37.90%
Target # of Agricultural linked SMEs(n=21)	298,336	12,000	20,209	330,545	
Actual # of Agricultural linked SMEs (n=21)	164,583	12,700	34,139	211,422	63.96%
Target # of new jobs created (n=12)	288,204	12,951	4,923	306,078	
Actual # of new jobs created (n=12)	110,174	2,215	2,030	114,419	37.38%
Target # of new jobs created for women (n=10)	52,538	1,527	738	54,804	
Actual # of new jobs created for women (n=10)	10,722	550	677	11,949	21.80%

Target # of new businesses created (n=6)	109	2,090	0	2,199	
Actual # of new businesses created (n=6)	72	1,988	0	2,060	93.68%
Target amount of investment stimulated (n=19)	1,354,636,952	1,178,877,925	£0	£2,533,514,876	
Actual amount of investment stimulated (n=19)	£803,525,672	£89,428,247	£0	£892,953,920	35.25%

This table includes only currently active programmes. These numbers should be examined with caution, as they are simply top line figures for all current programmes. Given that most programmes in the sample began between 2012 and 2014,¹⁹ and given that the most common programme length is 5 years, then targets for smallholder farmers and SMEs can be considered in general “on track.” This does not seem to be the case of Net attributable income, but that is because:

- 12 of the programmes started after 2013, making it too early to provide concrete results as it takes at least 2 years for increases in income to become evident.
- Income growth is generally a lagging indicator, as benefits from a new investment or process require time to yield benefits.

Still, this indicator seems to be lagging, highlighting again the apparent difficulty within the portfolio of achieving planned per capita increases in income. This can be further seen by examining the table below

Table 13: Target and actual per capita increase in income for programmes within the portfolio and AVG per capita increase target compared to actual

Programme	Target Per capita increase (GBP/ smallholder)	Actual current per capita increase (GBP/ smallholder)	Primary Subset
Regulatory and Investment Systems for Enterprise	£542	£122.71	Enabling Environment
Social Enterprise for Economic Development (SEED)	500	n/a	Research
Promoting Inclusive Markets (PIMS) in Somalia	368	n/a	Value Chain: input focus
Growth and Employment in States Programme (GEMS)	354	264.74	Value Chain: input focus
Katalyst Phase III - Agribusiness for Trade Competitiveness Project	213	88.57	Value Chain: input focus

¹⁹

38 programmes total: 11 in 2012, 14 in 2013, and 13 in 2014.

Programme	Target Per capita increase (GBP/ smallholder)	Actual current per capita increase (GBP/ smallholder)	Primary Subset
West Africa Regional Food Markets	191	185.54	Enabling Environment
Pro poor Growth Programme - Zimbabwe	184	147.83	Access to Finance
Kenya Market Assistance Programme (MAP)	180	124.00	Value Chain: input focus
Private Sector Development programme in the Democratic Republic of Congo	172	32.70	Value Chain: input focus
Southern Agriculture Growth Corridor Programme	150	N/A	Infrastructure
Business Innovation Facility (BIF2)	126	N/A	Value Chain: input focus
Beira Agricultural Growth Corridor (BAGC)	116	78.95	Agribusiness Investment
Africa Enterprise Challenge Fund (AECF) AAW	97	167.37	Agribusiness Investment
Comprehensive Agriculture and Rural Development Facility Phase ii	82	78.98	Value Chain: input focus
Katalyst Phase II	80	80.00	Value Chain: input focus
Nepal Market Development Programme (NMDP)	80	44.00	Value Chain: input focus
Rural and Agriculture Markets Development programme for Northern Nigeria (PropCom Maikarfi)	72	22.66	Value Chain: input focus
Sierra Leone Opportunities For Business Action	52	n/a	Value Chain: input focus
Market Development in the Niger Delta	49	40.20	Value Chain: input focus
Africa Enterprise Challenge Fund (South Sudan)	39	29.74	Agribusiness Investment
Cotton Sector Development Programme	30	90.88	Value Chain: input focus
Tanzania Agribusiness Window - Africa Enterprise Challenge Fund	14	17.76	Agribusiness Investment
Africa Agricultural Development Company (AgDevCo)	9	30.21	Agribusiness Investment
Development of Agricultural Rural Markets Project in Zambia	1*	1.09	Value Chain: input focus

* The programme had a target in Zambian Kwacha, hence the small number post currency conversion

Table 14: Target compared to actual increases in income per capita

	AVG Target income increase per capita	AVG actual increase income per capita
Value chain (n= 14)	£133	£79
Agribusiness investment (n =5)	£55	£65

The table highlights that value chain input focus programmes are the programmes that are most likely to report income increases. The sample size is too small to make any definite statements, but it does seem that one can say that in the current portfolio:

- Value chain programmes that report on net attributable income change (NAIC) have more ambitious per capita income increase targets than Agribusiness investment programmes that do the same. As a result, the value chain programmes that report on NAIC have so far not met their target, and agribusiness investment programme that do the same have exceeded their target. However, the per capita gain to smallholders is larger in value chain programmes;
- A similar comparison was not done for the other subsets since the number of programmes for which there is data is too small.

3.1.8 Top line Analysis of Cost per Beneficiary

Having discussed outcomes, one can now look at the return on investment within the portfolio (i.e. in this context seeing the relationship between programme budget and outcomes). This section faces the same constraints as the previous one: it will have to rely primarily on target data rather than actuals, as most programmes are not yet finished. Also, not all programmes have recorded data, so the number (n) of programmes used will likely be small in some situations.

Here, in terms of results, the focus will be on the number of smallholders targeted and who have benefited compared to the amount budgeted. As in the previous subsection, it is best to first look at the completed programmes and then the ongoing ones.

Table 15: Cost per beneficiary for 9 completed programmes with PCRs

Programme	Subset	Budget	Target # of SHF	Actual # of SHF	cost per target	cost per actual
Africa Enterprise Challenge Fund (South Sudan)	Ag Invest	3,763,603	60,000	17,916	63	210
Beira Agricultural Growth Corridor (BAGC)	Ag Invest	7,000,000	41,862	102,131	167	69
Coastal Rural Support Programme (CRSP)	VC	9,069,995	44,000	114,666	206	79
Development of Agricultural Rural Markets Project in Zambia	VC	5,049,999	250,000	311,801	20	16
Strengthening the Agriculture Sector in Afghanistan (SASA)	VC	12,930,000	NA	7,228	N/A	1,789
Trade in global value chains initiative	VC	4,930,000	40	6	123,250	821,667
Katalyst 2	Ag Invest	7,000,000	2,300,000	2,000,000	3	4
BIF 1	VC	11,617,523	2,400	2,200	4,841	5,281
AFR1	A2F	10,999,993	444,500	723,655	25	15

Three of the programmes: Trade in global value chains, SASA, and the BIF are outliers, and are not directly comparable to others because:

- Trade in global value chains had a very small relationship with commercial agriculture;²⁰
- BIF 1 had a focus beyond just agriculture, including employment in towns; and
- SASA took place in a conflict zone.

If these programmes are factored out, then the average cost per beneficiary are as follows:

Table 16: Average cost per beneficiary reached by type of programme (excluding three outlier projects) for completed programmes

	Target	Actual
Average cost for Value Chain	£113	£48
Average cost for Agriculture Investment	£115	£139

In this case, the cost per beneficiary reached is smaller in Value chain programmes than in agribusiness investment programme. Again, this evidence should be considered anecdotal given the extremely small sample size.

A more robust sample (though still small) can be used by examining the target cost per beneficiary of current programmes. This is done in the table below.

Table 17: Programme cost per beneficiary (weighted average)

Programme	DFID Budget (£)	Target #of Smallholder farmers	Cost per beneficiary target
Access to Finance			
Access to Finance in Rwanda (phase 2)	£10,500,000	470,000	£22.34
Land Investment For Transformation (2012/13-2016/17)	£56,653,007	1,360,000	£41.66
Private Enterprise Programme Ethiopia (2011/12-2016/17)	£69,903,424	65,000	£1,075.44
Pro poor Growth Programme - Zimbabwe	£16,697,334	71,612	£233.16
AVG			£343.15
Weighted average			£75.70
Climate Smart Agriculture			
Adaption for Smallholder Agricultural Programme (ASAP)	£150,024,099	6,000,000	£25.00
Climate Smart Agriculture in Africa	£38,000,000	70,000	£542.86
Northern Uganda: Transforming the Economy through Climate Smart Agribusiness (NU-TEC)	£48,000,000	150,000	£320.00
Promoting Conservation Agriculture in Zambia	£25,000,000	188,600	£132.56
Strengthening Adaptation and Resilience to Climate Change in Kenya Plus (StARCK+)	£28,000,000	828,000	£33.82
AVG			£210.85
Weighted Average			£40.28

²⁰

It's inclusion in the portfolio was done at DFID's request.

Programme	DFID Budget (£)	Target #of Smallholder farmers	Cost per beneficiary target
Enabling Environment²¹			
Business for Shared Prosperity in Burma (BSP)	£25,000,000	64,000	£390.63
East and Southern Africa Staple Food Markets Programme	£36,252,694	254,183	£142.62
Regulatory and Investment Systems for Enterprise	£40,299,994	60,000	£671.67
West Africa Regional Food Markets	£15,138,580	67,200	£225.28
AVG			£357.55
Weighted Average			£257.09
Infrastructure			
Southern Agriculture Growth Corridor Programme	£42,000,000	67,200	£625.00
Improving access to agricultural markets in Sierra Leone	£10,500,000	50,000	£210.00
Programme of support to Agriculture in Rwanda	£43,000,000	7,694,617	£5.59
Rural Access Programme Phase III	£72,500,000	50,000	£1,450.00
AVG			£572.65
Weighted Average			£21.37
Agribusiness Investment			
Africa Agricultural Development Company (AgDevCo)	£99,563,651	4,422,400	£22.51
Africa Enterprise Challenge Fund (AECF) AAW	£21,000,000	300,000	£70.00
Business Innovation Facility (BIF2)	£32,279,000	169,219	£190.75
Global Agriculture and Food Security Programme (GAFSP)	£136,000,000	820,000	£165.85
Tanzania Agribusiness Window - Africa Enterprise Challenge Fund	£19,799,995	375,630	£52.71
AVG			£100.37
Weighted Average			£50.38
Research			
Social Enterprise for Economic Development (SEED)	£3,000,000	500,000	£6.00
Value Chain			
Comprehensive Agriculture and Rural Development Facility Phase ii	£30,000,000	407,098	£73.69
Cotton Sector Development Programme	£10,939,998	300,000	£36.47
Growth and Employment in States Programme (GEMS)	£91,064,988	1,987,832	£45.81
Katalyst Phase III - Agribusiness for Trade Competitiveness Project	£11,959,999	840,000	£14.24
Kenya Market Assistance Programme (MAP)	£48,195,665	661,950	£72.81
Livelihood Enhancement Through Agricultural Development (LEAD) Programme	£8,200,000	93,600	£87.61

²¹ Enhanced Integrated Framework (EIF) Trade for Least Developed Countries Development Phase 2 was not kept, as it was an outlier with a cost per beneficiary of 22K GBP

Programme	DFID Budget (£)	Target #of Smallholder farmers	Cost per beneficiary target
Livelihoods and Food Security Trust Fund for Burma (NUTSEM) phase 2	£100,000,000	540,000	£185.19
Market Development in Northern Ghana	£14,900,000	58,500	£254.70
Market Development in the Niger Delta	£14,999,997	251,481	£59.65
Nepal Market Development Programme (NMDP)	£18,540,289	300,000	£61.80
Private Sector Development programme in the Democratic Republic of Congo	£102,500,000	1,320,000	£77.65
Private Sector Development Programme Malawi (Malawi Oil Seed Transformation - MOST and MICF)	£13,290,000	543,100	£24.47
Promoting Inclusive Markets (PIMS) in Somalia	£13,000,000	76,000	£171.05
Rural and Agriculture Markets Development programme for Northern Nigeria (PrOpCom Maikarfi)	£26,999,996	650,000	£41.54
Sierra Leone Opportunities For Business Action	£9,999,996	81,191	£123.17
AVG			£88.66
Weighted Average			£64.89

Based on the information in the portfolio, Infrastructure and Climate Smart programmes are the two most economical ways of reaching beneficiaries (at a weighted average of GBP £21.37 and GBP £40.28 per beneficiary).²² However, the cost per beneficiary reached does not inform us on what the actual benefits are to the beneficiaries, so this is only half of the cost-benefit equation.

3.1.9 Cross Sector Analysis: Climate Resilient Approaches, Nutrition, and Social Inclusion

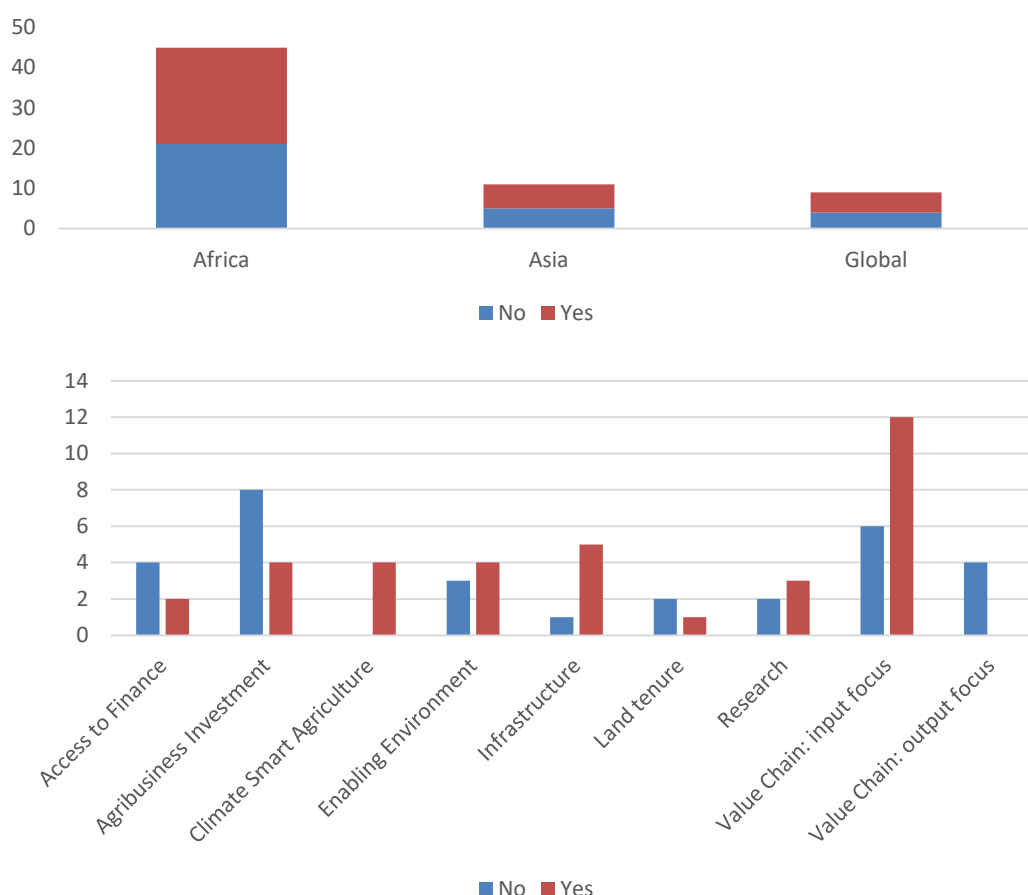
There are three cross cutting elements identified in the framework, which programmes need to consider. The following figures and tables highlight their consideration in the portfolio, based on the programmes business cases, logframes, and annual reviews.

- i) Climate resilience. Projects have a focus on developing specific pro-active, environment friendly strategies in programme interventions.²³ While most projects include some climate resilience elements, four programmes are dedicated to climate smart agriculture promoting climate resilient approaches as their main purpose.

Figure 10 Number of Programmes with a focus on climate resilience by continent and by subset of programming

²² PEPE is an outlier here because so much of the budget has gone into the Access to Finance and the Economic Competitiveness Components, which do not have targets for SHF.

²³ This is different from the DFID Business Case requirement that projects avoid negative environmental impact of programmes.



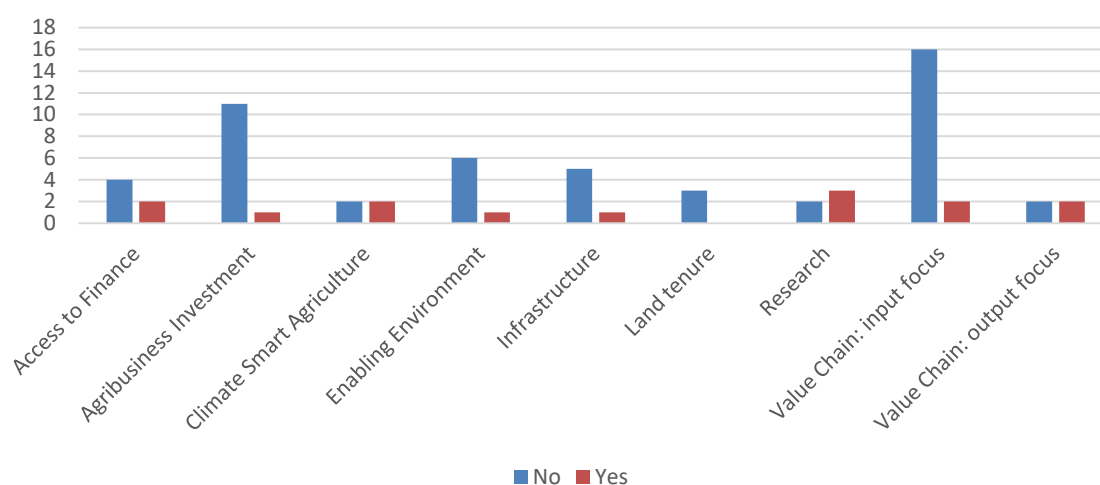
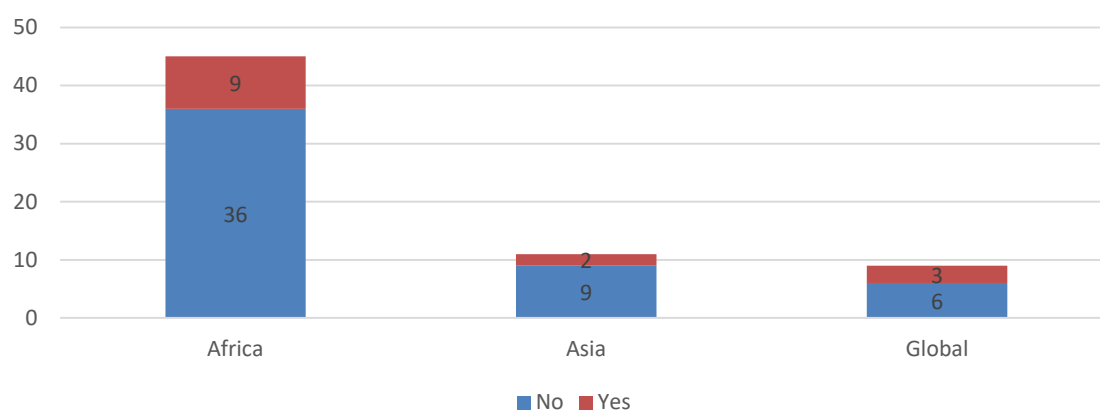
34 out of 65 programmes (52 percent) explicitly include a focus on climate resilience. The subsets of programming that perform the best on this are Climate Smart Agriculture, Infrastructure, and value chain with a focus on inputs. Agribusiness investments and value chain output focus report the least emphasis. It should be noted that, as a general trend, there has been an increased focus on climate resilience over time, with the drop in 2015 and 2016 linked more to the nature of programmes (the seven programmes that do not list a focus include: one Access to finance, two Agribusiness Investment, one Research, one Enabling environment programmes, and only two Value Chain programmes), than a change in general trend.

Table 18: Presence of Climate Resilience Strategy in programmes based on year programme began

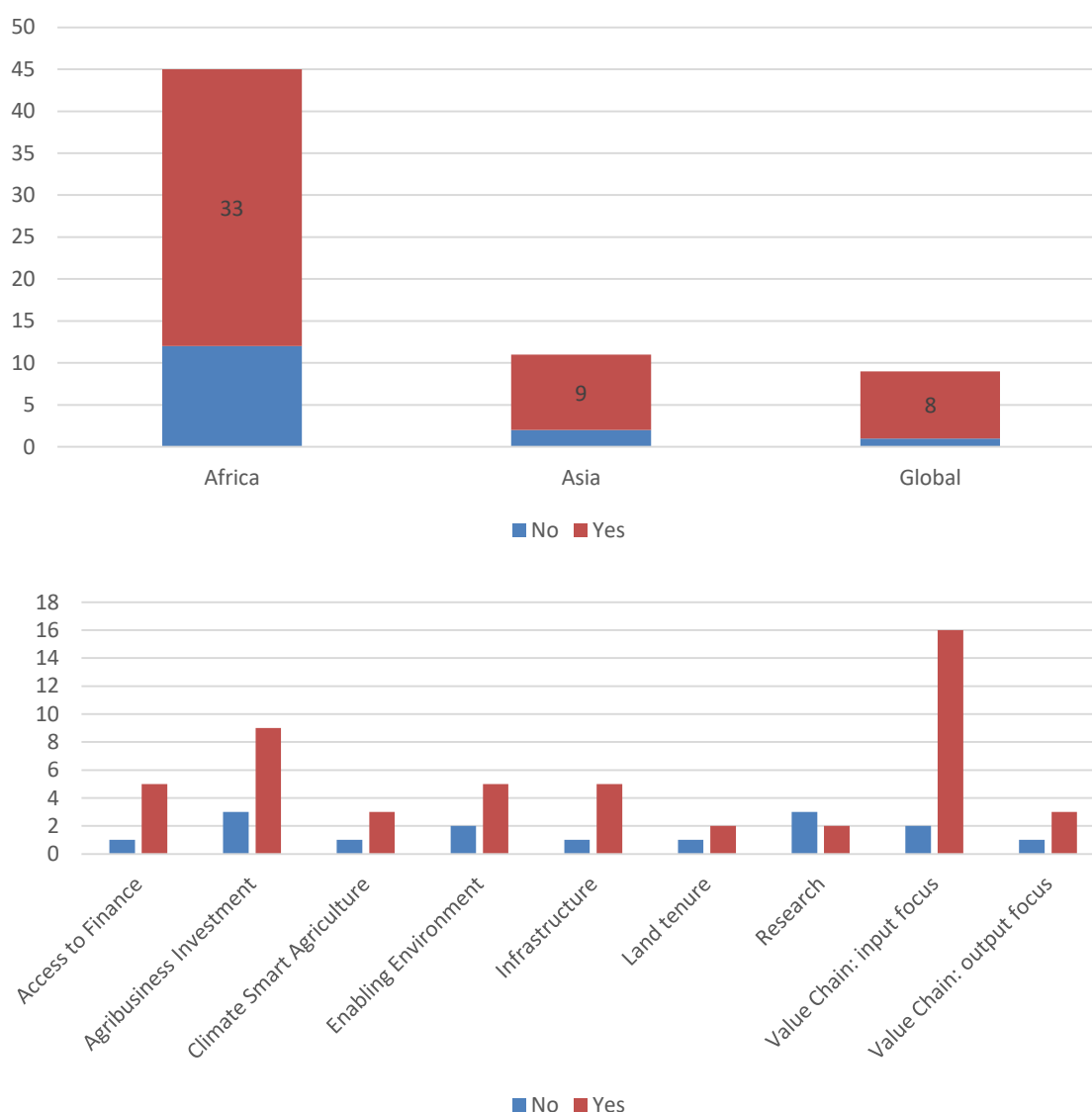
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Climate Resilience	0	1	0	1	1	2	7	9	7	2	3
No Climate Resilience	1	1	2	0	1	3	4	5	6	4	3

- ii) Nutrition. This is the area which receives the least focus in the portfolio. As can be seen in the figures below, only 14 out of 65 programmes refer to nutrition in project documentation. This is true across geographies and subsets of programming.

Figure 11: Number of Programmes with a focus on nutrition by continent and by subset of programming



- iii) **Social inclusion.** In general, social inclusion in the portfolio focuses on providing increased economic opportunities for women, with a select number of programmes focusing on both youths and women. We see an increased focus on gender and social inclusion, with 75 percent (50 out of 65) of programmes having a component dealing with social/gender inclusion.

Figure 12: Number of Programmes with a focus on Social Inclusion by continent and programming subset

It must be noted that despite these numbers, the majority of programmes have social inclusion targets rather than an entire dedicated strategy. There are exceptions, such as MADE Ghana which devised an in-depth study of the specific societal and monetary constraints that were blocking women from participating more actively in the groundnut value chain.

There is also anecdotal evidence that the portfolio's gender targeting isn't as strong as it could be. To begin with, though the overwhelming majority of programmes do collect some form of social inclusion or gender data as seen above, only 21 programmes actually report target outcomes disaggregated by gender. This means that gender disaggregation is done primarily at the output level, or on other outcomes than the ones used in this report.

Within these 21 programmes, women range from being more than 50 percent of target beneficiaries to as low 20 percent. This is highlighted in table 19 below.

Table 19: Examining beneficiary targets in selected programmes by gender

	Target # of smallholder beneficiaries (n=21)	# of which are women (n=21)	women as % of total	Target # of new jobs created (n=10)	# of which are new jobs targeting women (n=10)	women as % of total
Africa	10,793,317	4,657,879	43.16%	103,067	57,788	56%
Asia	707,098	339,055	47.95%	242,951	116,527	48%
Global	2,020,608	381,217	18.87%	4,923	738	15%
Grand Total	13,521,023	5,378,151	39.78%	350,941	175,054	50%

The low percentage of women target beneficiaries in global programmes is greatly impacted by EIF, which has a target of 20 percent female beneficiaries in its logframe.

There is also anecdotal evidence that programmes are having issues meeting gender targets. Table 20 below indicates the “completion rate” of the targets by comparing to current numbers achieved for the 21 programmes which have data on smallholder outcomes disaggregated by gender.

Table 20: Comparing completion rate (actual/target) for all smallholder farmers vs women only for 21 programmes with outcome data disaggregated by gender

	Target # of smallholder farmers (men and women)	Actual # of smallholder farmers (men and women)	Completion rate	Target # of women smallholder farmers only	Actual # of women smallholder farmers only	Completion rate
Africa	10,793,317	5,421,523	50.23%	4,657,879	1,194,564	25.65%
Asia	707,098	136,351	19.28%	339,055	63,730	18.80%
Global	2,020,608	757,782	37.50%	381,217.5	118,958	31.20%
Grand Total	13,521,023	6,315,656	46.71%	5,378,151	1,377,253	25.61%

The table highlights how despite representing approximately 40 percent of target beneficiaries, women in actuality have more difficulties being incorporated into these 21 programmes. Additional support for this view comes from the narratives of several annual reviews. For example,

- Though the Development of Agricultural Rural Markets in Zambia programme exceeded its total beneficiary target by 61,801 individuals (311,801 actual vs a 250,000 target), it actually failed to meet its target for female beneficiaries (though by less than 500 women).²⁴
- In 2016, AgDevCo outperformed its “new job created” target (having created 6,871 vs a target 5,874) but did not meet the gender targets it had set for itself. That year, women secured only 1,937 new jobs via the programme against an annual target of 2,937.²⁵
- Similarly, Tanzania’s Cotton Sector Development Plan had a per capita net income increase target of 30 GBP, which is widely exceeded with an average of 60.48 GBP per beneficiary. However, the gender

²⁴ PCR August 2016

²⁵ AgDevCo Annual Review May 2017

gap in per capita income increase was significant, with men enjoying an increase of 67.58 GBP per head vs women seeing only a 35.16 GBP per capita increase.²⁶

Several programmes have already taken steps to address these gender related issues by commissioning gender studies and then implementing recommended changes. Still, though the sample size remains too small to make a conclusive statement on the matter, there is anecdotal evidence that DFID programmes involved in commercial agriculture are having issues meeting gender targets. Some projects that have succeeded in hitting their targets (like MADE and PropCom Maikarfi in Nigeria) have had explicit engagement with women's organisations to help deepen the linkages at achieve better targeting.

²⁶ Cotton Sector Development Plan Logframe, 2017

3.1.10 Tools for programme implementation used within the portfolio

Table 21: Frequency of common DFID tools used by geographic region

Geographical focus Continent	No (No. of programmes)	Yes (No. of programmes)	Grand Total	% Yes of programmes total
Direct project delivery & Facilitation				
Africa	4	41	45	91%
Asia		11	11	100%
Global		9	9	100%
Grand Total	4	61	65	94%
Grants				
Africa	10	35	45	78%
Asia	3	8	11	73%
Global	5	4	9	44%
Grand Total	18	47	65	72%
Challenge Fund				
Africa	32	13	45	29%
Asia	10	1	11	9%
Global	6	3	9	33%
Grand Total	4	17	65	26%
Loan/Equity				
Africa	34	11	45	24%
Asia	11		11	0%
Global	7	2	9	22%
Grand Total	4	13	65	20%
Catalytic Funds				
Africa	37	8	45	18%
Asia	11		11	0%
Global	8	1	9	11%
Grand Total	4	9	65	14%

As can be seen in the table, the most common tools used are direct project delivery/facilitation and Grants. This is to be expected, as these are generally the “baseline” tools used by implementers in development programmes. Formal challenge funds and loan and equity are used in general on similar levels, and catalytic funds, due to their specific nature, are the least used.

There is a definite difference in regional focus for challenge funds and loan/equity, as Asia programmes seem to have little support in either. This is due to three factors:

- The presence of AECF and AgDevCo, Africa specific investment programmes which encompass six different agribusiness investment programmes involved in challenge fund and loan/equity provision.
- The presence of global programmes with a focus on Asia and Africa, which invest in both areas.

- The relatively large proportion of Afghanistan programmes in the portfolio, which represents three out of the eight programmes in Asia. Afghanistan, due to its conflict status is primarily the site of direct delivery programmes, even when infrastructure investments are made.

3.2 Summary of key findings on the portfolio

The portfolio is composed of 65 current programmes representing 2.44 billion GBP in total DFID budget. The geographical spread is as follows:

- Africa: 15 Countries and 11 regional initiatives, 45 Programmes, 1.14 billion GBP budget. There is a particularly strong presence in East Africa, which has 22 programmes and 542 million GBP in budget.
- Asia: 5 countries, 11 programmes, 852 million GBP budget (of which 3 Afghanistan programmes represents 470 million GBP)
- Global: 9 programmes, 4 with an exclusive focus on Africa and Asia, 448 million GBP budget

Countries which get the most budgeted funding are Afghanistan, Nigeria, Rwanda, Ethiopia, and Myanmar.

The countries which receive the most funding per programme are: Afghanistan, DRC (due to the size of its one, 11-year long programme), Pakistan (influenced by large programme for which Agriculture is one component), Ethiopia, and Myanmar (due to the budget of the new LIFT/NUTSEM programme there). Average funding per country specific programmes is 33.1 million GBP, and median programme budget for the entire portfolio is 20 million GBP.

The primary channel used by programmes in the portfolio is the Private sector, followed by Associations. If one adds financial institutions to the private businesses, they account for 58 percent of the programmes in portfolio are channelling through private businesses. If one adds associations, many of which are private sector oriented, this accounts for 73 percent. This highlights DFID's proclivity to use the private sector, evidenced by its use of AgDevCo, Pull Grants, and Catalytic Funds.

The major primary programme classification subsets found within the portfolio are:

- Value Chain: focus on inputs (28 percent of portfolio). If the subset Value Chain: focus on outputs is added, then Value chain as a whole represents 33 percent of the portfolio.
- Agribusiness Investment (19 percent of the portfolio),
- These two combined represent 52 percent of all programmes in the portfolio

The majority (65 percent) of programmes are between 5 and 7 years in length. Longer programmes tend to be programmes that DFID co-funds with other institutions, especially in those involved in Agribusiness Investments. A full third of programmes in the portfolio have either received a time extension or are the next phase of a previously exiting programme.

In the portfolio, DFID budgets more money for bilateral programmes (1.92 Billion GBP) than for multilateral programmes (1.21 Billion GBP). A third of DFID multilateral funding goes to Afghanistan, with the majority of the remainder supporting global initiatives.

In the portfolio, DFID contributes 35 percent of total funds to all multilateral programmes (1.21 Billion GBP out of 3.48 billion GBP). However, there is large variance in the actual percentage of funds contributed, ranging from 9 to 85 percent. On average, DFID contributes 51 percent of the funds to multilateral programmes it participates in within the portfolio.

Most programmes (40 out of 65, or 61 percent) focus solely on domestic markets. If one includes programmes that focus on the domestic and other markets, this number increases to 90 percent. Only 3 programmes (4 percent) focus exclusively on export and regional markets. This domestic market focus holds true across all three major geographic zones.

The preferred Value Chains supported by the programme are:

- Inputs: Improved access to agricultural inputs, including improved seeds, fertiliser, pesticides, vaccines and artificial insemination, will increase productivity (lowering cost per unit of output). This is coherent with the “Stepping Up” objective linked to commercial agriculture.
- Livestock: The second most common value chain, and found across all geographies (fourth most common value chain in Africa, 2nd in Asia and in Global focused programmes).
- Maize is due to the strong number of programmes focused on East and South Africa (25 out of 65 where Maize is the dominant staple crop that is widely traded).

Regarding outcomes, most programmes expect to report on number of small holder farmers whose productivity or linkages they have improved (44 out of 65) but the numbers of programmes drop on most other outputs such as net additional income provided, SMEs whose productivity or linkages have improved, number of jobs created, number of business created, and amount of investment stimulated (25, 22, 16, 4, and 19 respectively). Also, sometimes the outcome numbers do not link perfectly, such as programmes which cite increased net attributable income to farmers but then do not provide information on them, but rather on the number of jobs created.

Some preliminary findings on outcomes can be made, though given the fact that most programmes are on-going (the sample size of completed programmes is small), these findings should be considered as more anecdotal at this time until there is better data. They are:

- Programmes are able to hit their target number of smallholder farmers adopting new practices, but are not yet able to meet their net attributable income targets.
- Meeting average per capita income growth targets is quite difficult. There are several factors involved: i) there is a lag in the time between when farmers are exposed to and adopt new practices (intermediate outcome) and turn that into increased yields and sales (outcome); ii) the fact that the numbers of farmers changing their behaviour is constantly increasing while the income effect has not yet caught up, keeping average increases down; and iii) growth opportunities for the commodities to absorb the increases in production.
- The programmes that most often set targets and capture per capita income growth are value chain and agribusiness investment programmes (14 and 5 in the portfolio, respectively). According to this sample, Value Chain have higher per capita income growth targets and actual per capita income growth than agribusiness investment programmes.

Using the DFID budget, one can estimate the top line cost of providing services to smallholder farmers by subset of commercial programming:

- Value chain programmes are the most efficient²⁷ at 88 GBP per beneficiary reached. This is supported by the limited evidence when examining programmes with completed PCRs.
- Agribusiness investment programmes are the second most at 100 GBP per beneficiary.

Cross cutting themes of climate resilience, nutrition, and social inclusion have very different treatment in the portfolio.

²⁷

Using DFID's VFM indicators, efficiency refers to cost per output or outcome delivered.

- Nutrition is only considered in 27 percent of programmes.
- Climate resilience is considered in 51 percent of programmes, though in general the inclusion of climate resilience has increased in programmes that began after 2011.
- Social inclusion is targeted in 75 percent of programmes. However, it is often in the form of targeting and not as a core component of the business case or strategy. Focusing on gender, fewer than half of the programmes provide outcome data relevant to this study disaggregated by gender. Within these programmes women generally represent on average 40 percent of target beneficiaries. However, there is anecdotal evidence that programmes in the portfolio have difficulties meeting these targets.

The most commonly used tools are direct delivery/facilitation and grants (used in 94 percent and 72 percent of programmes, respectively). Challenge funds and loan/equity are used in around a quarter of programmes, while catalytic funds are the least often used tool (13 percent of programmes use them).

3.3 General Observations on programmes and the link to the Framework for Agriculture

This section seeks to provide some early insights on the portfolio based on the general analysis. A key element here is to highlight information that is missing from data capture that would be useful when trying to implement the CASA programme.

3.3.1 Missing pillar of the framework: no Geographic data capture

The commercial agriculture framework is composed of three interlocked elements: an objective (Stepping up, Stepping out, Hanging in), a target population for these objectives (the demographic pyramid), and a location where these individuals will be found (three different zones). If the framework is seen as a coherent whole, then the most attractive individuals for “Stepping Up” would be emergent small scale commercial farmers zones with higher productive potential.

The framework highlights the three different types of geography by agricultural/market potential. This often provides a tension between reaching the poor (as incidence of poverty is usually greatest in the lower potential areas) and the targets of increasing incomes and transforming the economy through commercial agriculture.

However, in none of the programmes surveyed was there any classification of the locations in which they worked. Even in the business case for Livelihoods and Food Security Trust Fund for Burma (NUTSEM) phase 2, which effectively used both the objectives and target population language from the commercial agriculture framework, there was no discussion of geography.

In fact, when geography is discussed in DFID business cases, it can run contrary to the framework. DFID programming priorities often target very specific geographic locations, such as the four core Niger Delta States or the Northern parts of Nigeria, the Arid and Semi Arid Lands (ASAL) in Kenya, the more arid northern zones of Ghana, where incidence of poverty is greatest in the country or which refer to UK Government political priorities. DFID is asking programmes to assist in stepping up in the areas, where stepping up is most difficult and hanging in may be the priority.

Since this geographical thinking is one of the three pillars of the framework, it should be included in programme thinking and captured in reports.

3.3.2 No classification of Smallholder farmers and targets for “Stepping up,” “Stepping out,” and “hanging in”

As mentioned previously, the Livelihoods and Food Security Trust Fund for Burma (NUTSEM) phase 2 is the only business case seen in this review that has tried to classify the programmes in terms of the new commercial agriculture framework. Given how recent the commercial agriculture framework is, this is normal.

However, a difficulty is in how to define and qualify a commercial farmer and whether they are most likely suitable for “stepping up,” “stepping out,” or “hanging in.” The geographic split by zones is not enough to define a commercial farmer.

In Section 2 of the report, a commercial farmer was defined as one who “plants a crop (or raises an animal) with the primary intent to sell the harvest and is investing in agricultural inputs²⁸ to increase productivity. Since in practice it is hard to measure individuals’ intent, one can use the criterion that the commercial farmer s/he must willingly seek²⁹ to sell at least fifty percent of the production.”

²⁸ In economic terms, so representing both capital and labor.

²⁹ Not out of a position of duress, but as an intentional plan to generate income

4 SUBSETS OF THE COMMERCIAL AGRICULTURE PORTFOLIO

This section discusses key statistics, general findings, and key lessons learned for each of the seven core primary subsets of commercial agriculture identified. In addition to information from the database, this section includes information gathered from the more extensive research done by looking at 24 programmes (see Annex 2) and complemented by the interviews of 18 individuals at the country and department level (see Annex 3).

The majority of this section focuses on two main programme types: Value Chain and Agribusiness Investment. Not only are those the two most common types of programme subsets in the portfolio, they also represent 44 percent of the potential target beneficiaries within the entire portfolio.

4.1 Value Chain

For this section, both subsets of value chain i.e. inputs and outputs will be discussed jointly. This is because, as mentioned in section 2, a value chain covers both inputs and outputs to smallholder farmers.

Table 22: Key Statistics for Value chain: input focus

	Programme	Budget (£)	AVG Length (in years)	Target # of Smallholder farmers	Actual # of Smallholder farmers	Target Attributable Income	Actual Attributable Income to date
Africa	13	368,210,634	6.0	6,317,654	2,916,285	1,148,939,728	392,384,108
Asia	5	141,430,288	4.4	1,547,098	1,035,579	236,179,218.	86,393,430
Total	18	509,640,922	5.5	7,864,752	3,951,864	1,385,118,947	478,777,539

Table 23 Key Statistics for Value Chain: output focus

	Programme	Budget (£)	AVG Length (in years)	Target # of Smallholder farmers	Actual # of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	3	55,880,050	5.6	0	0	0	0
Global ³⁰	1	4,930,000	3	40	6	0	0
Grand Total	4	60,810,050	5	40	6	0	0

³⁰

This is the Trade and Global Value Chain Programme, which has virtually no focus on commercial agriculture but was maintained in the portfolio because it was an innovative pilot.

Table 24: Secondary focus of programmes with a value chain focus

Secondary subset for Value chain: input focus	Count	Secondary subset Value Chain: output focus	count
Enabling Environment	8	Agribusiness Investment	2
Access to Finance	5	Enabling Environment	1
Agribusiness Investment	2	N/A – none listed	1
Infrastructure	2		
Climate Smart Agriculture	1		
Grand Total	18	Grand Total	4

As previously stated, value chain programmes represent 33 percent of the total portfolio and account for 19 percent of the total portfolio budget. In terms of outcomes, value chain programmes represent 24 percent of the smallholder farmer target for the portfolio. However, they represent 75 percent of the net attributable income to smallholder farmers.

This last item points to a key strength of value chain programmes. Since these programmes generally work within a market system framework, they have a strong interest in understanding the numerous parts of the market system from production to consumption. As such these programmes must generally rely on conducting extensive research and data collection. Generally, their success is dependent on the quality of their research³¹ however, interviews with DFID programme officers highlighted that programmes seem to struggle in two areas when dealing with research: the political economy and detailed profitability analysis at the firm level.

This subsection will seek to explain these points as well as some that can be observed from the data. It will discuss why a focus on inputs is dominant within value chain programmes. It will then discuss the secondary focuses of programmes and which components are most often missing. It will conclude with a discussion of the political economy and the need to understand the firm level of businesses.

4.1.1 The programmatic focus on inputs

Since value chain programmes should focus on all aspects from production to end consumer, they should be addressing access to inputs (increasing productivity) and outputs (selling the increased production). However, the presence of such a strong focus on inputs (production) could be seen as unusual, as it does not link into market demand. It is more a reflection of the conditions on the ground. The first reason is the target population for many value chain programmes. Many of these programmes follow a Market for the Poor (M4P) approach (n=14) or the market system development approach (n=3), which are synonymous.

A key aspect of these programmes is to target the poor (usually defined as those people below the poverty line), or as the KMAP business case puts it “the programme’s objective remains unchanged to reduce poverty in Kenya by helping to increase the incomes of the poor through adopting a M4P approach.” In the case of NMDP in Nepal, the target is to support 300,000 poor farmers. Concerns have been raised in the annual reviews of programmes such as MADE Nigeria for programmes not being sufficiently pro poor.³²

³¹ *Impact at scale: The challenge of moving from pilot interventions to sustainable, widespread change*, BEAM EXCHANGE, December 2016

³² From the 2016 Annual Review “The Programme needs to assess more rigorously whether it is effectively reaching the poor, and it needs to ensure its interventions are leaving no one behind.”

This presents an issue when trying to work in a market system to enhance commercial agriculture. As seen in the framework, the focus should be on emergent farmers. Value chains must be selected that can reach the lower two thirds of the commercial agriculture pyramid. Working on inputs provides a market driven solution to this challenge as they target all farmers.

In outgrower scheme, such as the one for cassava performed by BIF 2 the aim is to provide inputs in exchange for a future purchase of products, often at a pre-agreed price. By improving the value chain for inputs (seeds, fertiliser...), not only will emergent commercial agriculture benefit, but also smallholders who can then use the inputs to increase productivity. A select number will likely graduate to commercial agriculture thanks to this. There can also be secondary benefits which “spill over” from the primary intervention. NDMP observed this when supporting the artificial insemination of swine in Nepal. The farmers who could truly benefit from AI were wealthier, but with more swine and better breeds present in an area, other farmers were able to purchase them.

This highlights a fundamental tension between the commercial agriculture framework and DFID programming: the need to support the poor while encouraging agricultural transformation. Focusing on inputs can help resolve this tension by creating a more supportive production system, however this can also result in ignoring the market linkages for smallholder production.³³ Coupled with the tension linked to geography mentioned in section 3, a commercial agriculture programme can find itself working in a hinterland region focusing providing services to less commercially viable smallholders.

A focus on inputs is legitimate to improve commercial agriculture, and more inclusive programmes are commendable. However, when designing commercial agriculture programmes, the tensions highlighted here must be considered.

4.1.2 Output marketing focus

Lead buyers are often critical for driving the development of a viable market for smallholders to supply, be it cotton gins for cotton, exporters and pack houses for horticultural products, processing companies for all commodities. Programmes often do this through outgrower/contract grower schemes. Numbers are typically not as large, as the buyers have the incentive to focus on a smaller number of more reliable farmers with higher levels of productivity.

Governance issues often arise in output buying led programmes, where the farmers are dependent on the lead firm for both inputs and market. Guaranteed buyers and suppliers of inputs (lead firms) are a very strong driver in the early stages of developing a market and have been used successfully in many projects to get new products and concepts introduced. However, as a commodity system starts to take root and grow, care should be taken to ensure alternative suppliers of inputs and alternative buyers to avoid absolute dependence on one major supplier or buyer. Evidence from Kenya’s dairy sector work has highlighted the predatory behaviour of the large formal dairies towards milk suppliers; competition from informal traders has kept the market dynamic and stimulated farmer upgrading. Ensuring alternative output and input sources will stimulate good competition and steady upgrading.

4.1.3 Secondary subsets of programming.

The most common second subset on which value chain programmes focus is the enabling environment and the access to finance. This reflects the fact that most programmes work with a Market Systems Development (including M4P) framework taking systemic approaches. The issue most often tackled in the enabling environment is agricultural policy. This includes improved laws governing seed production, quality standards, and value chain governance.

³³

DFID made this comment regarding KMAP during interviews.

Access to finance reflects the focus on inputs: financing is required to purchase them. Whether it is smallholders who need credit to purchase inputs, or farm aggregators involved in an outgrower scheme to provide the inputs, finance is key. Unfortunately, many programmes do not include a focus on access to finance component from the start. This is often because DFID already has other projects focusing on access to finance (such as the Financial Sector Deepening - FSD - projects³⁴) and expects those projects to address the rural finance challenges. As a result, many projects subsequently include access to finance components as in Nigeria's MADE and PropCom projects, though they were not in the business cases.

4.1.4 Political Economy

Political economy analysis (PEA) covers two key elements: the macro level political economy, and the power dynamics within the value chain. These dynamics are related: in most developing countries, larger firms have more political lobbying power than smaller ones. This means that incumbent large firms can greatly influence both the market and legal environment of smaller firms and new entrants. These dynamics can often evolve quickly and can have lasting impact on value chains. Political economy analysis during the design and inception phases tends to look at the high-level PEA, while the political economy within each of the sectors is much more difficult to understand and is only learned after in depth work in the sector.

To use an example from MADE Nigeria, the repeated attempts by the government of Nigeria to promote the inclusion of High Quality Cassava Flour (HQCF) into wheat flour were stopped by the large wheat flour companies. Though regulations were enacted requiring that HQCF be blended with wheat flour, this ran counter to the interests of the major millers, who fundamentally ignored the government's regulations, and agreed (amongst themselves) a price for HQCF that was too low to be economically viable for small processors. This in turn ensured that HQCF was not produced in sufficient quantities for the wheat mills to be able to purchase, and though a legal requirement existed, in practice the notion was all but dropped.

Even when programmes are successful in achieving their targets, the power dynamics and the impact of a programme on these dynamics can be an issue. In the Democratic Republic of Congo, the Elan programme mentioned having to undertake a political economy analysis of a maize programme that had succeeded in increasing income, because said increases were leading to conflicts between village authorities and local partners.

Keeping track of the changes in political economy is difficult, especially when it must be done at both a macro and micro level. Some solutions are possible. In Tanzania, the DFID team is in the same building as the rest of the UK delegation. This has allowed them to establish a working group that meets often to discuss the political economy in the country, as well as share information on both micro and macro level issues. Good research from implementers, already identified as a key to programme success, will also ensure that power dynamics in value chains are understood.

4.1.5 Understanding the firm level business models and linkages to business upgrading

There is also a need for DFID and implementers to understand the business of not only lead firms, but also smallholder farmers. This means being able to understand a simplified cashflow and income statement for firms and smallholders, as well as cultural constraints, to establish whether there is a clear value proposition for the businesses to take up project sponsored innovations.

MADE Ghana has two good examples to highlight the importance of addressing cultural constraints, with the programme spending significant time understanding why women were not benefiting from groundnut production. By working through the constraints, they have ensured that women are preferred suppliers of

³⁴

DFID funds FSD projects in seven countries in Eastern and Southern Africa and in Nigeria

ground nuts in certain areas. Also, while by working through the expenses with a provider of mechanised tillage, they helped the business understand that they were losing money with each client serviced.

Understanding how a business makes money is critical to long term agricultural transformation. Many programmes focus on introducing a new product or a new technology that is needed, but by itself may not be profitable enough to promote uptake as a business. At the supplier level, examples around supply of tractor services, emphasising training to stimulate increased sales by agro dealers, or introducing a new service like vaccination – each is interesting and potentially profitable, but may not be profitable enough for the firm to commercially adopt them. At the farmer level, it could be that the marginal increase in yield from the new technology is good, but not sufficient for them to change their behaviour. Therefore, the introduction of these new technologies must carefully assess the business viability surrounding their introduction.

4.1.6 Potential gaps in value chain programming

Based on the previous points and interviews with DFID staff, the following potential gaps in programming can be identified:

- Clear definition of beneficiaries: the fundamental tension between working with smallholders who are below the poverty line (not necessarily viable targets for commercial agriculture) and those which it hopes to assist in “stepping up” has been highlighted. It would likely be helpful if programmes could at least broadly define the individuals which will most likely be in each category.
- Improved Political Economy Analysis: PEAs need to dig down to the commodity level, clearly explaining the power dynamics. This is not easy, however, as it often takes several years to fully understand a sector and the way that the businesses engage with one another. Also, understanding the governance structure of a sector and ensuring that there are additional firms that could enter the market (crowding in). If there are no other lead firms, then care must be taken in the interventions to not create an oligopolistic like market or to balance the power relationship between farmers and the lead firms.
- Short lifespan of programmes: In all interviews, DFID staff mentioned how short the programme horizon is. As seen in portfolio analysis, the average Value Chain programme last just over five years. Designing and implementing market system programmes require extensive research to understand the markets, the structure of the industry and its dynamics, and the value propositions behind upgrading in order to design their interventions. In order to gain traction, it takes time to build relationships with the key local partners to implement the interventions. Then it takes time for the target beneficiaries, smallholder farmers, to see the positive results before adopting on a wide scale. This means that the first two years are really the programme establishment, second two years are getting traction and the fifth year is reaching scale. So, the programmes are ending just as they are starting to reach scale. This may be one reason why half the programmes which received an extension in the portfolio have Value chain as a primary subset of commercial agriculture.

4.2 Agribusiness Investment

Table 25: Key Statistics for Agribusiness Investment Programmes

	Programme	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	9	232,747,249	6.9	4,492,304	2,300,554	109,324,573	37,746,629
Global	3	205,279,000	9	2,188,127	757,700	21,395,985	0
Grand Total	12	438,026,249	7.4	6,680,431	3,058,254	130,720,558	37,746,629

Table 26: Secondary Focus of Programmes Involved in Agribusiness Investment

Secondary subset	
Value Chain: input focus	5
Access to Finance	3
Climate Smart Agriculture	1
Enabling Environment	1
Infrastructure	1
Value Chain: output focus	1

The agribusiness investment subset is dominated by four actors. AECF and AgDevCo represent over half the programmes identified as such in the portfolio, in addition to playing supporting roles on other programmes. The third actor is CDC because of the size of its budget even though only 5 percent of its investments are in Agriculture.³⁵ The final actor is GAFSP, since it is such a large multilateral programme. These will be the focus of this section, with brief mentions of other programmes when appropriate. Note that AgDevCo and AECF also disburse funds from sources other than DFID, so only investments done with DFID funds will be discussed here.

4.2.1 Multiple approaches to financing

Though there are multiple forms of financing available, the most common one remains loans. AECF offers an even mix of grants and zero interest loans. AgDevCo, which is supposed to offer a mix of equity and commercial debt financing, seems to rely more on the later at about a 30/70 split.³⁶ According to its 2016 annual review, CDC relies heavily on direct equity investments (44 percent), relying on debt for 24 percent of its portfolio and intermediary equity for another 24 percent. It should be noted that this reliance on equity financing helps explain CDC's penchant for very large investments in more mature companies.

4.2.2 A strong East Africa presence

It was mentioned in the portfolio analysis that East Africa received the most commercial agriculture programmes of any region. This is also true in terms of investments. Tanzania by itself has about 25 percent of AECF's portfolio, and the fund has recognised in its most current strategy that it needs to rebalance geographically. However, it is limited by the fact that it is a challenge fund, and therefore funds the best programmes that are submitted to it, rather than identifying and promoting the best firms to reach specific targets. This has historically made it more present in East Africa which has provided more good applications.

Though AgDevCo has a specific Ghana window, it plays a larger role in East and Southern Africa, being present in Zambia, Tanzania, and Mozambique through its own windows, and in Uganda (Nu-Tec) and Rwanda (IMSAR) through other DFID programmes. The country currently receiving the highest amount of GAFSP funding is Tanzania.

³⁵ CDC Annual Report 2016

³⁶ Based on data from BAGC programme and assuming it is representative.

Some DFID advisors and implementers expressed concern about an over-abundance of such funds in East Africa given the absorptive capacity, which can lead to crowding out of commercial finance. This is particularly true since there is a limited number of investment ready companies. According to its annual reviews and the logframe, AgDevCo has not yet met its planned investment targets in any of the markets in which it operates. CDC has invested sparingly in agriculture related companies in 2016. Interviewed DFID staff have confirmed this as an issue. It is also seen as a key focus of AECF: to help create companies that are ready for investment. Its goal is to help graduate businesses along the investment ladder, to build a cadre of local businesses to address local problems.

Implementers highlight that there is an absence of solid local companies that are targets for funding, and that when such companies can be found, it is more efficient to find those capable of handling a large investment. For example, AgDevCo's current average deal size is \$1.5 million USD, and it is seeking to increase that to \$2.5 million USD. This is because "The breadth (number of farmers reached) and depth (income uplift) of seed investments below \$1m was the smallest and placing a significant burden on costs and financial sustainability. As such AgDevCo is progressively focusing on venture investments \$1-5m with the averages above."³⁷ CDC's investments are also focused exclusively on large businesses, as is GAFSP. There are many commercially sensible reasons for this, ranging from costs to the sophistication of companies to absorb an investment.

AECF is attempting to improve this situation. However, it offers on average a \$500,000 USD grant/loan. This requires a certain level of sophistication to use effectively in numerous African markets. In fact, in Tanzania, this amount was decreased to \$250,000 USD to ensure better absorption.

4.2.3 Stepping up,

The major impact from the agricultural investments appears to be the creation of a more conducive environment for smallholder farmers to step up. This is achieved by introducing new services and stronger buyers to drive economic growth to reduce transactions costs and opportunities for smallholders. While there have been increases in farmer productivity, the structure of the local economies has not necessarily had much impact on stepping out.

AgDevCo's flagship investment in Mozambique, ECA is a good example of investment driving stepping up. ECA receives 36 percent of total funding for the Beira Agriculture Growth Corridor (BAGC), more than double the next closest investment.³⁸ Money was used to buy a maize processing machine, but more importantly to fund a large outgrower scheme to provide the high quality maize required for ECA produce the maize flour. With a ready market for its maize (import substitution into the poultry sector) ECA investment has been able to drive greater demand for, and investment in, the production and marketing of maize.

In fact, all major agricultural investment programmes (AECF, AgDevCo, GAFSP) are quite active in the inputs value chain. This is in line with the general portfolio, and highlights once again how involved these investments are in promoting greater efficiency within the value chain, creating more opportunities for smallholder farmers to step up with better input supply and better markets to sell to. Even GAFSP, which has been credited for its introduction of innovative blended finance products, focuses primarily on stepping up.³⁹

This is evidenced by the secondary subset of programmes supported by agribusiness investment programmes. The majority are involved in commercialising inputs, followed by providing access to finance. Agribusiness Investment programmes are generally funding outgrowers systems that support their investment (as was the case with AgDevCo and ECA), or helping expand access to finance (as GAFSP is credited with doing). These activities support more stepping up than stepping out.

³⁷ Interview with Marco Serena, DFID PSD Advisor

³⁸ BAGC PCR 2016

³⁹ Interview.

4.3 Enabling Environment

Table 27: Key Statistics linked to Enabling Environment Programmes

	Programme	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	3	61,391,274	7	321,383	236,939	12,854,189	7,875,197
Asia	2	65,299,994	7	124,000	205,000	32,508,000	25,155,000
Global	2	42,900,000	6.5	1,700	75	0	0
Total	7	169,591,268	6.8	447,083	442,014	45,362,189	33,030,197

Enabling environment programmes display comparatively small impact numbers because they do not capture all the outcomes generally associated with commercial agriculture. The programmes in the portfolio seek to help improve commercial agriculture by lowering trade barriers in regions and improving the investment climate, but working through practical cases with local partners to build the evidence base. This is particularly useful in Africa, which, as previously mentioned, suffers from a lack of intra-regional trade.

The enabling environment is part of the commercial agriculture framework as it is seen as a key element for the rest of the framework to work. In fact, within the framework document, the enabling environment is part of getting the basics right.

4.3.1 Providing Evidence Based policy

Programmes such as East and Southern Africa Staple Food Markets Programme and West Africa Food Staple programmes seek to provide evidence based policy that promotes cross border linkages. They link these with a challenge fund to help test and promote trade and business models that will also generate evidence for policy dialogue. This should allow it to deal with both policy issues that challenge fund grantees face. The success of the policy component of these programmes is therefore directly linked to their ability to conduct research and their ability to interact with specific governments.

The research component is particularly useful, as it can overcome information asymmetries and help update or eliminate outdated policies (assuming there is political will to do so). Programmes such as the Enabling Business of Agriculture also seek to reduce these asymmetries to help improve investment in countries.

4.4 Access to Finance

Table 28: Key Statistics for Access to Finance Programmes

	Programme	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	4	153,753,765	6	1,966,612	803,528	13,191,808	11,807,945
Asia	2	144,980,000	7	540,000	0	0	0
Total	6	298,733,765	6	2,506,612	803,528	13,191,808	11,807,945

Access to finance is vital to improving commercial agriculture productivity, since most improvements rely on the purchase of inputs and services. As previously stated, this is why access to finance is a secondary focus of numerous value chain programmes. It is a vital component to allow farmer to participate in stepping up.

4.4.1 Innovative finance

However, there are rarely financial products present that are dedicated to specific agriculture value chains. Value chains vary based on the country, the crop, the power dynamics within the value chain and numerous other factors, but having a dedicated financial product for a value chain is extremely beneficial, as long as the value chain is indeed well understood.

Access to Finance Rwanda 2 is trying to bridge this gap in Rwanda by focusing on the financing of five value chains: coffee, tea, maize, Irish potatoes, and dairy. This coupled with a technology component will hopefully allow the provision of tailored products.

In addition to customised value chain products, ensuring farmers have collateral for loans is also a key element of stepping up. One of the more interesting access to finance programmes currently underway in the portfolio to address this issue is LIFT Ethiopia. Though primarily a land titling programme, LIFT is the only programme actively trying to build a market for these titles by having them accepted not only as collateral, but also as a way of leasing land. This means that instead of simply allowing farmers to step up, it can allow certain low capacity farmers to shift from agricultural production, into renting out their land, allowing them to hang in to their rural houses.

4.5 Infrastructure

Table 29: Key Statistics on Infrastructure Programmes

	Number of Programmes	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	4	116,686,898	5	7,811,817	8,570,362	10,062,000	116,686,898
Asia	2	500,500,000	6	50,000	18,403	0	500,500,000
Total	6	617,186,898	5	7,861,817	8,588,765	10,062,000	617,186,898

Infrastructure is a way to reaching a large number of beneficiaries. Roads are key to commercial agriculture as well as other commercial activity and tend to have large spill over effects. The recorded outcomes for investments in Africa capture the numbers of beneficiaries more effectively than those in Asia. This is because the major project (Afghan Road Reconstruction Trust) did not have any target numbers of farmers with increased productivity, and the Nepal project, while targeting 800,000 households, only had a target of 50,000 farmers increasing their productivity.

4.6 Research

Table 30: Key Statistics on Research Programmes

	Programme	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income

			years)				
Africa	4	28,000,000	4	500,000	0	250,000,000	0
Global	1	24,999,999	11	0	0	0	0
Total	5	52,999,999	5.4	500,000	0	250,000,000	0

As was mentioned in the general portfolio analysis, most of the research is stimulated through pull grants or catalytic funds. The idea of the Research and Evidence Department (RED) is to test interventions and then share the knowledge to other parts of DFID programming to achieve scale. There are primarily two ways: collaborative R&D with private sector firms and catalyst funds. In one case, the firms contact RED and in the other, RED issues a call to answer a specific problem.

At this time, no results are available, but given the range of different elements in the research portfolio, RED programmes will contribute particularly to stepping up.

There is however a big gap in linking with other DFID programmes and programme implementers. RED has a large body of knowledge that is rarely used for programme design or implementation. This is not necessarily due to neglect by other programmes, but rather a lack of time and knowledge about what exact information RED should offer.

It should be noted that RED programmes are the shortest in the sample. Were it not for the AgResults programme that lasts 11 years, research programmes would last on average 4 years.

4.7 Climate Smart Agriculture

Table 31: Key Statistics for Climate Smart Agriculture Programmes

	Number of Programmes	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
Africa	3	91,000,000	6	1,086,600	615,808	0	0
Global	1	150,024,099	10	6,000,000	4,290,000	0	0
Total	4	241,024,099	7	7,086,600	4,905,808	0	0

4.7.1 Working like the others

Though it is its own subset of DFID programming, it should be recognised that CSA programmes operate just like either Agribusiness Investment or Value chain programmes. The only difference is that the investment or the input that is being commercialised is specifically linked to climate resilience. Nu-Tec Uganda, for example is essentially an agribusiness investment programme that supports the climate resilience input value chain. As such most of the information and discussion mentioned in those sections is relevant here.

4.8 Land tenure

Table 32: Key Statistics for Land Tenure Programmes

	Programme	Budget (£)	AVG Length (in years)	Target #of Smallholder farmers	Actual #of Smallholder farmers	Target Attributable Income	Actual Attributable Income
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Africa	2	36,350,000	7	0	0	0	0
Global	1	20,000,000	5	0	0	0	0
Total	3	56,350,000	6.3	0	0	0	0

The land tenure programmes are key to helping improve the enabling environment for agricultural transformation by giving title to the farmers to improve their ability to use the land as a productive asset (use it as collateral, rent it out, or invest more heavily in the land). However, the programmes tend to be one dimensional, focusing just on the titling, without helping the farmers to access the services needed to add the value to the title to smallholders. This usually appears to be expected to take place on its own, but more slowly.

This can have unforeseen consequences, as highlighted by this section of the Rwanda Land Tenure programme August 2016 annual review:

“There could be a two-tier land registration system developing, although there is some evidence, it is not strong enough to quantify this impression. Transaction levels in relatively high land value areas, particularly in and around Kigali, appear to be rising steadily, and there appears to be a widespread awareness and acceptance of the new formal system. In the poorer rural areas, however transaction levels are relatively low, and there is some evidence of continued use of the informal system.”

Stimulating the use of land for promoting productive use and increased commercial agriculture may require additional facilitation. The LIFT programme in Ethiopia is not just promoting land titling, but also actively facilitating services and products to create a value proposition for the use of the titles. LIFT has focused at three levels which appear to be stimulating increased transactions around the land titles and improving value in the rural areas:

- Helping financial institutions to develop new products to reach smallholder farmers wishing to step up with larger loans using the title as collateral⁴⁰ for stronger emerging farmers, training their staff in how to market them, and to register the titles as collateral;
- Creating a new industry of “land rental service providers” who serve as agents to help smallholder farmers identify commercial partners to whom to rent the land and assist with the transaction registration; and
- Assisting with the provision of environmentally sustainable inputs to increase productivity on the land under title.

In addition, the synergy of working directly with the government offices in charge of land registration, is helping to address policy and “social” perspectives on the use of the land for commercial purposes. By stimulating the use of the land titles, the land registration agencies are becoming more relevant and accruing recognition.

One of the groups which appear to be specifically benefitting from the improved trade in land rental has been disadvantaged people (elderly, widows, or poor). Without the resources to use the land productively, this land often sits idle. The new contracting procedures and the comfort that owners will not lose the ownership of the land, allows them to rent the land and earn some additional income to help them hang-in.

⁴⁰ Ethiopia has declared that, while the SLLC in and of itself cannot be taken as collateral, the production from the land delimited in the SLLC can be used as collateral

While there is substantial informal land rental in Ethiopia, it is primarily within family relations. Initial evidence is also showing that this formalised trading is helping them to rent more often, but also to earn higher rental values than before. This provides increased benefits to all smallholders.

For larger scale commercial farming, having clear understanding of titles allows government investment agencies to lease land with greater confidence to large investors. The GEMS example with supporting Dangote with a rice plantation and outgrower scheme in Nigeria. Having a land titling system in place allows for a clearer relationship and lower transactions costs.

4.9 Additional insights provided through interviews and research

This subsection captures several cross cutting themes gathered across interviews with DFID staff and the general literature review.

4.9.1 Poor preparation for extreme events.

It is difficult to be prepared for extreme events, often referred to as black swan events. While DFID programming includes risk registers to anticipate risk, they rarely provide contingencies for extreme events such as droughts, floods, or major devaluations. An example of this include providing loans in dollar terms to non-exporting firms in Mozambique at preferential rates, which leaves them exposed to currency risk (and in this case, led to near default on loans). Similarly, the blockage of imports from India hurt NMDP in Nepal, but mainly because the designer of the implementer's business case, who had little experience in Nepal, was unaware that such blockages were rather common and part of the transaction costs of doing business.

This is relevant because as extreme weather events are expected to increase in the coming years, many countries engaged in commercial agriculture in Africa and South Asia are at risk. Additional planning for such an extreme event would therefore be reasonable, if not in the DFID business case then at least in the programme implementation business case.

4.9.2 Political economy and influencing the enabling environment:

Though already mentioned in the value chain section, it should be repeated here as it was a common failing identified in seven interviews on cross country and programme types. When not specifically mentioning political economy, the DFID advisors mentioned a desire to have a greater impact on the enabling environment. The one exception are programmes which have this as a primary focus. This is linked to the need for better research to include this understanding.

4.9.3 Short time frames for programmes.

The programmes with the shortest timeframes are those dedicated to research and value chains. This seems somewhat at odds with the objectives of those two subsets, since one requires time to test and validate hypothesis and the other generally seeks to impact an entire market system.

4.9.4 Scarcity of lateral discussions and synergies within DFID programmes

The majority of the individuals interviewed stated that there was insufficient lateral discussion and planning across programme lines and even between programmes working in the same sectors. This was primarily attributed to lack of time and lack of occasions to meet and disseminate knowledge. This is particularly true of the lack of what one DFID staff called "serendipitous encounters." Even in countries where similar programmes meet to discuss implementation, there is little active collaboration between them to fill in missing services or carry out joint interventions, even though there could be good synergies. This has been attributed to the incentive structure inside the DFID programmes, challenges with attribution if joint interventions, and competition between contractors implementing the programmes.

5 SUMMARY OF FINDINGS AND RECOMMENDATIONS FOR CASA PROGRAMMING

Section 4, above has captured most of the key issues by type of programme. This section will focus on answering some of the key questions asked by DFID in the TOR and in discussions, and then a summary of the conclusions on gaps and lessons learned. These sections below highlight the conclusions and make recommendations at the same time.

5.1 Answering the core questions to influence CASA design

5.1.1 How are existing Commercial Agriculture programmes supporting the Stepping Up and Stepping Out goals?

The main emphasis of most of the commercial agribusiness programmes is to support stepping up of smallholder farmers to increase their incomes. This is in line with most of the DFID country and region level programme objectives which seek to alleviate poverty. But there are different levels of stepping up and the sequencing of the stepping up needs to be acknowledged.

5.1.1.1 Stepping up

Stepping up is really focusing on firm/farmer level upgrading, which can occur in many forms for SHFs, as described in Section 2. The main forms of stepping up for SHFs in commercial agriculture, which are used by DFID programmes, include:

- **Process** upgrading: improving their production processes to become more efficient and productive;
- **Product** upgrading: producing a differentiated product to fit a higher value market;
- **Functional** upgrading: changing the functions they perform in the value chain, either by shifting entirely from one function to another, or by integrating numerous functions inside their business;
- **Channel** upgrading: shifting from a lower value added channel to a higher value added channel for the same product (differentiated by the technology they are using or the market they are targeting).

The main approaches to stepping up are taken to address the key issues of increased productivity (higher yields per GBP invested) and improved prices to the farmers from better coordination with the end market buyers or stronger negotiating power between the farmers and the buyers. Given the large numbers of target farmers who need to be reached, the latest generation of programmes (those applying market systems approaches which became mainstreamed in about 2012) typically work through lead firms to access them. Most of the value chain programmes start with an analysis of the structure of the subsectors in the countries, the growth opportunities and the binding constraints. With a clear understanding of the growth opportunities and binding constraints, they usually tie the solution to working with/through a large company which serves as an effective point of leverage to reach large numbers of smallholder farmers.

Programmes are generating the majority of the outreach through firms with a solid value proposition for reaching out to the commercially active smallholder farmers – they want to sell them something or buy something from them. The programmes typically help the large lead firms understand the value proposition of reaching out to marginal emerging commercial farmers; gain the lead firms' buy-in to the concept; help the lead firms design a strategy (business model) for engaging effectively with the smallholder farmers to build demand for inputs (to sell them) or their commitment to sell their production to the lead firms. The

programmes then to support the lead firms to buy down the risk of making the new investment or to speed up their adoption of this approach in the target areas, most often using a cost sharing mechanism (matching grant or output based grant). In both the input sales and output marketing, a critical component applied by most projects is to focus beyond the pure value of the product but on the knowledge transfer needed to change the Knowledge Attitudes and Practices (KAP) of the smallholder farmers around the use of the products.

Agricultural input suppliers have been significant points of leverage in most of the value chain projects. The most effective partners have been suppliers of high value products such as seed, feed, nurseries, crop protection products, or agro-veterinary supplies, and have probably contributed to the majority of the declared outcomes in the projects by enhancing the productivity of the SHF. The main strategy employed by projects is to demonstrate to the lead firms that the best marketing is through demonstration and teaching the farmers how to use the products most effectively to generate higher yields and increased profitability.

The climate smart agriculture programmes have typically focused on the promotion of new crops through input suppliers or specialised lines of credit through MFIs.

Regarding output buying, projects are working to overcome the main challenges facing the buyers (processors or traders): getting the right supply at the right price to meet market opportunities, either domestic or for export. Contract growing schemes, where the lead firm provides inputs to the smallholder farmers to stimulate their production, often run into problems of side selling especially if they are general commercially traded crops. Therefore, the contract growing schemes tend to work best in industrial crops when the buyer is the sole buyer for the product (as in sugar cane or cotton), and there is limited opportunity for side selling. If ready opportunities for side selling exist then the relationships fall apart very often. One success factor for output buyers is to build the strong relationship with the producers by providing them with advice delivered through extension workers employed by the output buyers.

An additional issue on contract growing is the scale. Good processors prefer a smaller number of higher quality outgrowers with whom to work and should be incentivising the upscaling of their best suppliers.

Agricultural investment. The agricultural investment programmes have also been largely funding key players in the value chain, either to serve as effective input suppliers, aggregators, processors, or trader/exporters. Some of the investment programmes have also addressed new technology research and development (seed varieties, banana varieties) on the production side, so that they can meet market demand. They have also funded marketing companies (like ECA in Mozambique) to help them develop the infrastructure (storage and packing) as well as purchasing capacity (working capital) to meet demand from major processors.

Land tenure. In land tenure, only one programme (LIFT) has been focused on the actual application of the value add for the land now that the people have titles. The majority of this has allowed for stepping up by smallholder farmers, enabling emerging commercial farmers to get larger loans for more commercial agriculture as well as to facilitate the rental of additional land to step up production. LIFT has also played a secondary role in helping smallholders stay on the land (hanging-in). With a better market for land rentals and a reduced risk of losing property when it has been rented out, more people who are not using their land seem to be renting it out as well as renting it for higher prices. This has been a strong benefit to widows and the elderly who are no longer able to produce on the farms to earn revenue from their land without having to work it.

5.1.1.2 Stepping out

The “stepping out” refers more to opportunities for employment for people who had been growing their own production before. This employment can come either as i) off-farm (i.e. in aggregating, processing, wholesaling, or service supply) or ii) on-farm where the individual is now working either on large commercial

farms or for other growing emerging commercial farmers who face serious labour constraints for planting, weeding, and harvesting.

From the review, stepping out is rarely a specific target on the commercial agriculture projects, though they do count on farm employment creation (as in the PIMS project in Somalia). In other projects, it is a non-agriculture component that is often creating the employment opportunities, but being done as specific programme objective:

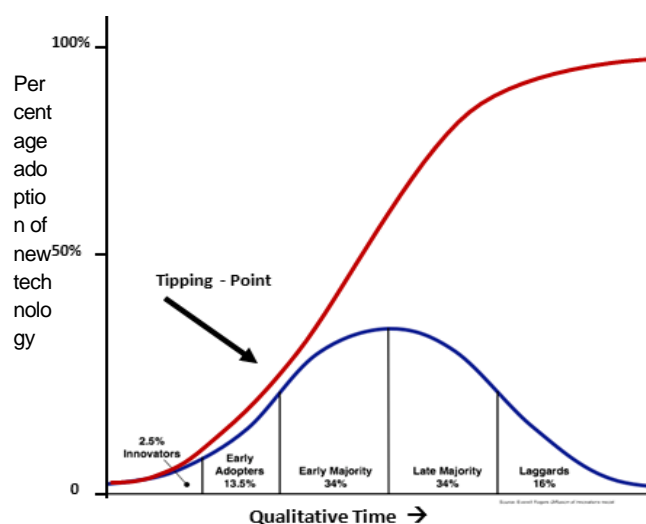
- The Ethiopian government's definition of its priority sectors in PEPE as "cotton to garments" and "livestock to leather", explicitly integrated the stepping out of agriculture by creating employment opportunities in tanneries and leather (shoe) companies as well as in garment factories.
- In Nigeria, the GEMS suite of projects covered a range of topics designed to stimulate opportunities for stepping out, as well as stepping up:
 - GEMS 1 was also "livestock to leather" so had an emphasis on increasing productivity and production of animals, as well as the tanning and the actual leather manufacturing;
 - GEMS 2 was to create employment opportunities in construction in part to absorb labour leaving the farms;
 - GEMS 3 was to address the policy environment from land to investment promotion with a specific eye towards creating special processing zones or to address the land registration issues
 - GEMS 4, focusing on wholesale and retail to make the value chains more efficient through more efficient marketing channels and linkages, but creating job opportunities in the marketing channels.

5.1.2 What is the scale of farms and scale of agribusinesses to be prioritised?

The prioritisation of scale of farms or farmers or agribusinesses, comes at two levels: overall targets and initial focus early in the project. Prioritisation for getting traction and adoption depends more on the nature of the farmer or agribusiness, generally reflecting their appetite for risk. The figure at right presents the theory of adoption of new

technologies by farmers, which has been reinforced by most agricultural programmes that show significant success. The vertical axis to the left reflects the percentage adopting, while the horizontal axis represents the rate of adoption by the farmers (or agribusinesses). The experience in terms of adoption of the KAP by both farmers and agribusinesses follows a trend of "innovator, early adopter, early majority, and late majority". The laggards will typically drop out of a system because they do not adapt to keep up with commercial productivity levels. Therefore, it is not necessarily the size of the farm or agribusiness, or even their profitability, as it is the intent of the enterprise and its appetite for risk.

Figure 13: Client prioritisation



Farmers. As noted in section 2, a “commercial farmer is someone who is investing to grow/raise and sell a product.” Most of the programmes are focusing on the commercially active poor, who are those who are most likely to change their behaviour to adopt new practices and step up most quickly. Within the pyramid framework the focus (target) has been the farmers who are at the bottom of the emerging commercial farmer segment. However, since most of the projects are working through lead firms and market systems, the actual outreach is to farmers of all sizes who had previously not been included (regardless of size). The creation of a more efficient system for marketing seeds, or feed, or other inputs, will benefit all farmers, regardless of size. But the initial target of the programmes should be to seek out the innovators (typically lead farmers) who are willing to try new things and demonstrate their commercial viability, who are then followed by the early adopters. The role of the projects should be to help move partners through the early adopters’ stage to get us to the tipping point, which is when initiatives have gained buy-in from large numbers of farmers and the results will expand gradually, but picking up speed to bring new farmers into the system.

Agribusinesses. The same applies for agribusinesses engaged with the emerging commercial farmers. But since these agribusinesses are typically the lead partners through which the projects make investments, it is imperative that they choose the partners meeting the selection criteria. If the wrong partner is selected, then experience has shown that the initiatives will not succeed. Therefore, some of the critical considerations in the selection of agribusiness partners to lead intervention initiatives for projects include:

- Are they at the right point in the value chain to have impact on many emerging commercial farmers (point of leverage)?
- Do they have the will to carry out the proposed activity?
- Do they have the technical skills to carry out the activity?
- Do they have the management capacity to take on the activity and then to grow it to scale?
- Do they have the financial capacity to expand their operations to the desired scale?

Carrying this level of due diligence takes time and is critical. But if the right few partners are selected initially, they will demonstrate the value proposition and other firms will start to copy and crowd in. One of the constraints experienced by many of DFID’s commercial agriculture projects is the selection of a partner who does not meet the selection criteria.

Looking at these selection criteria, initial lead agribusinesses to work with may often be multinationals working in a country. Firms like Pannar, Syngenta, Bayer, Contec Global, ETG, OLAM, etc. are typically the right leverage points in the value chains and have the skills, resources and general capacity to carry out and lead initiatives and do them successfully (if they have the will). They can make good initial partners, who will drive the innovation. But programmes should also be thinking about how and when to bring in more firms as early adopters to give them competition. In some cases, it is smaller, more aggressive firms that are the innovators. In many countries, there are no large firms or multinationals and the projects must select from among the available choice of partners⁴¹.

In terms of agribusinesses, there is currently a gap in good local service providers in most developing countries. It will clearly depend on the market in which the firm operates. However, given the size of certain investments seen in programmes in the portfolio, a firm that can effectively deploy a £500,000 investment is likely a medium size firm in most markets.

⁴¹ This was one of the issues for BIF 1, why it switched from focusing on multinationals to larger domestic firms under BIF 2.

5.1.3 What are the institutional arrangements to be promoted to ensure greatest benefits from investments to large numbers of small scale farmers?

The institutional arrangements are threefold: one in terms of better defining activities considering DFID's agriculture policy framework, second is the actual programmatic steps by DFID projects, and third is effective partnering with local institutions.

5.1.3.1 Clearly defining terminology

Defining the target audience and geographies. Increasingly, DFID is focusing its efforts on specific regions (geographies) determined by UK policy. But within those regions are the sub geographic areas discussed in the framework. So, for the first step, in addition of defining agribusinesses and smallholder farmers as done in the previous section, geography needs to be considered as a core element of the framework.

5.1.3.2 Programmatic elements

Strong analysis. In terms of programming, there seems to be the greatest benefits per capita in value chain programmes. However, these should be value chain programmes that are designed based on a strong understanding of not only the composition of the value chain, but also the power dynamics and understanding the business within the actors of the value chain. As was mentioned previously, the misunderstanding of the political economy and power dynamics within a value chain has been cited by most interviewed staff as a key hindrance to programmes. Similarly, not understanding the business value proposition can lead to poor decisions that don't incentivise actors in the correct way.

Project alignment. Aligning DFID's projects within a country and incentivising the implementing partners to collaborate and share information is one area that can be improved to increase impact. Experience from Ethiopia, Nigeria, Malawi and others have highlighted how there are lost synergies within the group of projects in a country both from within the same pillar (economic growth) as well as across pillars. This is reported as a function of silos within the missions, but also silos between the projects which often see themselves in competition with one another. In Ethiopia, collaboration between LIFT and PEPE has required special brokering to maximise cooperation even when working in the same sector (access to finance). Meanwhile in Nigeria the GEMS projects, despite regular information meetings, did not collaborate effectively to make VCs work more efficiently. Or projects with a mandate in a sector, such as the FSDs for access to finance, have their own agendas that do not include the priorities for other projects, even if it falls within their mandate. Interviewed staff also discussed the challenge of getting the policy and business enabling projects to address the varying policy issues high on the agenda of the commercial agriculture projects.

Project duration. The timeframe for projects was frequently commented on as one of the limiting factors for impact.

It seems that most of the value chain projects spend the first year and a half to two years (including inception) learning about their sectors and building relationships, and getting partners to buy-in the concepts. Then next year is spent testing the hypotheses and pilots to prove the value propositions, and finally by year four, the projects are starting to run, but by year five projects are starting to pull back, often when they should be achieving greatest scale and impact. PropCom Maikarfi in Nigeria was able to build on the learning and relationships of the first phase to seamlessly incorporate interventions going to scale in its first year, greatly improving its impact. BIF 2 also built off the learning of BIF 1 to improve their focus and increase their impact.

For the agricultural investment programmes (such as AgDevCo), it also takes time for them to learn the market, identify suitable companies for investment and build the relationships. Then there is the time frame for the investment, scale up and the exit, which realistically takes a minimum of 5-7 years to get a return on investment for future refinancing.

5.1.3.3 Implementing institutions

DFID relies primarily on partners to implement its programmes: contractors, large local or international NGOs/Foundations, Special Purpose Vehicles (SPVs), or Private businesses. But ultimately it is looking for institutional arrangements that will last into the future, continuing to deliver inclusive solutions in the most sustainable manner:

- Contractors can be hired to deliver a solution within a fixed timeline. The most effective arrangement for contractors seems to be when they serve as facilitators, to engage all necessary local institutions (private, public, and civil society); in this case they will find the local partners with the best long-term sustainability and common agenda to deliver the results into the future.
- International NGOs essentially operate like contractors, implementing time bound programmes, but operate within their own development framework.
- Special Purpose Vehicles, such as the Financial Sector Deepening Trusts or TRADEMark East Africa, are created by DFID, either with the help of a contractor or directly by DFID staff,
- Pure private entities to deliver their own business model. These are most often funded through challenge grants (which require a manager) or through a direct grant from DFID to a social impact investor (such as AgDevCo).

DFID has several key considerations when discussing institutional options focusing on long term sustainable impact: maintaining control over the agenda, long term funding obligations, and challenges of institution building versus getting the results within a reasonable timeframe.

- One of the key considerations for DFID as it looks at institutional partnerships remains DFID's control over the agenda and its ability to keep focus on its objectives. When SPVs are created (such as the FSDs or TRADEMARK East Africa), they establish autonomous boards of directors and source funding from a range of providers. While these SPVs may be more institutionally sustainable long term, if they build a strong institutional foundation, DFID's control over their agenda and interventions can be diluted.
- A second consideration is the amount of time it takes to build the independent institution (establishing the governance set up, recruiting suitable management team, training the staff, and assisting with fundraising) compared to achieving the desired results of the programme.
- A third consideration raised by DFID staff is DFID's obligation to ensure the long term financial sustainability of the organisation they create.

Similar challenges can occur when working with/through international foundations (such as the Gatsby Trust) to create new local foundations/trusts (such as Msingi or KMT),

Contractors, whose role is time bound, must find the best local partners, with existing sustainable models, and engage with them to deliver the solutions in order to meet their targets. In countries where the working environment is quite difficult (e.g. the Niger Delta, Somalia, North East Nigeria, Afghanistan, etc.), contractors will often identify and develop co-facilitators (other non-market actors) to help them deliver the results. This builds the capacity of other NGOs or private companies to continue the programme's mission.

When funding a social impact investor, there are advantages to scale. AECF (and KPMG, its implementer) has successfully captured a larger percentage of the challenge fund money for private sector development in Africa from a wide range of donors. The rationale is that they have the systems, networks, and staff to

implement these more effectively. Therefore, it can make sense to run the money through one institution, rather than trying to establish multiple smaller institutions to deliver the service.

5.1.4 Which value chains or related agribusiness investments are likely to have the largest impact in the long run?

Assuming that there is a sound growth framework that is based on a strong competitiveness analysis and understood by DFID in each country, then this will help to focus the opportunities for the greatest impact. One thing that has been shown, over and over, is that by creating a sound underlying commercially viable system in any sector, it has the potential to go to scale and reach large numbers of clients with positive impact into the future.

Cross cutting sectors compared to commodity value chains. There are both commodity value chains (by crop like maize, cotton, vegetables, beans, poultry, ruminants, etc,) that will have strong potential depending on the country and its characteristics as well as cross cutting market systems that are needed to make those commodities work function efficiently like agricultural inputs (seeds, CPP, fertilisers, agrovet products), fabrication or food processing, and agricultural finance (see below).

The portfolio indicates that the most common value chain supported is inputs. As has been previously discussed this is because inputs can assist both commercial farmers and emerging commercial farmers, supplying benefits across the board. Agricultural inputs usually provide a very good point of entry into agriculture as they are driven by large firms with a clear value proposition to support increased adoption of their products to very large numbers of people. They do this by stimulating demand for the products through demonstrations and training to get farmers to change their behaviour (i.e. purchase more inputs) because it will increase their productivity and yields. Therefore, working through agricultural input suppliers can reach large numbers of smallholders with productivity enhancing benefits which have long term impact on emerging commercial farmers by increasing their profitability and long-term competitiveness.

However, one should remember the need to include a strong, dedicated component on providing access to finance in these situations.

Import substitution, export promotion, and traditional domestic markets. From a strictly commercial point of view, the value chains that are most likely to grow and provide more rapid impact are those that promote import substitution, promote export growth, or have higher marginal propensities to consume (MPC)⁴², as they are feeding into existing growth opportunities. Whether to focus on import substitution or export promotion will depend on each country, the size of its markets, and the growth opportunities. A country like Nigeria, which imports 3 million tons of rice per year, while also producing 2 million tons of rice, should be able to double local production to substitute for the imports more easily than promote exports in another commodity. But a country like Mozambique, with a smaller economy and lower absorptive capacity, should probably target more export oriented crops, as it has with pigeon peas and cashews into the international markets.

Most value chains in the current portfolio have a domestic market focus. There are many reasons for this, including growing cities and middle-class consumers with higher MPC for certain products, barriers to regional trade, issues linked to currency, and the requirements for inputs. The primary one, however, is that as a rule, Africa (the location of most programmes in the portfolio) imports a fair amount of food it should be able to produce at home to compete with imports.⁴³

This implies that there are huge gains from boosting productivity at home, which is reflected in the strong domestic market focus of the portfolio.

⁴² MPC is an indicator of areas where local consumers are more likely to spend their additional income, leading to a stronger growth opportunity

⁴³ Approximately 35 billion in food exports, according to the AfDB, in Africa Economic Outlook, 2017

Policy environment. While not a value chain, investing in the right policies can have the broadest impact on a country, as policy affects everyone. Trade negotiations (like Mozambique's agreement with India, or Kenya's renegotiating its LDC status with the EU) can create significant opportunities. Import tariff policies, monetary policies, foreign exchange policies, can all have significant impact in shaping the incentives for firm level investment. Typical commercial agriculture projects do not prioritise work on the policy environment, unless the project is focused on the enabling environment, even though policy is sometimes the binding constraint.

5.1.5 What are the risks from prospective agribusiness investments that need to be prevented or mitigated?

There are many risks that prospective agribusiness investments can create or fall victim to. These include developing power dynamics that create monopolistic conditions; focusing on subsectors that have weak competitiveness for the country in general; promoting products that do not have long term competitiveness for emerging commercial farmers; choosing the wrong partners to work with; having too narrow a focus on a single service or product which is not viable in the context of the local market, thereby promoting investments that do not have an effective value proposition for partners and clients.

Much of this can be prevented or mitigated by good initial analysis and sound design that starts with:

- Selection of sectors with the greatest potential for long-term competitive growth, relative to DFID's priorities (target clients, geographic areas, etc.);
- Carrying out a good initial analysis of the sectors that clearly highlights the markets that are being served (to understand where growth will come from), the structure of the sectors (who buys from whom and which markets are they serving), and
- Carrying out a good political economy analysis to understand who will win and who will lose from specific investments, as well as how to avoid partnering with the wrong firms or promoting products that vested interests do not want. This will also include what is socially and culturally acceptable;
- Review of the business enabling environment;
- Carrying out the firm level financial analysis for smallholder farmers, service providers, and lead firms to really understand the value propositions for the firms, and what it will take for them to really make money;
- Understanding the real limiting factors within the participating firms that may prevent uptake of the desired changes in KAP (fundamental resource availability, financial resources etc.
- Design of interventions that explicitly recognise what the structure of a competitive industry should look like with good competition between lead firms and good cooperation and coordination between the actors at various functional levels; and
- Follow the principle of "Do no harm", i.e. do not promote an intervention that may require the beneficiaries to make very risky investments.

These design elements hold true for all types of interventions, including agribusiness investment. The assumption of agribusiness investment programmes is that entrepreneurs or applicants to challenge fund grants will have done this research and submit it as a component of a business plan. This information should be fact checked by testing assumptions and serious due diligence on the firms should be applied.

Unfortunately, this is difficult to do without access to information. This is where DFID's "silo" set up is most detrimental. DFID has a collection of very knowledgeable individuals and a large repository of market

information in the forms of the numerous studies it has asked its programme implementers to do over the years. It would be helpful if the studies carried out by projects was made public and searchable, so that interested investors and entrepreneurs could use the information. It should be noted that the database created for this project is positive first step in that direction, because it highlights at least value chains in which DFID is involved at the country level, and so inquisitive parties could eventually contact DFID to have it share such information.

5.2 Conclusion Key gaps and best practices identified

DFID's Framework for Commercial Agriculture and its Economic Development Strategy lay out fundamental frameworks for implementation that are well thought through and cover most eventualities. But DFID is still learning about how to best implement within those frameworks. There are some gaps in focus of programmes, some gaps in DFID's own internal coordination, and a lot of learning on better practices for achieving results.

5.2.1 Main gaps in the framework

A number of weaknesses exist in the overall project implementation and application of DFID's EDS and Agriculture framework. These include:

1. Defining the target beneficiaries in most of the projects is a challenge, as the emphasis is on the level of poverty, not on the potential for the individuals to step up and become more productive and commercially active. Setting large target numbers to be reached can also orient projects into supporting sectors with lower long-term potential. Identifying good proxies for the target market (such as land size), will greatly help measurement.
2. Geographic targeting also can affect the selection of value chains with lower opportunities, because they need to achieve results in terms of target numbers.
3. Emphasizing zones within Geography. While the agriculture policy framework highlights the three main geographic zones, these are rarely explicitly taken into consideration in the design of programmes. Clearer definition of the target zones, relating to infrastructure, markets, and opportunities needs greater attention.
4. Research into the value chains and market systems needs to be ongoing. Even with long inception periods, these initial analyses are just getting below the surface. As projects work with their partners and implement interventions, they learn a lot, but there is no explicit requirement to update their strategies (though the best projects do). Recognition of the steady changes in each sector, which can vary tremendously year on year, and the need for regular updating.
5. Gap in Political Economy research. There are two levels of political economy one at the national, and then the other is within each value chain. The emphasis is on the first, while the second is much more difficult as it takes an in-depth knowledge of the sectors to do well. Then once it has been done it needs to be regularly updated.

5.2.2 Gaps in DFID's portfolio and coordination

Agricultural finance. Probably the most significant gap in the commercial agriculture portfolio is around agricultural finance. While long term investment is important, it is the ability of the hundreds of thousands of targeted farmers to access the working capital to buy seeds, inputs, pay for labour, rent tractors, that are the binding constraint. The majority of DFID's access to finance portfolio is linked to the Financial Sector Deepening Trusts, which set their own agendas targeting national financial inclusion issues and are not focused on agriculture. There is a need to have greater and more explicit linkage to commercial financial services for agricultural finance within the projects.

Land tenure. While DFID is making steady progress on helping a number of countries to register land and get title deeds to farmers, there is less focus on linking registration with the services need to make it most productive. Introducing supporting initiatives, as exist on LIFT in Ethiopia, will speed to economic use of the land titles and stimulate commercial agriculture.

Lateral linkages in DFID projects. As noted in 5.1.3, above, lateral linkages between projects between projects are weak. Beyond the gap of access to finance, there are challenges aligning the incentives across project implementers to stimulate real coordination and synergy to address the binding constraints at all functional levels. This also includes coordination and linkages within DFID's own portfolios (i.e. governance linking to economic growth).

Better inclusion of women in programmes. There is anecdotal evidence that though programmes set targets to ensure that women represent 40 percent of all beneficiaries, in practice programmes in the portfolio struggle to meet this target.

Output buying linkages. Even though the market drives demand, projects based on establishing effective output buying market linkages are rare. There are some programmes based on outgrower schemes, but they typically target a small number of outgrowers (compared to the scale of DFID targets). Given DFID's emphasis on reaching large numbers, it is often easier to work through input suppliers, rather than output buyers, for sustainable relationships to drive increases in productivity and increased incomes for SHFs. Many output buyers tend to have a much more transactional approach to working with SHFs, where they seek the lowest price (zero sum game) rather than promoting better coordination and pricing. When there is an effective commercial outgrower scheme for a widely traded commodity, including embedded input supply and extension services, it tends to service a comparatively small number of SHFs (hundreds not thousands), with an emphasis on making the best ones bigger.

5.2.3 Recommended best practices for commercial agriculture programming.

Introduction of new technologies (inputs, practices) is critical for smallholder upgrading to increase productivity, but this requires finance. Inputs alone will not make it work.

Good analysis of the whole system. There is general agreement that we must understand the nature of the problem being fixed and its specific context before embarking on applying a solution. Three main types of analysis are required:

- Understanding the whole value chain, its structure and the markets it serves, including all the channels taking the product to those specific markets. This will inform us of where our target clients are situated within the value chain and identify the constraints binding growth of the whole value chain, the priority problems to address, and the key points of leverage for addressing them;
- With the understanding of the broader commodity system and key constraints, the deeper specific market system analysis is required to understand why a particular constraint is not being solved. Many of the M4P projects do not have the broader context of the whole value (production to market) before starting their analysis of a particular piece of the value chain (such as provision of seed to smallholder farmers); and
- Good political economy analysis which goes beyond the macro political economy at the national level (very important) down to the political economy within the specific value chain, which will reveal the governance structures and power relationships.

Using points of leverage. Identifying and applying services through the right points of leverage within the value chain is critical for most efficient and cost-effective impact on large numbers of emerging farmers. Major points of leverage can be economic nodes (points through which many SHF transact), formal policy or social

norms which affects all participants in the sector, or focus on a particular geographic region where there is a large number of the target SHF and good cluster for outreach.

Using lead firms. The projects that reach the largest numbers of target clients prioritise their delivery through larger agribusinesses, if they exist, situated at the right points of leverage. Successful implementation will depend on the ultimate adoption by the lead firms of these innovations based on a sound value proposition. These are most often agricultural input companies (selling to smallholder farmers), but can also be processors or aggregator/traders (buying from farmers, including associations).

Other lead firms may include financial institutions, equipment suppliers, or service providers which are supporting the specific point in the value chain.

Use of proper due diligence. With a reliance on lead firms as partners to drive sustainable interventions, it is imperative that they have to capacity to do so. Therefore, more programmes are applying more stringent due diligence analysis on the partner firms to ascertain their capacity and commitment to following through on the intervention. Simply providing co-funding, which is time bound to the partnership, is not sufficient for creating the right environment.

Facilitation and use of Co-facilitators. DFID projects are increasingly playing the role of facilitator, working outside of the direct market transactions (unless they invest in a social investor) needed to grow commercial agriculture opportunities. The role of facilitator, an organisation with a clear agenda for growth, that is seeking to get the right commercial and government actors working in mutually beneficial manner. As facilitators have time bound interventions and need to achieve results, they need to carefully select their partners, working with strong value propositions. This model has been very effective, when properly implemented.

In many cases, the facilitators also need to work through co-facilitators, local NGOs, associations, or consulting firms, to be able to deliver in hard to reach environments or to leverage their own scarce resources. Some programmes, like MADE in Nigeria, have developed initiatives to build the capacity of local co-facilitators which will continue to play this role into the future for DFID or other funders. Working through other co-facilitators can reduce DFID's programmatic costs.

Importance of cross cutting services. Sectors providing services that cut across many value chains, such as agro-inputs or food processing, can address binding constraints for a number of value chains simultaneously. Though the emphasis of reach many smallholders with viable services.

Establishing a clear value proposition. Building buy-in from institutional partners who will potentially deliver the solutions into the future requires a clear identification of the value proposition. A sound value proposition is needed for reaching sustainability and scale, tied to business modelling. An important element in establishing the value proposition is sound business modelling, which is often a weakness in projects.

Effective use of Monitoring and Results Measurement (MRM). MRM, often used synonymously with M&E, is a critical component that is weak on most projects. Good MRM starts with the clear understanding of the desired results and then monitors against them. The Donor Committee on Enterprise Development (DCED) standards for MRM are based on the use of results chains, which explicitly lay out the theory of change and the elements needed to measure progress on the theory of change.

Clearly defining and harmonising indicators is important. At present DFID programmes have varying definitions between what is an "output indicator" and what is an "outcome indicator", which makes it difficult to compare across projects. Very frequently DFID programmes define systemic change as an output, when this is an outcome.

Focus on reachable markets. Domestic markets are much easier to reach than international markets, which have much more stringent standards and trade criteria. In addition, competing with international competition for domestic markets usually means working under a “price umbrella”, where local suppliers are competing with the Cost Insurance Freight cost locally compared to the Free on Board price for exports. Therefore, being able to compete effectively for the local market is the starting point, and then export.

While the majority of the DFID projects are in Africa, the emphasis on responding to the needs of domestic markets also holds true in the portfolio in Asia. DFID’s recent focal countries in Asia have been Afghanistan, Nepal, Bangladesh, Pakistan, and Myanmar, countries with large underserved domestic markets.

Flexible programming to support innovation. As a concluding topic, it is important to note that DFID’s funding is providing much of the most innovative work that is being done in the field of commercialising agriculture to the benefit of SHFs. As noted throughout this study, DFID is setting new standards for target numbers of beneficiaries who can be reached and funding the innovations by contractors and other implementing partners to effectively reach those beneficiaries. In order to reach target beneficiaries at scale with sustainable benefits into the future, implementers have been developing and using methodologies focusing on and addressing underlying systemic constraints. DFID programmes have also tried innovations such as the Gatsby currency swaps, and the PropCom MaiKarfi’s equity investment in Baban Gona. DFID should continue its use of relatively flexible programming to deliver on large targets which will continue to facilitate future innovations.

ANNEXES

Annex 1 Updated Data sheet, tables

Framework for Creating Data labels

This section focuses on the ones that needed the most defining, notably the outcomes/outputs, the channels, and the subset of commercial agriculture programming.

Outcomes/outputs

In the original database provided by DFID, there were the three following sub-sheets:

- Output indicators: this was a list of all the indicators, without values, used by DFID programmes.
- Outcome indicators: this was a list of outcomes listed for 39 programmes, some with target numbers associated, others not. Some outcomes were simply target percentages to be achieved. There was no clear indication if numbers presented were always targets or if some were actual numbers achieved.
- Standardised indicators: A list of indicators that seems to have been gathered from other institutions such as the World Bank.

This organisation of the data made it not only difficult to understand how programmes were associated to outcomes, it also made it truly difficult to evaluate larger scale outcomes across all programmes.

Using DFID's Agriculture Policy Framework as a guide, it is clear that commercial agriculture programmes should primarily focus on the "Stepping up" of smallholder farmers, with some "Stepping out" occurring through the creation of new processing and service businesses.⁴⁴ Based on this, and the most common outputs and outcomes found in the original database numerous and annual reviews, the five outcomes identified below were seen as most relevant to the largest number of programmes:

1. **Number of Smallholder farmers which will show increased productivity (through improved inputs, better processes, or new technology), access to new customers (through new channels, product mix, or linkages). Outcome.** In Access to Finance programmes in rural areas, it was assumed that extending credit to farmers allowed them to improve productivity.⁴⁵
2. **Number of Agricultural linked SMEs which will show increased productivity (through improved inputs, better processes, or new technology), access to new customers (through new channels, product mix, or linkages). Outcome.**
3. **Number of new jobs created through programme. Outcome.** This includes Full time equivalent jobs.
4. **Number of new businesses created through project Outcome**
5. **Amount of investment stimulated. Outcome.** This assumes that additional investment has stimulated additional results. The database should show the programme target amount and actual amount for each outcomes/output.

Channels

The channel is the delivery through which the change expected from the programme will be delivered. It is not necessarily the project implementer. For example, a consultancy may have been contracted by DFID to implement a Market Systems Development (MSD) project in Niger, but the channel that it will most likely use

⁴⁴ As defined by DFID, stepping up is "promoting agricultural transformation focused on commercialisation and agroindustry development, to create jobs and raise incomes" while Stepping out is "facilitating a long-term rural transition from subsistence agriculture to off-farm job opportunities as these emerge."

⁴⁵ This is centred around the fact that finance is not an actual input, but rather a means to acquire an input. This will be discussed in more detail during the additional research section.

is Small and Medium Enterprises (SMEs). In this example, one should input “SMEs”. Similarly, AgDevCo is an investment fund, but the channel through which it operates are SMEs as well, by extending loan or equity financing. This is a difference in contracting language versus implementation language.

There are seven primary channels most programmes go through

1. **Government:** Generally, the government is driving change through changes in the market environment (Policy reform, Institutional building, Enabling environment) and infrastructure programmes.
2. **Private Sector:** This represents a range of regional and local companies, based primarily outside of the EU or USA. This is an arbitrary definition, but so would be using a World Bank or other definition. This does mean that certain large local companies, such as Shoprite in East and Southern Africa, get assigned to this category. However, since no project exists that works exclusively with only one large company, it would be inane to prioritise Shoprite as a partner at the expense of 30 smaller local companies.
3. **Multinational Corporations (MNCs):** MNC here is described as a company whose home country and primary incorporation are in the EU or USA. Though limiting, this definition helps better classify the data, and avoids the debate involved in defining what is an SME. For example, Shoprite is an SME by European standards but could qualify as an MNC in Africa. In the present classification, Shoprite is not considered an MNC.
4. **Associations:** Any private sector groupings, including cooperatives, farmer groups or similar working together to create income generating activities
5. **Non-Government Organisations (NGOs)** can drive change in market environment through improved negotiating power (both in purchase and sale), information sharing within the group (best practices, market information) and without (lobbying). This amounts to reduction of information asymmetry. NGOs are often a primary channel in conflict and post conflict areas.
6. **Research institutions:** Local or international bodies that conduct research to improve productivity through technological or process breakthroughs.
7. **Financial Institutions (FI):** Though many FI are SMEs, their specific nature and role makes it useful to understand when they are the primary channel. Financial institutions include MFI, Banks, Social Impact Funds, and Fintech companies

Subsets of Commercial Agriculture Programming

It is important to differentiate what type of DFID programmes are being implemented and what is their impact. To do this, 8 subsets were identified and defined below.

1. **Value Chain Development:** These are programmes which seek to improve agricultural value chains, by improving one or several of the following⁴⁶:
 - a. **Market linkages:** This is primarily done by linking to output buyers, resulting in increased demand for a certain quantity and quality of product
 - b. **Commercialising technology:** This improves productivity by improving access to better inputs or through the promotion and use of different equipment
 - c. **Economic infrastructure:** this is the creation of exchanges or other marketplaces, rather than the creation of roads or other physical assets. An online trading platform for grains would be an example of economic infrastructure.

⁴⁶ Value Chain Development (called Value Chain in the database for the sake of brevity) has a very specific definition. A value chain improvement can occur through a large series of interventions, ranging from infrastructure improvements to changes in public policy. This is why a value chain analysis covers all these areas. This was done in order to comply with the ToR, which requested that the database be subcategorized by subsets such as “agribusiness” and “access to finance,” which are also components of value chain improvement and examined during value chain analysis.

2. Agribusiness investment: These focus primarily on companies, whether new or existing ones, which require capital for asset purchase or market expansion.
 - a. Investment promotion/Business linkages
 - b. Equity or loan provisions to Private sector companies
 - c. Grant or 0% interest loan to Private sector companies
 - d. Public Private Partnership
3. Business enabling environment/regulatory reform: Also referred to as “Getting the Basics Right,”. These are generally handled by governments or advocacy initiatives some common ones are
 - a. Investment climate reform
 - b. Trade Policy
 - c. Trade infrastructure
 - d. Agricultural Policy Reform, which includes strengthening institutions responsible for agricultural oversight
 - e. Financial Policy Reform, which includes strengthening institutions responsible for financial oversight
4. Access to finance: Whereas Agribusiness investment targets manufacturing or service to SMEs, access to finance programmes seeks to expand the number of individuals who have access to financial services. There are two primary sub categories
 - a. Financial Systems Development: This includes the expansion of financial services through the provision of new products and services to a variety of actors.
 - b. Rural finance: This includes the expansion of financial services to farmers, primarily in the form of loan products. The primary difference with the previous point is a more targeted group of individuals and less actual financial innovation.
5. Land Tenure: Land registration, primarily to ensure owners have the incentive to improve the land, as well as have an asset to act as a guarantee in access to finance
 - a. Land titling
 - b. Using land titles for productive use
6. Climate Smart Agriculture (CSA): Linked to DFID’s own new sub component, this focuses primarily on promoting the use of climate resilient techniques, crops, and inputs.
 - a. Research into new CSA
 - b. Commercialising CSA
7. Agricultural research and development (through Research Organisation): There are numerous areas of both practical and applied research that can benefit commercial agriculture. Below are three that seemed most common
 - a. Agricultural Policy Research: Research in improving agricultural enabling environment
 - b. Encouraging Private sector research: This is a rather unique approach that DFID has taken through Pull Funds and Catalytic Funds. Unlike pure research, it seeks to reward businesses for finding solutions to issues the private sector faces, and help pilot those solutions.
 - c. Trade and Policy Research: Research in improving Trade and Policy enabling environment
8. Infrastructure: DFID has a number of programmes which focus on providing road and irrigation infrastructure, either bi-laterally or through multilateral programmes with institutions such as the World Bank.

Below is the complete table of data items

Programme Description	Categories that provide descriptive information of programme
Geographic focus	This identifies the continent (e.g. Africa) or generally recognised region (e.g. "Middle East") in which a programme takes place. If the programme spans multiple continents or regions, the entry should be marked as "Global"
Specific Geographic focus	The project will focus on a specific country to be entered (e.g. Afghanistan), multiple countries on the same continent clustered in a region to be cited (for example, East African Community/EAC), or multiple countries on different continents (Global)
Start Date	Actual Start Date of Project
End Date	Most recent end date, including extensions to projects
Length of Project (in years)	Total estimated duration of project
Not Started/Implementation/ Closed	Allows to see if project is closed or ongoing. Extensions are considered ongoing
Bilateral/Multilateral	Project is funded bilaterally (just DFID) or through Multilateral funding sources (includes co-financing from other donors – i.e. DANIDA, EU, etc).
DFID Budget	Amount DIFD contributed to program, including extensions
Total Project Budget	Final amount committed to project, including extensions. If multilateral, this should be larger than the amount provided by DFID alone
Centrally managed or Country Office	A centrally managed Project will be multi-country managed out of DFID HQ or a Regional office, compared to implemented by a country office
Annual Review rating	Indicates the Ratings given by DIFD each year, which can be A++, A+, A, B, or C
PCR Rating	Indicates PCR rating if applicable
Risk at Outset	Use Risk at first year
Aries Code	Input Aries Code From DevTracker
Programme Title	write programme title, and create hyperlink to DevTracker (https://devtracker.dfid.gov.uk/) page
Overview of project	Cut and paste overview from DevTracker home page
Climate Change	Does the project have a specific climate resilience component Yes/No
Climate Change Elements	If yes, describe
Nutrition	Does the project have a specific nutrition component Yes/No
Nutrition Elements	If yes, describe
Gender & Social Inclusion	Does the project have a specific Social Inclusion & Gender component Yes/No
Social Inclusion & Gender Elements	If yes, describe

Major Market Focus	There are six options:
	Domestic (local market)
	Regional (export to other countries within the continent/region)
	Export (export to countries outside the continent)
	Domestic & Regional (an explicitly known market for products both domestically and regional)
	Domestic & Export (explicit market for product both domestically and outside the region)
	Domestic, Regional, & Export (this generally means the programme is a large multilateral initiative.)
Programme Implementation	
Outcome/output Targets	<i>These categories are simplified targets, based on the most common ones found in the previous projects. This does not automatically add up all outcomes or outputs in logframe. When it makes sense to do so, one should add them up if for example the programme is working with SMEs in three different fields (e.g. Banks (for finance), input suppliers (for improving farmer productivity), and processors (for purchasing farmer outputs). However, if a project has a target for trainings, then one for number of farmers who use the techniques, then these should not be added, since the second output is logically dependent on the first (at least one hopes). Therefore, time should be spent looking at outputs as well as outcomes.</i>
	Number of Smallholder farmers which will show increased productivity (through improved inputs, better processes, or new technology), access to new customers (through new channels, product mix, or linkages). This is not necessarily the number of individuals trained. If project logframe has output that measure number of individuals using techniques (compared to simply attending a training), that is the number to use. If the information is not specified use larger number.
	Number of Agricultural linked SMEs which will show increased productivity (through improved inputs, better processes, or new technology), access to new customers (through new channels, product mix, or linkages). Same logic as above applies for all other outcomes
	Number of new jobs created through programme. This includes Full time equivalent jobs.
	Number of new businesses created through project
	Amount of investment stimulated
Outcome/output Actual	<i>Same as previous, except using actuals from Annual and project reviews</i>

Value Chains 1 through 3	Top three value chains project is targeting. These include
	Specific names of value chain such as "maize, cassava...."
	Horticulture, to be specified as Fresh or Processed
	Agricultural inputs: Use for all inputs, even if only 1 input (such as fertiliser) is being supported. Also use if more than 1 input is being supported
Delivery Channels	There are seven primary channels used to impact behaviour. If a project uses multiple, cite the primary core one. The seven are:
	1. Government
	Indicated when the government is driving change through changes in the market environment: Policy reform, Institutional building, Enabling environment ("Getting the Basics Right").
	<ul style="list-style-type: none"> ○ Min Ag
	<ul style="list-style-type: none"> ○ Trade Policy
	<ul style="list-style-type: none"> ○ Infrastructure
	Private agribusiness Sector defined as either Private Sector, Multinational Corporations(MNCs), or Associations
	Private sector companies in agribusiness are driving long-term change by through changes within the market environment. These include: input supply, output supply, other technology changes (in equipment or process).
	2. Private Sector: This is a catch all for any local or regional company operating in project country, regardless of size. This will range from large African retailer Shoprite to smaller processors
	3. Associations: Any private sector groupings, including cooperatives, farmer groups or similar working together to create income generating activities
	4.MNC: MNC here is described as an EU or USA incorporated entity. Though ethnocentric, it helps better qualification and avoids the debate of "what is an SME"
	5.NGOs
	NGOs are driving change in market environment through improved negotiating power (both in purchase and sale), information sharing within the group (best practices, market information) and without (lobbying). This amounts to reduction of information asymmetry
	6.Research institutions

	Local or international bodies that conduct research to into improving productivity through technological or process breakthroughs.
	7. Financial Institutions
	To be used when the primary institution driving change are financial institutions, such as MFI, Banks, Social Impact Funds, Fintech companies....
Subset of Commercial Ag Programming	<i>There are 9 subsets. If there are several within a project, the primary subset should be listed, then the second. The 9 are</i>
	<i>Value Chain development: focus on inputs. projects which seek to improve agricultural value chains, by improving one or several of the following</i>
	○ Commercialising technology
	○ Through the increased access to better input supply
	○ Through the promotion of new equipment
	<i>Value Chain development: focus on outputs. projects which seek to improve agricultural value chains, by improving one or several of the following</i>
	○ Market linkages
	○ Primarily by linking to output buyers
	○ Economic infrastructure
	<i>Agribusiness investment,</i>
	○ Investment promotion/Business linkages
	○ Trade linkages
	○ Equity or loan provisions to Private sector companies
	○ Grant or 0% interest loan to Private sector companies
	○ Public Private Partnership
	<i>Business enabling environment/regulatory reform</i>
	○ Investment climate reform
	○ Trade Policy
	○ Trade infrastructure

	○ Agricultural Policy Reform, which includes strengthening institutions responsible for oversight
	○ Financial Policy Reform, which includes strengthening institutions responsible for oversight
	<i>Access to finance</i>
	○ Financial Systems Development
	○ Rural Finance
	<i>Land Tenure</i>
	○ Land titling
	○ Using land titles for productive use
	<i>Climate Smart Agriculture</i>
	Research into new CSA
	Commercialising CSA
	<i>Agricultural research and development (through Research Organisation)</i>
	○ Agricultural Policy Research
	○ Encouraging Private sector research
	○ Trade and Policy Research
	<i>Infrastructure</i>
	○ Roads, Irrigation, Warehouses
<i>Tools</i>	<i>There are 6 basic tools being currently used. These are</i>
	○ Direct Project delivery (workshops, TOT, direct TA to firms)
	○ Challenge Fund or Pull Grant
	○ Implementation grants: here used for implementation grants/Matching grant/Catalytic Fund
	○ Research and analysis – intervention identification
	○ Business Plan competition
	○ Facilitation

Annex 2 Programmes For Deep Dives

No.	Programme	Country/Geography
	Value chain	
1	Katalyst Phase III - Agribusiness for Trade Competitiveness Project	Bangladesh
2	Nepal Market Development Programme (NMDP)	Nepal
3	Market Development in Northern Ghana	Ghana
4	Private Enterprise Programme Ethiopia (2011/12-2016/17)	Ethiopia
5	Private Sector Development Programme Malawi (Malawi Oil Seed Transformation - MOST)	Malawi
6	Rural and Agriculture Markets Development programme for Northern Nigeria (PrOpCom Maikarfi)	Nigeria
7	Kenya Market Assistance Programme (MAP)	Kenya
	Agribusiness Investment	
8	Africa Enterprise Challenge Fund (AECF)	Africa
9	Africa Agricultural Development Company (AgDevCo)	Africa
10	Northern Uganda: Transforming the Economy through Climate Smart Agribusiness (NU-TEC)	Uganda
11	Global Agriculture and Food Security Programme (GAFSP)	Global
	Infrastructure	
12	Southern Agriculture Growth Corridor Programme	Tanzania
13	Afghanistan Reconstruction Trust Fund, 2014-2017	Afghanistan
14	Programme of support to Agriculture in Rwanda	Rwanda
	Access to Finance	
15	Land Investment For Transformation (2012/13-2016/17)	Ethiopia
16	Access to Finance in Rwanda	Rwanda
17	https://devtracker.dfid.gov.uk/projects/GB-1-204252	Bangladesh
	Enabling Environment	
18	Enhanced Integrated Framework (EIF) Trade for Least Developed Countries Development Phase 2	Africa
19	East and Southern Africa Staple Food Markets Programme	Africa
20	West Africa Regional Food Markets	Africa
	CSA	
21	Strengthening Adaptation and Resilience to Climate Change in Kenya Plus (StARCK+)	Kenya
22	Climate Smart Agriculture in Africa	Southern and eastern Africa
	Research	
23	AgResults: Innovation in Research and Delivery	Kenya, Nigeria, Zambia, Uganda, Vietnam
24	Sustainable Agricultural Intensification Research and Learning in Africa	Ethiopia, Tanzania, Ghana, Malawi, Burkina Faso and Zambia

Annex 3 Interviewed DFID Staff

Name of Staff	Country/Department
Rudriksha Rai Parajuli	Nepal
Catriona Clunas	Mozambique
Sarah Bloom	Tanzania
Aysha Johnson	Malawi
Elizabeth Mwikaki	Kenya
Eunice Ogolo	Kenya
Joanne Raisin	Burma
Mark Davies	Rwanda
Narissa Haider	Bangladesh
Nicholas Baynham	Ghana
Lindi Hlanze	Ethiopia
Makda Ababe	Ethiopia
Andrew Gartside	Nigeria
Simon Calvert	Global - EcDev - GRD
Tabitha Gillan	Global- GRD
Duncan Barker	Global - RED
Marco Serena	Global - ARD