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PUBLIC SECTOR SUPPORT FOR INCLUSIVE AGRIBUSINESS DEVELOPMENT

An appraisal of institutional models in Ghana





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models in Ghana**

Science and Technology Policy Research Institute

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Preface

The agrifood system is changing rapidly. Structural changes are occurring throughout the system in response to the modernization of agriculture (globalization, coordination and concentration) and shifting consumer and societal demands for safer, better-quality and ready-to-eat food produced in a socially and environmentally responsible manner. This new scenario coexists with more traditional types of family and subsistence farming.

This changing environment places increased pressure on Ministries of Agriculture (MOAs) in developing countries to engage in agribusiness and agro-industry development. However, to what extent are the MOAs empowered and equipped to do so? Many of them have seen their mandates and functions expanded from a strictly productive dimension to a more holistic, farm-to-fork approach. This expansion should be reflected in the provision of an increased scope of public goods and services to deal with post-production issues. MOAs also face the challenge of mainstreaming relatively new approaches such as the design and implementation of value chain programmes; climate-smart agriculture; the use of contract farming; public-private partnerships and other private sector engagement models; and agribusiness programmes with a territorial dimension (e.g., agricultural growth corridors and clusters).

FAO has conducted an appraisal of the organizational arrangements used by MOAs to support inclusive agribusiness and agro-industry development, which included a scoping survey of 71 countries and in-depth analysis of 21 case studies from Africa, Asia and Latin America. The study found that many MOAs have established specific agribusiness units with technical, policy and/or coordination functions concerning agribusiness development. Others have set up clusters of units with complementary individual mandates.

The study analysed how well prepared these agribusiness units and their staff are to deal with both traditional and non-traditional approaches and tools for agribusiness development. This assessment examined the units' staffing, organizational structure and budget allocation, and the range and quality of goods and services they provide.

FAO is publishing this series of country case studies to enhance knowledge and information on best practices for establishing and operating well-performing agribusiness units. The various organizational models applied by countries to cater to the changing agribusiness environment are also explored, including mechanisms to build linkages with other relevant ministries (e.g., of industry and commerce) and private institutions. The series provides an opportunity to raise awareness about the need for stronger public commitment to inclusive agribusiness and agro-industrial growth, reflected in a more generous allocation of human and financial resources to empower agribusiness units and similar structures within MOAs. Refocusing the core functions and/or targeting specific commodity/value chains could also help the units to achieve a suitable balance between the requirements of their changing agribusiness mandates and their existing resource allocations, while maximizing the achievement of social goals (e.g., inclusiveness and job creation).

Acronyms

AfDB	African Development Bank
AESD	Agricultural Engineering Services Directorate
AFD	French Development Agency
AgSSIP	Agricultural Services Subsector Investment Programme
ARI	Animal Research Institute
ASD	Agribusiness Support Division
BNARI	Biotechnology and Nuclear Agriculture Research Institute
CAADP	Comprehensive Africa Agriculture Development Programme
CBO	community-based organization
CGIAR	Consultative Group on International Agricultural Research
CRI	Crop Research Institute
CSD	Crop Services Directorate
CSIR	Council for Scientific and Industrial Research
DADU	district agricultural development unit
DAES	Directorate of Agriculture Extension Services
DED	German Development Service
EDIF	Export Development and Investment Fund
EMQAP	Export Marketing and Quality Awareness Project
EPA	Environmental Protection Agency
FAGE	Federation of Associations of Ghanaian Exporters
FASDEP	Food and Agriculture Sector Development Policy
FBO	farmer-based organization
FDB	Food and Drugs Board
FRI	Food Research Institute
GAEC	Ghana Atomic Energy Commission
GAP	good agricultural practices
GCAP	Ghana Commercial Agriculture Project
GDP	gross domestic product
GEPA	Ghana Export Promotion Authority
GIPC	Ghana Investment Promotion Council
GIZ	German Agency for International Cooperation
GMP	good manufacturing practices
GPRS	Growth and Poverty Reduction Strategy
GRATIS	Ghana Regional Appropriate Technology Industrial Service
GSB	Ghana Standard Board
HACCP	Hazard Analysis and Critical Control Points
HAG	Horticulturists Association of Ghana
HEII	Horticultural Exports Industry Initiative
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture
IPPC	International Plant Protection Convention
KII	key informant interview

M&E	monitoring and evaluation
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MDAs	ministries, departments and agencies
MEST	Ministry of Environment Science and Technology
METASIP	Medium Term Agriculture Sector Investment Plan
MOA	Ministry of Agriculture
MOAP	Market Oriented Agriculture Programme
MOFA	Ministry of Food and Agriculture
MOFEP	Ministry of Finance and Economic Planning
MOTI	Ministry of Trade and Industry
NAFCO	National Food Buffer Stock Company
NBSSI	National Board for Small-Scale Industries
NEPAD	New Partnership for Africa's Development
NGO	non-governmental organization
OPRI	Oil Palm Research Institute
PAMPEAG	Papaya and Mango Producers and Exporters Association of Ghana
PPMED	Policy, Planning, Monitoring and Evaluation Directorate
PPP	public-private partnership
PPRSD	Plant Protection and Regulatory Services Directorate
R&D	research and development
RADU	regional agricultural development unit
RCC	Regional Coordinating Council
RTIMP	Root and Tuber Improvement and Marketing Programme
SARI	Savannah Agricultural Research Institute
SPEG	Sea-Freight Pineapple Exporters of Ghana
SPS	sanitary and phytosanitary
SWOT	strengths, weaknesses, opportunities and threats
TIPCEE	Trade and Investment Programme for a Competitive Economy
USAID	United States Agency for International Development
VAT	value-added tax
VEPEAG	Vegetable Producers and Exporters Association of Ghana
WIAD	Women in Agricultural Development
WRI	Water Research Institute

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Executive summary

This study documents Ghana's experiences in providing public support for agribusiness, with emphasis on the role of the Ministry of Food and Agriculture (MOFA). The importance of agribusiness has been increasingly recognized over recent years, with different organizations providing support to agribusiness, usually through programmes and projects. MOFA, the Ministry of Trade and Industry (MOTI), the Ghana Export Promotion Authority (GEPA), the Council for Scientific and Industrial Research (CSIR) and other public organizations are implementing specific programmes to enhance agribusiness development in Ghana, in collaboration with development partners. Within Ghana's MOFA, agribusiness programmes and projects are being undertaken by units of the different directorates, each involving numerous public, private, local and international stakeholders. However, the plethora of individual institutional initiatives is resulting in weak coordination within the agribusiness sector. There appears to be difficulty in streamlining the various activities because of their different objectives and orientations and the diffused organizational framework for agribusiness across MOFA directorates. To address this situation, MOFA is establishing the Agribusiness Support Division (ASD) to coordinate efforts to provide the necessary support for agribusiness in Ghana. This study provides inputs for fine-tuning the concepts and processes that guide the establishment of ASD.

The study was conducted using key informant interviews and secondary data. A total of 26 respondents were interviewed and relevant documents from the institutions concerned were analysed.

MOFA has not had a central agribusiness unit, but its technical directorates have units, projects, programmes and functions that deal with agribusiness issues. MOFA initiates some agribusiness-related programmes; oversees the projects of subvented organizations involved in agribusiness, such as the Root and Tuber Improvement and Marketing Programme (RTIMP), the Ghana Commercial Agricultural Project (GCAP), the National Food Buffer Stock Company (NAFCO) and the Youth in Agriculture Programme; and participates in agribusiness projects initiated by development partners and other organizations, including the Market Oriented Agriculture Programme (MOAP), the Rubber Outgrower Plantation Project, the Buabin Oil Palm Outgrower Project, and the Trade and Investment Programme for a Competitive Economy (TIPCEE). Given the emerging trends in agribusiness operations globally, however, there is now need for a central unit to coordinate agribusiness activities within MOFA.

Over the years, MOFA has performed remarkably well in the development of agribusiness, providing technical assistance and resources to key actors in the agriculture sector – particularly farmers, small-scale processors and traders – and serving as the channel for all government interventions in agriculture. However, it faces challenges, particularly in dealing with post-production issues such as post-harvest handling, processing and marketing. The entire range of agribusiness operations in Ghana requires concentrated attention to bring it into line with recent developments in agribusiness worldwide. The establishment of ASD is therefore expected to take these challenges into account. It is recommended that while ASD translates its terms of reference into reality and refines its goals, objectives, mission and functions, it should focus on the ultimate goal of stimulating agribusiness productivity on a sustainable basis. This study shows that ASD will face challenges in all dimensions, especially infrastructure development, technology transfer and diffusion, knowledge sharing and information dissemination, and capacity development.

The study makes a number of recommendations in this regard, focusing on priorities for capacity development. To make ASD fully functional, it is recommended that it should:

- i. have operational staff that include representatives from relevant ministries, departments and agencies (MDAs);
- ii. recruit external experts to provide services for which MOFA has limited capacity;
- iii. have strong links with development partners and non-governmental organizations (NGOs);
- iv. have expertise and capacities to source funding for projects;
- v. be transparent and have clear objectives and functions, to avoid the overlapping of efforts and conflicts with other agencies;

- vi. concentrate on policy formulation, legal and regulatory issues and the establishment of a conducive and enabling business environment;
- vii. be equipped to transform the private sector, making it more business-oriented;
- viii. be a source of information for knowledge institutions (universities) so they can structure curricula to train students to be business-oriented and to participate in the agribusiness sector;
- ix. implement activities that reflect the country's needs in terms of value chain development;
- x. avoid high levels of bureaucracy and slow implementation processes, as these reduce efficiency;
- xi. have personnel with high tolerance for risk taking.

Chapter 1

Introduction

1.1 BACKGROUND

Agribusiness has undergone a shift from the traditional family farm model to strategically placed commercial production and processing units linked to exporters and modern retailers. New, sophisticated and globalized procurement practices have been mainstreamed to comply with food quality and safety standards, including traceability requirements, and to reduce transaction costs and minimize risks. Recurrent increases in food prices that could heighten food insecurity are attracting serious policy attention, and changing consumer preferences (especially for health, convenience and ethical reasons) and concerns about the impacts of climate change are pushing the agribusiness sector to new heights of performance and innovation. Irrespective of a country's specific socio-cultural characteristics, global pressures are remoulding the agribusiness sector in all national contexts.

This changing agribusiness environment is putting increasing pressure on ministries of agriculture (MOAs) to engage in agribusiness and agro-industry development. Some MOAs have chosen to establish specific agribusiness units; others have updated the mandates of existing departments or bureaux dealing with agribusiness aspects and/or have added new substructures to deal with such issues as the promotion of value chains and agribusiness public–private partnerships.

This study documents the experience of Ghana in establishing an agribusiness unit within the Ministry of Food and Agriculture (MOFA). The importance of agribusiness has been increasingly recognized over recent years, with different organizations providing support, usually through programmes and projects. MOFA, the Ministry of Trade and Industry (MOTI), the Ghana Export Promotion Authority (GEPA)¹ and the Council for Scientific and Industrial Research (CSIR) are among the organizations that have initiated specific support programmes to enhance agribusi-

ness development in Ghana, in collaboration with development partners. However, the plethora of individual institutional initiatives is resulting in weak coordination in the agribusiness sector. Within MOFA, agribusiness programmes and projects are being undertaken by several units of the ministry's directorates, each involving numerous public, private, local and international stakeholders. Although these units collaborate, information is scattered and is not readily available, and it is difficult to streamline activities with different goals and objectives.

FAO commissioned this study to support the establishment and functioning of an agribusiness unit within MOFA. This report presents outputs of the FAO study, which examined public agribusiness support in Ghana, detailing experiences from within MOFA and other relevant agencies and proposing recommendations for improvement.

1.2 PURPOSE

The objectives of this Ghana case study are threefold:

- i. to characterize the *institutional profile* of the structures within MOFA for dealing with agribusiness issues, particularly their motivations, missions and functions; the environment in which they operate; existing capacities in terms of human resources, strategic leadership and other core resources; and their linkages to other institutions;
- ii. to appraise the *business model for service provision*, by:
 - analysing the scope and types of service provided, the capacities for providing them, the clients, and the main instruments used and strategies and programmes implemented;
 - assessing the performance of existing agribusiness structures – their capacities to fulfil their functions – and analysing their strengths, weaknesses, opportunities and threats;
 - appraising the new agribusiness unit's institutional comparative advantages in providing services related to agribusiness and agro-industry development;

¹ GEPA was known as GEPC (Ghana Export Promotion Council) until 2011. Please see the paragraph on GEPA in section 3.6 for details.

- iii. appraising *capacity development priorities*, by identifying areas requiring capacity development, proposing a development path for the new unit, and identifying options for support from FAO.

1.3 METHODOLOGY

FAO provided a checklist questionnaire to guide the preparation of this case study. Two methods of data collection were applied: key informant interviews (KIIs); and a review of secondary data.

For the KIIs, a total of 26 respondents were interviewed, in line with the following guidelines:

- An appropriate spectrum of people were considered, with representatives of each of the three categories of major stakeholders identified.²
- Key documents were obtained from relevant institutions.
- The dynamics among the people interviewed were observed to provide insights into the dominant paradigm guiding the new agribusiness unit.

In the review of secondary data, priority was given to strategy, policy, planning and budget documents; reform proposals and progress reports; institutional appraisals; and relevant reports and communication materials from institutions such

as universities, research institutes, donors and technical agencies.

Using the information gathered from KIIs and secondary sources, an analytical appraisal was undertaken to determine the institutional profile, business model for service provision and capacity building needs of the new agribusiness unit. After this initial analysis, there will be a meeting with stakeholders to discuss, refine and validate the findings and conclusions. Particular attention will be given to verifying the capacity development priorities identified.

1.4 ORGANIZATION OF THE REPORT

This study has five main sections. After this first introductory section, section 2 characterizes the institutional profile of MOFA and its new agribusiness unit. Section 3 describes the business model for service provision and assesses the scope of services provided against a set of 11 agribusiness service areas identified by FAO for the study series: appraisal of business models; value chain analysis, including benchmarking, chain coordination and facilitation; building of business and entrepreneurial skills; reinforcement of business and market linkages; support to collective action and alliance building; finance and investment appraisal and support; trade and marketing appraisal and support; agro-industry and processing appraisal and support; development of policy and strategy papers; lobbying and advocacy in the agribusiness sector; and sharing of knowledge and information pertaining to the agribusiness sector. Section 4 proposes priority areas for capacity building pertaining to these service areas and section 5 presents conclusions.

² Public sector (including MOFA staff), private sector, and development partners. See Annex 1 for a list of interviewees.

Chapter 2

Institutional profile

MOFA is the lead agency and focal point of the Government of Ghana with responsibility for developing and implementing policies and strategies for the agriculture sector, within the context of a coordinated national agenda for socio-economic growth and development. In accordance with the government's policy of decentralization, MOFA's current structure comprises: i) a National Secretariat made up of four line directorates – the Finance and Administration Directorate, the Policy Planning, Monitoring and Evaluation Directorate (PPMED), the Human Resource Development and Management Directorate, and the Statistics, Research, Information and Public Relations Directorate; ii) eight technical directorates for Crop Services, Agriculture Extension Services, Plant Protection and Regulatory Services, Agricultural Engineering Services, Animal Production Services, Veterinary Services, Fisheries Services, and Women in Food and Agricultural Development; iii) regional and district directorates; and iv) four subvented organizations. PPMED is charged with coordinating MOFA activities, collecting information for policy planning and analysis, and gathering data on crop and livestock production, inputs, prices and marketing (see the MOFA organogram in Annex 2).

Over the years, MOFA has not had a central agribusiness unit, but its technical directorates have units, projects, programmes and functions that deal with agribusiness³ issues. MOFA initiates some agribusiness-related programmes; oversees the projects of subvented organizations involved in agribusiness, such as the Root and Tuber Improvement and Marketing Programme (RTIMP), the Ghana Commercial Agriculture Project (GCAP), the National Food Buffer Stock Company (NAFCO) and the Youth in Agriculture Programme; and participates in agribusiness projects initiated by development partners and other organizations, includ-

ing the Market Oriented Agriculture Programme (MOAP) and the Trade and Investment Programme for a Competitive Economy (TIPCEE). Annex 3 provides a summary of the agribusiness projects and programmes that MOFA has been involved in through its directorates. While the range of these initiatives illustrates the vibrancy of agribusiness activities in the country generally, their origins as discreet institutional efforts by different organizations leads to a lack of synergy.

Recognizing the importance of developing, promoting and effectively managing agribusiness in Ghana, MOFA is in the process of establishing an agribusiness unit within PPMED.

2.1 DRIVERS BEHIND THE CREATION OF THE AGRIBUSINESS UNIT

Ghana's agricultural policies have undergone a metamorphosis over the years, under different governments and regimes. Changes in the country's policy orientation became particularly obvious in 1983, when revolutionary economic reforms were made. Prior to 1983, agriculture sector policies were closely aligned to the State-controlled economy that originated from the post-independence socialist orientation of the First Republic (1957–1966). By the 1970s and 1980s, disillusionment with socialist systems had set in, but national structures, policies and programmes retained vestiges of the socialist philosophy. Prior to 1983, the context for agricultural policies in Ghana – as aptly described by Stryker (1990) – was one in which the government controlled prices and provided inputs and credit subsidies to farmers, with heavy State involvement in the production, distribution and marketing of agricultural produce. However, State-owned agricultural enterprises such as the State Farms Corporation, the State Fishing Corporation and the Food Distribution Corporation were becoming liabilities and needed to be divested.

Based on socialist thinking, these enterprises had been set up to spearhead the modernization of agriculture and enhance the adoption of innovations, but their failure was now a major hindrance to the country's agricultural modernization. For example, the Agricultural Development Board was set up in

³ The term "agribusiness" refers to the various business activities involved in food production, including farming, contract farming, seed supply, agrochemical production and supply, farm machinery production and supply, wholesale distribution, processing, marketing and retail sales.

the 1960s in an effort to stabilize prices by buying maize and rice at guaranteed prices and storing them. In 1975, the board was replaced by the Ghana Food Distribution Corporation to perform a similar task, but lack of storage facilities and weak infrastructure soon led to the corporation's dissolution. In the ten years from 1973 to 1983, Ghana's gross national product declined by 15 percent, necessitating a paradigm shift in the management of the economy, particularly the agriculture sector, which was the largest contributor to the country's gross domestic product (GDP) (Fosu and Aryeetey, 2008). It is one thing to introduce idealistic socio-economic policies, but another to experience their impacts. Realistic market forces conflicted with Ghana's State-centred economic policies and, by 1983, the country had to reorient its economy to a free market system.

The general economic policy underwent a paradigm shift in 1983 with introduction of the Economic Recovery Programme in a liberalized free market system, which recognized the private sector as the engine of growth for improving the vibrancy and competitiveness of the agriculture sector. The programme defined a new role for the government in creating an enabling environment for the private sector. The State now aimed to reduce its own direct control of and intervention in the management of the economy against the backdrop of limited government resources.

This new policy approach led to formulation of the Ghana Agricultural Policy (MOFA, 1986), with the key objectives of achieving self-sufficiency in cereals, starchy staples and animal protein food, with priority for maize, rice and cassava in the short term; maintenance of adequate buffer stocks for price stabilization and food security during shortfalls; and improved institutional facilities such as for research, credit and marketing. To improve public sector service delivery, in 1987–1990, the government, in collaboration with the World Bank, instituted the short-term Agricultural Services Rehabilitation Project to strengthen the capacities of institutions responsible for formulating and implementing agricultural policies and programmes. This project was also expected to improve the procurement and distribution of agricultural inputs through privatization.

Notable achievements of the project included the strengthened capacity of agricultural research and policy planning institutes. With support from the World Bank, the government decided to build on these achievements by rolling out the Medium Term Agricultural Development Programme 1991–2000

with the broad aim of liberalizing trade to create markets and increase the productivity and competitiveness of the agriculture sector, focusing on key areas of agricultural research, extension, livestock, fisheries development and export promotion. Projects launched under the programme included the National Agricultural Research Programme, the Agricultural Diversification Project, Agricultural Sector Adjustment Credit, the Agricultural Sector Investment Project, the Coastal Wetlands Management Project, the Environmental Resource Management Project, the Fisheries Capacity Building Project, the National Agricultural Extension Project, the National Agricultural Research Project and the National Agricultural Livestock Services Project. Positive results were achieved, with all projects having positive impacts; for example, the Agricultural Diversification Project led to pineapple exports increasing from 10 000 tonnes in 1990 to more than 22 000 tonnes in 1999, and the overall food production index increasing by almost 70 percent between 1990 and 1997 (World Bank, 2000).

Historical analysis of the growing prominence of agribusiness in Ghana's agricultural policies and programmes emphasizes the important role of the private sector in the country's economy since the reorientation to a free market regime. Agribusiness provides the toolbox for implementing private sector-driven agricultural programmes to achieve sector-specific goals and objectives. Public support is still vital – not in the form of State-centredness but in line with free market principles.

In 2002, MOFA developed the Food and Agriculture Sector Development Policy (FASDEP), which introduced a sector-wide approach to agricultural development to replace the previous discreet project approach. The aim of FASDEP was to modernize the agriculture sector and make it a catalyst for rural transformation, in line with the Accelerated Agricultural Growth and Development Strategy developed in 1996, which aimed to strengthen linkages among value chain actors. The objectives were to ensure food security, poverty reduction, and sufficient supplies of raw materials for industry, to increase GDP and revenue mobilization. FASDEP was expected to contribute to the Growth and Poverty Reduction Strategy (GPRS I) 1996–2000, which elaborated the country's Vision 2020 of achieving middle-income status by 2020.

Poverty and social impact analysis of FASDEP identified uneven coverage in which the very poor and women were disadvantaged. After four years of implementation, FASDEP was amended to create FASDEP II, which operates on the principle

of market-driven growth, the use of all resources, and commercialization of activities in the sector. FASDEP II focuses on applying science and technology, enhancing value chain processes, and emphasizing environmental sustainability, encapsulating the long-term policy objectives of Ghana's agriculture sector. The Medium Term Agriculture Sector Investment Plan (METASIP) (MOFA, 2010) for 2011–2015 was formulated in line with the Comprehensive Africa Agriculture Development Programme (CAADP) of the New Partnership for Africa's Development (NEPAD). METASIP seeks to increase private sector participation in the agriculture sector, government agencies' involvement in the preparation of policies for the sector, and interactions among the various stakeholders along the value chain.

The new agribusiness unit⁴

The Agribusiness Support Division (ASD) will be located in MOFA's PPMED and will be the fifth division of PPMED, along with the Policy Planning and Analysis Division, the Monitoring, Evaluation and Coordination Division (for internal programmes), the Budget Division, and the Project Coordination Division (in collaboration with partners).

PPMED has drafted terms of reference to facilitate stakeholders' buy-in and support to the unit. ASD's objective will be to collate and centralize MOFA's own programmes, thereby streamlining the management of agribusiness and the agribusiness sector as a whole. ASD will act as an investment unit supporting the development of project proposals and business plans; gathering and disseminating data on investments; keeping records of investment opportunities and interventions in the agribusiness sector; and providing a general investment database through liaison with the Ghana Investment Promotion Council (GIPC). The unit will follow up on investments in the country to ensure that investors' aims are achieved and that the volume of investment (the capital injected) is measurable and consistent with the intended impact. It will provide relevant information for promoting agribusiness investments, recommend incentives for agribusiness investors, and train district-level MOFA staff to assist investors, especially farmers, in obtaining access to funds from banks.

It is proposed that ASD will serve as an international trade information centre providing data on local and international agribusiness tariffs, policies, standards and other requirements. The unit will be involved in conducting education and training; carrying out awareness raising and sensitization; and verifying the needs and requirements of donors and beneficiaries. Specific training will be directed towards building the capacity of farmers and small and medium enterprises in record-keeping to facilitate tracking processes. ASD will work closely with development partners, including FAO, for technical, financial and moral support.

Currently, the Deputy Director of PPMED (in charge of agribusiness) and two other staff members (of the four approved by MOFA's management) are already working in ASD. It is clear that current staffing is inadequate for the unit's proposed work, and it is envisaged that more staff with relevant expertise will be employed. At present, ASD has no office, equipment or general logistics infrastructure, but MOFA's management has promised to provide the necessary logistics support in the near future.

ASD's activities in the first quarter of 2012 were to:

- i. complete the arrangements for enabling the two identified staff members to start work;
- ii. conduct an orientation course for the staff of Ghana Institute of Management and Public Administration and other institutions;
- iii. undertake training courses in running the unit;
- iv. develop and adopt a framework for the ideal agribusiness unit for Ghana;
- v. conduct a consultative workshop for stakeholders;
- vi. draw up a work plan, with detailed activities and targets.

2.2 INSTITUTIONAL MISSION AND FUNCTIONS

Vision and mission

The national vision for the food and agriculture sector is a modernized sector leading to a structurally transformed economy with food security, employment opportunities and reduced poverty. This vision is linked to the national vision in GPRS II and to NEPAD's CAADP. Developments in the food and agriculture sector have direct impacts on at least five of the Millennium Development Goals, and policies for developing the sector are crucial to the attainment of these global goals.

MOFA's mission is to promote sustainable agriculture and thriving agribusiness through research and technology development and effective exten-

⁴ At the time of undertaking the study, the Agribusiness Unit was yet to be established.

sion and other support services to farmers, processors and traders, for improved livelihoods.

MOFA is charged with the development and growth of agriculture in Ghana, with the exception of the cocoa, coffee and forestry subsectors. Its primary roles are the formulation of appropriate agricultural policies, planning and coordination and monitoring and evaluation (M&E) within overall national economic development. MOFA aims to:

- i. improve agricultural productivity, incomes and employment opportunities;
- ii. contribute to the balance of payments;
- iii. establish effective linkages between agriculture and industry;
- iv. promote balanced regional development.

Following a sector-wide approach, the ministry's plans and programmes are developed, coordinated and implemented through policy and strategy frameworks. In this regard, MOFA facilitated the preparation of FASDEP II and METASIP 2010–2015.

The objectives of FASDEP II are to:

- i. improve food security and emergency preparedness, and reduce income variability;
- ii. improve income growth;
- iii. ensure the sustainable management of land and environment;
- iv. increase competitiveness and enhance integration in domestic and international markets;
- v. apply science and technology in food and agricultural development;
- vi. ensure effective institutional coordination.

FASDEP II targets risk-prone, mainly subsistence farmers with interventions to reduce vulnerability and improve productivity. At the other end of the scale, the policy also aims to assist the commercial sector in fostering linkages with smallholders, among other activities. The strategies in FASDEP II encompass all the interventions for modernizing agriculture specified in Ghana's development framework. Thirteen principles have been formulated to determine the direction of FASDEP II and to guide and facilitate its implementation. Among these principles is the pursuit of intersectoral collaboration and government partnerships with the private sector and civil society for the implementation and review of policies and programmes. Public-private partnerships (PPPs) have been found to be limited in the agriculture sector. FASDEP II will use PPPs to increase investments in the sector and to build operators' capacity to compete effectively in global markets.

MOFA's roles in implementing FASDEP II are:

- i. policy analysis and formulation;
- ii. M&E of policy implementation;
- iii. advising Cabinet on the laws required to regulate agricultural activities, to protect all stakeholders and the environment;
- iv. coordination and harmonization of policies and sector activities with other ministries, departments and agencies (MDAs);
- v. facilitation of public-private dialogue and partnerships;
- vi. advocacy for the sector's interests, locally and internationally;
- vii. facilitation of capacity building of the sector's human resources;
- viii. facilitation of research and technology development;
- ix. facilitation of linkages between agriculture and industry;
- x. facilitation of the integration of cross-cutting issues such as gender equality into the ministry's work;
- xi. facilitation of international trade and domestic marketing of agricultural commodities;
- xii. provision and facilitation of agricultural service delivery;
- xiii. coordination of the enforcement of regulations;
- xiv. coordination of development partners' policies and activities with those of the sector.

MOFA prepared METASIP 2011–2015 to implement the broad strategies specified in FASDEP II. The aim is to achieve agriculture sector growth of at least 6 percent a year and a government expenditure allocation of at least 10 percent of the national budget, in conformity with the Ghana Shared Growth and Development Agenda, the Agricultural Policy of the Economic Community of West African States (ECOWAS) and NEPAD's CAADP. The METASIP funding proposal envisages cost recovery of about US\$88 million, to be realized through PPPs, constituting about 25.5 percent of the total domestic funds projected for the five-year period 2011–2015 (MOFA, 2010: 62).

In addition, each MOFA directorate has specific missions, objectives and functions that are linked to the ministry's broad mission, objectives and functions (see Annex I). However, these stated missions and functions provide only the templates for concrete actions to achieve the overall sector vision. Harmonizing actions and realizing synergies are a challenge, especially when some directorates lose sight of the big picture and may be more anxious to protect their own turf.

2.3 INSTITUTIONAL ENVIRONMENT

Political, administrative, legal and economic environment

The political system of Ghana requires that when a new government is elected, the ministries are re-established by executive instrument. In exercise of the powers conferred on the President under section 11 of the Civil Service Act 1993 (Provisional National Defence Council Law No. 327), amended by the Civil Service Act of 2001 (Act No. 600), MOFA was established on 23 January 2009 under Executive Instrument No. 7. MOFA is led by the minister and three deputy ministers (one each for crops, livestock and fisheries). The political party in power has the mandate to appoint the minister and deputies, and a change of government is usually followed by a change of minister. The Chief Director is appointed by the government through the Public Services Commission and is the head of all the directors of directorates. MOFA has four line directorates, seven technical directorates, ten regional directorates and 170 district directorates. Each directorate is headed by a director, thus there are national, regional and district directors.

The decentralization policy, backed by the Local Government Act (No. 462), devolves central administration authority to the district level and fuses the government agencies in each region, district or local area into one administrative unit, through institutional and staff integration, composite budgeting and the provision of funds for decentralized services. Under Act No. 462, district assemblies are primarily responsible for the implementation of development policies and programmes coordinated by the National Development Planning Commission. District assemblies comprise decentralized departments and organizations that perform functions previously carried out by the central government.

MOFA's restructuring involved the creation of regional agricultural development units (RADUs) and district agricultural development units (DADUs), in line with the decentralized governance structure. RADUs are engaged in monitoring and backstopping activities, building databases for agricultural planning, facilitating access to credit and markets for farmers and processors, and ensuring the efficient management of financial and institutional resources for policy planning and implementation. Their responsibilities include liaising with the Regional Coordinating Council (RCC) and development partners to promote agriculture in the region; ensuring timely preparation and submission

of consolidated annual programmes and budgets for regional agricultural development to the RCC and the Chief Director of MOFA; ensuring timely mobilization and allocation of resources; M&E of the performance of regional and district programmes, with reports submitted to the RCC and the Chief Director of MOFA; managing staff and activities of the Regional Agricultural Department; supervising and providing technical backstopping; formulating and implementing capacity building and training programmes for all categories of staff; promoting agribusiness development in the region; liaising with national directorates and relevant research and training institutions to obtain information and assistance in promoting the region's agriculture; and ensuring agricultural development.

DADUs are involved in managing and coordinating the District Department of Food and Agriculture within the District Assembly, and ensuring the development and effective implementation of district agricultural programmes. DADUs' responsibilities are facilitating the development and promotion of agribusiness in the district; organizing demonstrations, field days and farmers' fora; overseeing preparation of district agricultural development plans and their incorporation into overall district assembly plans; preparing district annual agricultural work programmes and budgets for submission to the District Assembly, with a copy to the Regional Director of Food and Agriculture; and managing and coordinating the day-to-day activities of the District Food and Agricultural Department and its financial, human and other resources. Subject matter specialists have been appointed to provide technical support to agricultural extension agents, with backstopping from the national directorates.

MOFA also has a Permanent Representative to FAO, a Fisheries Commission, a Veterinary Council and a Plant Protection, Seed and Fertilizer Council, all of which provide technical and administrative support to the ministry. Also under MOFA are subvented organizations such as the Irrigation Development Authority, the Grains and Legumes Development Board, and NAFCO, which is a fully government-owned company incorporated in 2009 under the Companies Code of Ghana 1963 (Act No. 179). The Grains and Legumes Development Board was set up by a much earlier Act of Parliament (No. 324) of 17 April 1970 with the mission of producing and distributing good-quality foundation seeds and planting materials, and making processing and storage facilities available to registered seed growers and other farmers.

The sources of funding listed in FASDEP II include the Government of Ghana, development partners, the private sector and civil society. The mechanisms for sourcing funds include:

- i. budget support from development partners;
- ii. co-financing with the private sector;
- iii. beneficiary contributions;
- iv. internally generated funds/non-tax revenue;
- v. loans and grants from international financial institutions;
- vi. bilateral agreements.

To meet the challenges of managing funds from these diverse sources, particularly the specific conditions attached to some, the sector-wide approach (SWAp) is adopted. Elements of this SWAp include establishing an institutional set-up that enables MOFA to provide its services efficiently, and developing coherent sector plans through joint planning, programming, reviews and information sharing with stakeholders. In line with adoption of the SWAp, in 2003, the government and its development partners agreed to adopt multi-donor budgetary support. The subsequent signing of a memorandum of understanding commits the government and its development partners to working together according to harmonization and aid effectiveness principles.

Major agribusiness stakeholders

This subsection describes the major agribusiness stakeholders of MOFA and its directorates, projects and programmes. The stakeholders include clients and beneficiaries, collaborating agencies, development partners and donors. A summary of agribusiness stakeholders is shown in Table 1.

Major clients and beneficiaries are farmers, agro-processors, seed growers, importers, exporters and other agribusiness entrepreneurs. The categories of farmers are very diverse: at one end of the spectrum are individual resource-poor smallholders producing various food and cash crops; and at the other end are commercial farmers with abundant resources in land and technology, producing for local and export markets. Several farmer-based organizations (FBOs) have been founded with the aim of facilitating the work of member farmers; there are also commodity-based associations such as the Maize Farmers Association, VEPEAG, SPEG, and outgrowers. The strength of the lobbying of these associations depends on their numbers, leadership and resources.

Institutions with which MOFA collaborates in implementing most of its programmes and projects include:

- i. research institutions such as the Food Research Institute (FRI), CRI, the Animal Research Institute (ARI), OPRI, the Soil Research Institute and the Savannah Agricultural Research Institute (SARI) – all of which are members of CSIR; BNARI; university faculties of agriculture; and international research centres/institutions such as the International Institute of Tropical Agriculture (IITA), the International Food Policy Research Institute (IFPRI) and other institutes of the Consultative Group on International Agricultural Research (CGIAR);
- ii. regulatory and promotional agencies such as EPA, GSA, FDB and GEPA;
- iii. MOFA technical directorates, RADUs and DADUs; market-oriented associations such as FAGE; and local and international non-governmental organizations (NGOs) such as CARE International and the Centre for Energy, Environment and Sustainable Development (CEESD);
- iv. development partners, which vary from project to project, with some providing continuous support to agribusiness activities via MOFA, including multinational banks such as AfDB, the World Bank and AFD; other partners are bilateral institutions such as GIZ-KfW, the Japanese International Corporation Agency (JICA), USAID and the Canadian International Development Agency (CIDA); and international research organizations such as IFPRI, the International Water Management Institute (IWMI), the Japan International Research Center for Agricultural Science (JIRCAS) and the Brazilian Agricultural Research Corporation (EMBRAPA).

2.4 INSTITUTIONAL CAPACITY

Financial resources

As a public institution, MOFA is supported by the budget of the Government of Ghana. Government funds for public agricultural institutions are generally used for personal emoluments, administration and services and capital investments. However, budget allocations for personal emoluments are more likely to be fulfilled than those for the other two expenditure categories (services and investments), at all levels – national, regional and district. In some instances, no allocations are made to either services or investments, especially the latter. It is important to note that in almost all situations, budget allocations are substantially lower than the amounts originally requested by the ministry to fulfil the government's stated policy objectives

TABLE 1
Agribusiness projects/programmes and their stakeholders

Agribusiness project/ programme	Stakeholders		
	Clients/beneficiaries	Collaborators	Development partners
Horticultural Exports Industry Initiative (HEII) (ended)	Horticultural product exporters, VEPEAG, SPEG, HAG, PAMPEAG	MOFA, BNARI, GEPA, GSB, FAGE, EPA	World Bank under AgSSIP
Export Marketing and Quality Awareness Project (EMQAP) (ongoing)	Individual smallholder farmers, commercial farmers, VEPEAG, SPEG, Ayensu Cassava Farmers Association, HAG, horticultural product exporters	MOFA, CRI, GEPA, GSB, FDB, EDIF, FAGE, EPA, Feeder Roads Department	AfDB
Youth in Agriculture	Unemployed youth, FBOs, farmers	MOFA technical directorates, consultants, the private sector – e.g., fish farmers	–
Root and Tuber Improvement and Marketing Programme (RTIMP)	Small-scale farmers and agroprocessors	universities, NBSSI, the private sector – e.g., <i>gari</i> processors	IFAD
Market Oriented Agriculture Programme (MOAP)	Trade/commodity associations, small-scale farmers and agroprocessors	MOFA technical directorates, GEPA, NBSSI, MOTI, the private sector – e.g., consultants	GIZ, DED
National Food Buffer Stock Company (NAFCO)	Grain and legume farmers, traders and processors	AESD (MOFA), the private sector	
Ghana Commercial Agriculture Project (GCAP)	Small-scale farmers, large-scale farmers, outgrowers	MOFA, GIPC, Lands Commission, EPA, MOFEP, Ghana Irrigation Development Authority, Ghana Grains Council, ADVANCE (an NGO)	World Bank, USAID
Trade and Investment Programme for a Competitive Economy (TIPCEE)	Small-scale farmers, large-scale farmers, outgrowers, exporters	MOFA, CARE International, TechnoServe, The Services Group, Geomar, Dexis International, Elan International, International Business Initiatives	USAID
Buabin Oil Palm Outgrower Project	Small-scale farmers and processors, outgrowers	MOFA, Twifo Oil Palm Plantation Ltd., National Investment Bank, OPRI	KfW, AFD
Rubber Outgrower Plantation Project III	Small-scale farmers and processors, outgrowers	MOFA, Ghana Rubber Estates Limited, National Investment Bank	KfW, AFD

ADB = African Development Bank; AESD = Agricultural Engineering Services Directorate; AFD = French Development Agency; AgSSIP = Agricultural Services Subsector Investment Programme; BNARI = Biotechnology and Nuclear Agriculture Research Institute; CRI = Crop Research Institute; DED = German Development Service; EDIF = Export Development and Investment Fund; EPA = Environmental Protection Agency; FAGE = Federation of Associations of Ghanaian Exporters; FDB = Food and Drugs Board; FBO = farmer-based organization; GIZ = German Agency for International Cooperation; GRATIS = Ghana Regional Appropriate Technology Industrial Service; GSB = Ghana Standard Board; HAG = Horticulturalists Association of Ghana; IFAD = International Fund for Agricultural Development; KfW = *Kreditanstalt für Wiederaufbau* (German Reconstruction Credit Institute); MOFEP = Ministry of Finance and Economic Planning; NBSSI = National Board for Small-Scale Industries; OPRI = Oil Palm Research Institute; PAMPEAG = Papaya and Mango Producers and Exporters Association of Ghana; SPEG = Sea-Freight Pineapple Exporters of Ghana; USAID = United States Agency for International Development; VEPEAG = Vegetable Producers and Exporters Association of Ghana.

Sources: Authors' elaboration.

and goals. For example, in 2008, MOFA requested GH¢319.71 million for services and investments, but was allocated only GH¢11.97 million (IFPRI, 2008). MOFA's shares in total government budgets for 2000 to 2009 are shown in Table 2; budgeted and actual inflows for 2004 and 2005 are shown in Table 3.

NEPAD's CAADP aims to eliminate hunger and reduce poverty through agriculture. In pursuance of this aim, African governments have agreed to increase their public investments in agriculture

by 10 percent, and to raise agricultural productivity by 6 percent per annum.

In 2009, Ghana became the tenth African country to sign the CAADP compact and design a detailed investment plan for implementing it. In a bid to apply the CAADP principles, the Government of Ghana allocated 6.8 and 5.7 percent of total GDP for 2002 and 2003 respectively. From 2005 to 2009, public investments in agriculture were impressive, with an average of 9.6 percent of total budgets devoted to agriculture: budget

TABLE 2
MOFA's shares of government budget, 2000–2009 (million Ghana cedis)

Expenditure item	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total central government expenditure	329.5	1 307.4	1 544.7	1 044.2	1 051.3	1 269.4	1 791.2	5 624.6*	8 009.5	8 345.5*
Total agriculture expenditure	5.78	6.25	12.70	13.67	14.27	20.98	25.69	33.83	126.68	165.01
Development expenditure	2.23	1.85	6.14	2.14	3.82	9.68	11.96	14.42	68.31	89.63
Recurrent expenditure	3.55	4.40	6.56	11.53	10.45	11.30	13.73	19.41	58.37	75.38
Agriculture expenditure as % of total government expenditure	1.75	0.48	0.82	1.30	1.36	1.65	1.43	1.29	1.58	1.98

* Bank of Ghana data.

As a very rough indication of these sums in United States dollars, GH¢1 = approximately US\$0.44 (November 2013).

Sources: MOFA Budget Division; Ghana Statistical Service.

TABLE 3
MOFA budgets and actual inflows, 2004 and 2005 (Ghana cedis)

	2004			2005		
	Annual budgeted inflow	Actual inflow	%	Annual budgeted inflow	Actual inflow	%
Item 1	8 797 900.0	11 103 800.0	126.2	9 856 800.0	11 185 300.0	113.5
Item 2	1 653 500.0	2 578 200.0	155.9	1 439 600.0	1 319 700.0	91.7
Item 3	16 665 700.0	11 944 200.0	71.7	22 588 000.0	19 845 000.0	87.9
Item 4	12 320 500.0	7 023 400.0	57.0	29 323 600.0	10 084 100.0	34.4
Total	39 437 600.0	32 649 600.0	82.8	63 208 000.0	42 434 100.0	67.1

Source: MOFA.

allocations for investment in agriculture exceeded the demands of CAADP in 2006 (10.3 percent) and 2008 (10.2 percent). However, these gains in public investments in agriculture have not translated into equivalent agricultural growth rates, as shown in Table 4. It is important to note that MOFA does not oversee growth and development of the cocoa, coffee and forestry subsectors, and the percentage expenditures indicated in Table 4 include these subsectors. Actual MOFA expenditures are shown in Table 2.

For most of its agribusiness projects MOFA (government) seeks funding through mechanisms such as budget support from development partners, co-financing with the private sector, beneficiary contributions, loans and grants from international financial institutions, and bilateral agreements. MOFA usually provides counterpart

funding when money comes from external sources. Some agribusiness projects, such as TIPCEE and MOAP, are initiated by development partners, with MOFA involved as a collaborator, implementing agent or beneficiary. Table 5 shows examples of agribusiness projects, budgets, funding sources and time frames.

Human resources

MOFA has four categories of staff: professionals, sub-professionals, technical officers and support staff (administrative and secretarial). It has approximately 7 000 employees, of whom nearly 6 000 are located in regional and district directorates. A summary of MOFA's staffing levels is shown in Table 6.

The minimum entry requirement for professional staff is a first degree from university. MOFA

TABLE 4
Shares of agriculture in total expenditures, and agricultural growth rates, 2002–2009

Year	Agriculture expenditure share (%)	Agricultural growth rate (%)
2002	6.8	4.4
2003	5.7	6.1
2004	8.8	7.5
2005	9.6	4.1
2006	10.3	4.5
2007	9.9	4.3
2008	10.2	5.1
2009	9.6	7.6

Source: MOFA's PPMED, 2010.

TABLE 5
Examples of agribusiness projects, budgets, main funding sources and time frames

Agribusiness project/programme	Funding source	Amount	Time frame
AgSSIP: research and extension, reform of agriculture sector HEII	World Bank	US\$67 million	2000–2004 2004–2006
EMQAP (ongoing)	AfDB loan Government of Ghana	UA17.00 million (US\$28.84million) UA1.84 million	2006–2011
Youth in Agriculture	Government of Ghana	–	2009 onwards
RTIMP	IFAD loan	> US\$18 965 000	2007–2014
MOAP	GTZ, DED	€25 million	2004–2013
NAFCO	Government of Ghana	–	2010 onwards
GCAP	World Bank USAID	US\$100 million US\$45 million	Starting
TIPCEE	USAID	US\$30 million	2005–2009
Rubber and Oil Palm Development Project	KfW AFD	€6 million €19.4 million	2006–2012
Rubber Outgrower Plantation Project III	KfW AFD	€14 million	1995–1999 2010–2014

UA = Unit of Account (currency unit of ADB).

Source: Project documents.

TABLE 6
Staffing levels of MOFA, by category, 1999–2010

Category	1999	2001	2003	2006	2007	2008	2009	2010*
Professional	752	633	738	783	793	1 099	1 099	1 099
Sub-professional	420	529	575	527	530	579	579	579
Technical	3 139	2 947	3 065	2 816	2 831	2 757	2 757	2 757
Support**	2 842	2 508	2 606	2 175	2 293	2 168	2 168	2 168
Total	7 153	6 617	6 984	6 312	6 510	6 603	6 603	6 603

* Provisional.

** Administrative staff and secretaries.

Sources: MOFA Human Resource Development and Management Directorate.

has competent staff who provide technical services in agricultural production, and experts capable of dealing with issues at each stage of the value chain. The ministry's staff hold B.Sc., M.Sc. and a few Ph.D. degrees in areas of agriculture that include crop science, animal science, horticulture, soil science, entomology, food science, fisheries science, agricultural economics and, recently, agribusiness. Most regional and district development officers are university graduates. MOFA oversees the running and management of five colleges of agriculture, which produce certificate and diploma graduates who are employed as MOFA technical officers. All five colleges award diplomas, and three are fully accredited by the National Accreditation Board. MOFA offers opportunities for career development through mid-career training throughout its employees' professional lives. For example, a technical officer who joins MOFA with a certificate in agriculture is eligible to study for a diploma after three years of service. People with diplomas join the ministry as assistant extension agents and can apply for further study to obtain a Bachelor's degree, after which they return to the ministry and serve as professional officers.

MOFA has adequate technical capacities, but its staff-to-client ratio is too low, leaving many farmers and other clients with no access to extension and other relevant services. The ideal ratio of agricultural extension officers to the population would be 1: 300, but no district in Ghana achieves this figure; ratios vary from region to region, with the remotest regions experiencing the worst ratios. Even Adansi North in Ashanti region, which is not particularly remote, has only one agricultural extension officer for every 3 575 people, while in Kpandai district of Northern Region, the ratio is 1: 5 140, even though agriculture is reported to provide employment for about 90 percent of the population (Ministry of Local Government and Rural Development, 2012).

The Government of Ghana secures loans or grants for the implementation of most agribusiness projects, and external experts/consultants are hired to provide services in situations where MOFA itself is unable to do; for example, under EMQAP, an expert in good agricultural practices (GAP), who is also a member of VEPEAG, was hired as a consultant to train farmers. This approach of using an experienced farmer was helpful because trainee farmers identified with him as he understood their needs. Most agribusiness projects have collaborators that provide expertise in specific services; for example, GEPA provides expert advice and training on issues related to export, GSB provides laboratory services

such as testing of produce for pesticide residues, and CSIR and the universities conduct research for the development of improved planting materials, etc.

Strategic leadership and governance

Leadership and governance style vary from project to project. Most agribusiness projects are led by competent MOFA staff, although sometimes external people are hired to head the project while MOFA plays a supporting role. There is usually a project coordination and management unit, which supervises the selection and screening of participants in the various components of the project or programme and may also supervise the work of all the experts/consultants recruited under the project. Depending on the type of project, the project coordination and management unit may comprise:

- i. a coordinator;
- ii. technical specialists in research, innovation, food safety, marketing, infrastructure, planting materials and seeds, etc.;
- iii. procurement specialists;
- iv. accountants;
- v. M&E specialists;
- vi. support staff.

A project steering committee comprising stakeholder representatives is also established to perform such roles as approving annual work plans and budgets, addressing interagency constraints and facilitating project implementation, and reviewing regular project progress reports, including M&E reports from the project coordination and management unit. At the field level, a project implementing team is constituted to work closely with the RADUs and DADUs within the project area.

Other core resources

MOFA is a well-structured ministry with the following well-equipped and staffed offices:

- i. minister's office;
- ii. deputy ministers' offices;
- iii. four line directorates;
- iv. ten technical directorates;
- v. subvented organizations and State-owned enterprises;
- vi. councils and commissions;
- vii. ten regional directorates;
- viii. 170 district directorates.

Vehicles and motor cycles are available for easy movement of staff from and to project areas. Where existing means of transport are inadequate, provision is made in the project budget for vehicles and

other infrastructure. MOFA's agricultural mechanization service centres are equipped with tractors, planters, shellers, and mechanical and solar dryers to improve the quality of stocks for storage and reduce post-harvest losses of grains and vegetables. Other facilities include seven national livestock breeding stations, two livestock demonstration centres, a food processing training centre, a farmer demonstration home and veterinary diagnostic laboratories. MOFA produces training manuals, policy documents, technical video documentaries, brochures, production guides and fact sheets for various categories of clients.

However, these resources are inadequate for the farmer population and MOFA's clients. Many agricultural extension officers do not have means of transport and are unable to make trips to educate farmers as regularly as needed because of the limited budgetary resources. The tractor-to-farmer ratio is currently 1:1 800 (Joy online, 2011) and most farmers depend on hoes and cutlasses. It is estimated that Ghana would need about 9 000 tractors to bring this ratio to an acceptable level by 2015 (ibid). Limited use of training manuals and production guides is mainly the result of illiteracy among farmers. Agribusiness support initiatives need to take these systemic constraints into account.

2.5 INTER-INSTITUTIONAL LINKAGES

Research and education institutions

MOFA, especially through its technical directorates, has strong links with CSIR, and CSIR's CRI, SARI, OPRI, FRI, ARI, the Water Research Institute (WRI) and SRI all work closely with MOFA to generate new and improved technologies, planting materials, improved crop varieties, aquaculture techniques and livestock breeds, among other activities. CSIR is under the Ministry of Environment Science and Technology (MEST), but MOFA is one of its largest clients – nine of CSIR's 13 research institutes are agriculture-related and have, over the years, produced several agricultural technologies for extension to farmers (CSIR, undated). However, the logic for maintaining CSIR under MEST is strong because science and technology cut across all sectors and, as the main organization for promoting the application of science and technology, CSIR must operate from a position that is cross-cutting of all sectors.

Operating under MEST instead of directly under MOFA does not seem to have hampered CSIR's impact in the agriculture sector. CSIR has partnered MOFA in disseminating technologies to farmers, particularly improved seed varieties and

farm management practices. For example, in 2010, a total of 1 279 456 beneficiaries, comprising farmers, processors and marketers of agricultural commodities, obtained access to crop production, livestock, fisheries and other agriculture-related technologies – representing an increase of 11.9 percent over the number of beneficiaries in 2009 (NDPC, 2011). MOFA also has strong links to universities, which provide significant research inputs to the ministry's agribusiness projects and assist in upgrading the expertise of its staff. For example, under the Sasakawa Programme, MOFA extension agents have upgraded their educational qualifications to the B.Sc. level.

In May 2002, the Department of Agricultural Economy and Farm Management of the University of Ghana changed its name to the Department of Agricultural Economics and Agribusiness in response to global trends in the field of agricultural economics and the need to highlight the agribusiness aspects of the department's academic programmes. The department currently offers courses in agribusiness at the post- and undergraduate levels, and contributes to the diploma course. It has collaborated with several public and private institutions on agribusiness studies, including:

- a market identification survey under RTIMP, funded by MOFA and IFAD;
- market surveys and subsector analyses of vegetable production in West Africa, focusing on farmers and consumers, their awareness of pesticide risks and their willingness to produce and consume organic vegetables;
- analysis of agricultural value chain financing options, as part of TIPCEE, financed by USAID;
- a mango farmers' evaluation of agricultural service providers in Dangbe West and Yilo Krobo districts.

Private sector and civil society organizations

Private sector farmers, agroprocessors and exporters are MOFA's main clients. MOFA works with both small- and large-scale farmers, agroprocessors and exporters and with all categories of clients along the value chain; linkages with the private sector are mutually beneficial. Through its agribusiness projects, MOFA invests in productive activities in the sector, supports training and skills improvement of the sector's labour force, and disseminates GAP. Private sector actors benefit from training and skills improvement; participate in and utilize the results of research; participate in policy dialogue to ensure that their interests are reflected; comply with laws

and regulations; and partner the government in developing the agribusiness sector.

Ministries, departments and agencies

MOFA has interministerial linkages with the Ministries of Trade and Industry (MOTI); Land, Forestry and Natural Resources; Environment Science and Technology (MEST); Local Government and Rural Development; Finance and Economic Planning

(MOFEP); Water Resources, Works and Housing; and Roads and Transport. It has also established strong links to institutions such as GEPA, NBSSI, GRATIS, GSB and FDB. Generally, MDAs participate in agribusiness sector policy development, planning and review; research; human resource development; implementation of cross-sectoral activities; and M&E of development indicators. They also provide MOFA with information relevant to agribusiness.

Chapter 3

Appraisal of the business model for service provision

ASD is still at a formative stage, so its functions and services, clients, instruments for delivering services, capacities, performance and comparative advantages cannot yet be fully analysed. This section therefore provides information on the services delivered by MOFA's agribusiness-related directorates, projects and programmes, and on ASD's intended clients and beneficiaries, with a view to formulating recommendations for enhancing ASD. The section also presents the instruments and means by which services are delivered; an analysis of existing capacities in relation to those required for maximum performance; and an analysis of MOFA's comparative advantages *vis-à-vis* other public or private organizations providing similar agribusiness services in Ghana.

3.1 MOFA'S AGRIBUSINESS-RELATED SERVICES

The technical directorates of MOFA perform core functions aimed at promoting agribusiness. Some of these functions and services are specific to individual directorates, but they generally include liaising with stakeholders to share information on improved production, packaging and marketing of agricultural products; facilitating and promoting the development, production, processing and marketing of domestic, industrial and export products; providing technical advice and information to clients; and issuing permits and recommendations for exemption of valued added tax (VAT), import duty and the national health insurance levy. The directorates also advise entrepreneurs and investors on the technical feasibility of projects; regulate imports of agricultural inputs and products; inspect agricultural produce and issue quarantine certificates; and ensure the availability of farm power and other engineering technologies for the agricultural production and related activities of all categories of farmers, fishers and agroprocessors. In addition, the directorates provide technical backstopping to regional and district MOFA staff for the effective transfer of appropriate technologies to farm families in crop, livestock and fish production, processing,

utilization and marketing, through regional officers and other stakeholders.

Various agribusiness projects and programmes provide specific core services, including development of infrastructure such as demonstration farms, cold chain facilities, pack houses, laboratories and offices, and upgrading of roads; procurement and provision of equipment, materials and other resources; sourcing and provision of funds; preparation of production protocols and publications; dissemination of technologies to farmers and other stakeholders; identification of international markets; conducting and supporting research; and training and sensitization of clients, with awareness creation on issues such as production, handling, storage, processing, quality standards and export requirements. The services provided by some projects and programmes also include creating awareness of credit resources within Ghana, and technical assistance in market analysis, strategic planning and business planning.

In the absence of a central agribusiness unit, various MOFA projects and programmes have provided core services such as project management; M&E; providing support staff; supervising the selection and screening of participants in training programmes and the work of consultants recruited for projects; providing funds for auditing projects and undertaking mid-term reviews; organizing stakeholder planning and review seminars and workshops; and providing project teams with operating and maintenance costs, means of mobility and other logistics. A summary of the agribusiness services that MOFA offers is shown in Table 7.

Appraisal of business models

Appraisal of business models is a core activity for MOFA because the ministry needs to ensure that it delivers its services to clients through the most appropriate models to achieve the best performance. The business models MOFA uses include FBOs and other farmers' associations, clusters (formal and informal), demonstration farms and processing centres, farmers' fora and farmers' field schools.

Services are delivered through participatory training, workshops and field demonstrations, among other channels. Under EMQAP, demonstration farms serve as centres of excellence where farmers obtain hands-on experience of GAP. Most services are delivered to clients free of charge, but clients are sometimes required pay for them, to ensure the sustainability of the project; for example, under EMQAP, tractors and temperature-controlled trucks were provided to associations of cassava producers, SPEG and VEPEAG for use by their members for a fee, enabling the project to run and maintain the fleet. The associations have also been strengthened through training, so they are able to manage and maintain their assets, especially equipment. MOFA's PPMED monitors and evaluates each project and often engages clients and stakeholders in reviewing projects and coming up with strategies that best meet their own needs and those of the nation as a whole. Projects are also appraised through research, such as the mango farmers' evaluation of agricultural service providers in the Dangbe West and Yilo Krobo districts of Ghana, conducted by the Department of Agricultural Economics and Agribusiness, University of Ghana.

Value chain analysis

Linkages in the value chains of various agricultural commodities present opportunities for strengthening agribusiness operations. Some agribusiness projects link small producers, processors and traders to larger-scale industrial end users, and provide technical support to actors involved in the chain; this was observed in RTIMP, which linked cassava farmers to large-scale processors. Value chain analysis is a core service provided by MOFA, which frequently works with farmers and processors so can easily establish such linkages. Secondary services such as business training for actors in the value chain, and development of commodity value chains are also offered. MOFA's competences are stronger in technical agronomic services than in business-related ones, which are usually provided by external experts/consultants. For example, GIZ led a team of experts to carry out a value chain analysis for Ghana's cashew sector as part of the African Cashew Initiative funded by the Bill and Melinda Gates Foundation and the Government of Ghana. RTIMP also hired a consultant to develop a supply chain for gari, a processed cassava product.

Building of business and entrepreneurial skills

To enhance the performance of agribusiness and agro-industry, MOFA provides technical assistance

and training in strategic and business planning, and training in basic business and accounting skills for industry players. As these activities are business oriented, they are usually carried out by external experts, because MOFA does not have appropriate human resources. An enterprise development manual has been developed, printed and distributed to MOFA beneficiaries, including FBOs.

Reinforcement of business and market linkages

MOFA creates the enabling environment for its clients to participate in domestic and international fairs. Under HEII, TIPCEE and MOAP, horticultural producers and exporters could be sponsored to participate in the Fruit Logistica International Trade Fair. MOFA promotes and participates in local fairs where local agribusiness industry players showcase their products and services, including the National Farmer Day Exhibition, the Health and Nutrition Fair, the Policy Fair, the Scientific Renaissance Day Exhibition, and other exhibitions and fairs organized by organizations such as the National Festival of Arts and Culture (NAFAC), the Alliance for a Green Revolution in Africa (AGRA) and the National Food and Agriculture Show (FAGRO). Under some agribusiness projects, technical assistance is provided in market analysis, but this is a secondary service because of MOFA's low capacity in the area of marketing and business development.

Support to collective action and alliance building

MOFA's main clients are farmers, usually organized into commodity and trade associations, and FBOs. MOFA encourages the formation of FBOs and clusters of processors to enhance their access to credit, technical advice and logistics. To strengthen the FBOs, MOFA has developed an FBO policy to guide the implementation of projects that involve FBOs. A handbook for facilitators and farmers on the development of FBOs has been printed and distributed throughout the country, and efforts are under way to encourage FBOs to harmonize their activities and strengthen their voice in advocacy, to ensure more constructive engagement with government and other key actors in agriculture. For example, the Farmers Organization Network in Ghana, formed in 2003 as an apex body for farmers' organizations, currently has about 72 member associations, with three zonal offices in the north, south and middle belt of Ghana. The network's operations have centred mainly on mixed community organization for food production, gender empowerment and

ecological sustainability (AgriCord, 2012). Cooperation and alliances among FBOs are highly beneficial given the resultant synergy and maximization on

available resources. However, harmonization is a major challenge because of the organizations' different orientations and attitudes.

TABLE 7
MOFA's agribusiness services

Service area	Services offered*	Directorate or institution providing the service	Core*	Secondary*
1. Appraisal of business models	a Review workshops, M&E and research	PPMED, private consultants, public and private knowledge and research institutions	(a)	
2. Value chain analysis	a Linking small producers, processors and traders to larger-scale industrial end users	DAES (Research and Extension Linkage Committee), AESD, WIAD and other MOFA technical directorates	(a), (c)	(b), (d)
	b Providing business training to actors in the value chain	GEPA, FAGE, private consultants		
	c Providing technical support to actors in the value chain	MOFA technical directorates, RADUs, DADUs		
	d Developing commodity value chains	Private consultants		
3. Building of business and entrepreneurial skills	a Providing technical assistance and training in strategic and business planning	GEPA, FAGE, private consultants		(a), (b)
	b Training in basic business and accounting skills			
4. Reinforcement of business and market linkages	a Assisting clients in participating in international fairs	MOFA technical directorates	(a)	(b)
	b Providing technical assistance in market analysis	GEPA, FAGE, private consultants		
5. Support to collective action and alliance building	a Work largely with commodity and trade associations and FBOs	DAES, RADUs, DADUs	(a), (b), (c)	
	b Encouraging the formation of FBOs and clusters of processors to enhance access to credit, technical advice and logistics			
	c Development of the FBO policy			
6. Finance and investment appraisal and support	a Sourcing of funds	MOFEP, Minister's Office (MOFA), development partners	(b), (d)	(a), (c)
	b Writing grant proposals	MOFA technical directorates		
	c Signing bilateral agreements	MOFEP, Minister's Office (MOFA), development partners		
	d Creating awareness of credit resources	MOFA technical directorates, RADUs, DADUs		
7. Trade and marketing appraisal and support	a Providing technical assistance in market analysis	GEPA, FAGE, private consultants	(c), (d)	(a), (b), (e)
	b Identifying international markets	GEPA, FAGE, private consultants		
	c Promoting locally produced products domestically	MOFA technical directorates, MOTI		
	d Training farmers and processors in GAP/GMP/HACCP and other market requirements	CSD, PPRSD, WIAD, DAES, FDB, GSB		
	e Providing infrastructure such as roads and improved market centres	MDAs, private consultants		

see next page

TABLE 7 (continued)

MOFA's agribusiness services

Service area	Services offered*	Directorate or institution providing the service	Core*	Secondary*	
8. Agro-industry and processing appraisal and support	a	Training in improved, cost-effective processing technologies	AESD, WIAD, CSD, FRI, NBSSI	(a), (b), (c), (e)	(d), (f)
	b	Establishing agro-processing training centres			
	c	Linking farmers to processors			
	d	Linking processors and exporters to local and international markets	GEPA, FAGE, private consultants		
	e	Promoting agro-processed products locally	MOFA technical directorates, MOTI		
	f	Supporting R&D activities	Research institutions, universities, MOFA technical directorates		
9. Development of policy and strategy papers	a	Organizing policy review meetings	PPMED, project coordinating units, MOFA technical directorates	(a), (b), (c)	
	b	Organizing stakeholder planning and review workshops			
	c	Developing guidelines, policy, laws, standards			
10. Lobbying and advocacy in the agribusiness sector	a	Establishing ASD	PPMED	(a)	
11. Sharing of knowledge and information pertaining to the agribusiness sector	a	Producing publications and videos	DAES	(a), (b), (c)	
	b	Extension services to disseminate technology and information			
	c	Collaborating with MDAs, civil society and development partners	MOFA technical directorates, RADUs, DADUs, PPMED		

CSD = Crop Services Directorate; DAES = Directorate of Agricultural Extension Services; GMP = good manufacturing practices; HACCP = Hazard Analysis and Critical Control Points; PPRSD = Plant Protection and Regulatory Services Directorate; WIAD = Women in Agricultural Development.

Source: Authors' elaboration.

Finance and investment appraisal and support

MOFA plays a significant role in sourcing funds, writing grant proposals, signing bilateral agreements and creating awareness of the credit resources to which agribusiness actors can obtain access. This is a core service for MOFA because most agribusiness activities cannot be carried out without funding. To ensure sustainability, in some projects funds are invested in activities that generate additional income, such as the provision of vehicles under EMQAP, described in the section on Appraisal of business models. The central government plays a key role, especially in securing loans and bilateral agreements, because MOFA may not have the capacity to do this itself.

Trade and marketing appraisal and support

MOFA supports trade and marketing by ensuring

that producers have markets for their products. In this regard, MOFA promotes locally produced products in domestic markets to boost consumer appeal. To ensure the safety and quality of products, MOFA offers training for farmers and processors in GAP, GMP, HACCP, GlobalGAP and other market requirements. MOFA usually hires experts to provide technical assistance in market analysis and to identify international markets. The ministry also facilitates the provision of infrastructure such as roads and improved market centres to enhance trading activities. GEPA plays an important role in providing agribusiness market linkages and enhancing export trade. Many of Ghana's non-traditional exports come from the agriculture sector and are promoted mainly through GEPA. MOFA's main role is to support producers under various projects.

Agro-industry and processing appraisal and support

Core services that MOFA provides to support agroprocessing include training in improved, cost-effective processing technologies; establishing agroprocessing training centres; linking farmers to processors; and promoting agroprocessed products locally. MOFA supports research and product development activities, as well as linking processors and exporters to local and international markets.

Development of policy and strategy papers

Agriculture probably has the most comprehensive set of policies of any sector in Ghana, reflecting the critical role it plays in the national economy. Agricultural policy formulation follows an elaborate process. Periodic policy review meetings and stakeholder planning and review workshops are organized to collate the views of stakeholders. Guidelines, policies, laws, standards and other relevant documents are also produced through consultations with stakeholders. The papers produced include:

- i. FASDEP I and II;
- ii. the Youth in Agriculture policy document;
- iii. guidelines on the production and distribution system for certified seeds and planting materials;
- iv. a national rice development strategy document to guide promotional activities on the production, consumption and competitiveness of locally produced rice;
- v. draft proposals for the development of the Ghana Agricultural Engineering and Mechanization Policy and the MOFA Transport Policy;
- vi. guidelines on integrated pest management for food crops;
- vii. ten fisheries by-laws, which have been gazetted, with four passed through the District Attorney and three through the Attorney General.

Lobbying and advocacy in the agribusiness sector

To develop the agribusiness sector, lobbying and advocacy are needed, especially to ensure access to project funds. MOFA's technical directorates do not all have adequate capacities to perform these activities, so there is need for a dedicated agribusiness unit. ASD's establishment within MOFA is very timely.

Sharing of knowledge and information pertaining to the agribusiness sector

To ensure effective dissemination of information, MOFA has established a Publication Unit within

the Directorate of Agricultural Extension Services to produce print documents and videos. Through its extension agents, MOFA disseminates information to target audiences, sharing information through collaboration with MDAs, civil society and development partners. MOFA extension officers use electronic media (radio and television) to reach their principal clients – farmers. There are radio stations in almost all of Ghana's 230 administrative districts, providing regular agricultural information in local languages. Policy-makers are brought into radio and television discussions of matters relating agricultural policies, but there is need for more structured and consistent knowledge sharing from scientific institutions, to enable farmers and other stakeholders to adopt the innovations coming out of these institutions. Currently, such efforts are inadequate to meet the demand for sustainable agricultural practices based on science and technology.

3.2 CLIENTS

The main clients of agribusiness services are actors in the agribusiness sector, including farmers, agro-processors, seed growers, importers, exporters and other agribusiness entrepreneurs along the value chains. Actors can be individuals, groups or clusters, FBOs, commodity-based associations such as VEPEAG and SPEG, and outgrowers. Clients also include large commercial producers and processors, traders – including exporters and importers – and other providers of agribusiness-related products and services. Clients are drawn from both rural and urban areas; the composition depends on the objectives and location of the project. Projects are strategically located so that clients and beneficiaries derive the maximum benefits. For instance, projects under EMQAP are located in districts where abundant fruits and vegetables are produced.

Most clients see MOFA as a one-stop shop where most of their needs are met. The services that clients demand most frequently from MOFA and various agribusiness projects are shown in Table 8.

Under the various agribusiness projects, most of these services are provided because MOFA has competent experts and specialists. In cases where MOFA lacks capacity, external experts and additional funds are sourced to provide the services. According to clients, MOFA's greatest inadequacies are the low extension officer-to-farmer ratio, inadequate financial and logistics support for regional and district MOFA offices, and lack of capacity to lobby for funds for agribusiness industry players.

3.3 MAIN INSTRUMENTS FOR SERVICE DELIVERY

Various instruments are used in service provision; the type of project/programme largely determines the type of instrument used. The most common are PPPs; train-

ing; stakeholder consultations; business incubators; investments in infrastructure; research and development (R&D) in marketing, processes and products; commodity chain analysis; fairs and exhibitions; publications; and promotional campaigns (see Table 9).

TABLE 8
MOFA agribusiness clients and services demanded

Clients	Services demanded	Provided by
Farmers: individuals, small-scale, large-scale, groups, outgrowers, rural, urban, young, older, livestock, fish and crop	General agricultural extension services	MOFA technical directorates
	Crop, livestock and fish production and management technologies	MOFA technical directorates, with support from CSIR (CRI, ARI, SARI, WRI, etc.), universities
Agroprocessors	Agroprocessing technologies	MOFA (WIAD, AESD), with support from CSIR (FRI), universities, Institute of Packaging
Farmers, agroprocessors, exporters, traders: individuals, small-scale, large-scale, groups, outgrowers, rural, urban, young, older, livestock, fish and crop	Access to credit facilities	MOFA awareness creation and facilitation of access
	Infrastructure: roads, equipment, market centres, storage facilities, etc.	MDAs and development partners, with MOFA's facilitation
	Feasibility assessment	MOFA, with support from external experts
	Training in GAP, GMP, HACCP, national and international standards: SPS/Codex, IPPC, OIE	MOFA technical directorates, with support from GSB, FDB
	Product quality and safety assurance	MOFA technical directorates, with support from GSB, FDB, CSIR, NGOs, private experts
	Market linkages	Provided by FAGE, with support from GEPA and facilitated by MOFA
	Subsidies for services: laboratory, inputs, etc.	Facilitated by MOFA
	Support for participation in local and international fairs	MOFA, development partners, NGOs
	Market information	GEPA, FAGE, trade associations, with support from MOFA
	Alerts or information on products intercepted or rejected on international markets	Regulatory authorities (GSB, FDB, MOFA's PPRSD)
	Research, process and product development	CSIR, universities, with support and facilitation from MOFA
	Licences: production, export, import	MOFA, with support from MDAs
	Inspection: SPS certification	MOFA (PPRSD), GSB, FDB
	Policies and legislation	MOFA, with support from stakeholders
Export/import procedures	GEPA, FAGE, NGOs, with support from MOFA	
Promotional campaigns	MOFA, with support from MDAs, NGOs	
Tax exemption	MDAs, with facilitation and recommendations from MOFA	
MOFA regional and district directorates	Upgrading of technical knowledge and skills	Local and international educational institutions, with support from Government of Ghana, MOFA, development partners
	Financial resources and logistics	Government of Ghana budgetary support, project funds, development partners
	Increased number of technical staff	Facilitated by MOFA

IPCC = International Plant Protection Convention; OIE = World Organisation for Animal Health; SPS = sanitary and phytosanitary.

Sources: Authors' elaboration.

3.4 CAPACITIES

Over the years, agribusiness projects have been carried out mainly by MOFA's technical directorates and their collaborators. In most cases, funding for the projects is sourced, enabling the provision of all relevant services. MOFA has experts and specialists in various fields of agriculture, and other resources, as discussed in section 2.4. An analysis of the existing capacities related to each service area is shown in Table 10. MOFA has inadequate capacity to provide some services, but is able to support and facilitate their provision.

3.5 PERFORMANCE

Overall performance of MOFA

MOFA is charged with development and growth of the agriculture sector in Ghana, with the exception of the cocoa, coffee and forestry subsectors. The agriculture sector grew by 4.9 percent in 2007 and 6.2 percent in 2009. This high growth was led by the crops and livestock subsectors, largely because of expansion of the area cultivated, a good rainfall pattern in Ghana's farming areas in 2009, and value addition.

In assessing the performance of Ghana's agriculture sector generally, some credit goes to the effectiveness of MOFA as the oversight ministry. It

has demonstrated its capacity to attract the needed public and non-public investments, coordinate the activities of its agencies, and build the capacity of critical actors. Key informants acknowledged that MOFA's agribusiness projects and programmes have made remarkable achievements in the agribusiness sector, including those described in the following paragraphs.

Improved infrastructure: Various projects and programmes have provided infrastructure such as roads, temperature-controlled pack houses, refrigerated trucks, residue analysis laboratories, farmers' demonstration centres and grain and legume storage equipment. For example, under HEII, Shed 9 at Tema port was refurbished at a cost of US\$5 million and is now an ultra-modern food terminal with cold storage facilities and the capacity to handle 2 000 tonnes of different types of produce at a time. The new food terminal is expected to lead to improvements in fruit quality, and may help to increase the market share of Ghanaian fruit, with the potential for the industry to reach a capacity of 300 000 tonnes. MOFA's agribusiness projects and programmes comply with infrastructure, safety and quality standards for exports (MOFA, 2007b).

TABLE 9

Projects/programmes and main instruments used

Service area	Projects/programmes	Main instruments
Appraisal of business models	All agribusiness programmes/projects	M&E, review workshops, research
Value chain analysis	African Cashew Initiative, RTIMP	Value chain analysis, supply chain analysis
Building of business and entrepreneurial skills	EMQAP, Youth in Agriculture Programme	PPPs, training, business incubators
Reinforcement of business and market linkages	EMQAP, HEII, TIPCEE	Local and international fairs
Support to collective action and alliance building	All agribusiness programmes/projects	Stakeholder consultations
Finance and investment appraisal and support	All agribusiness programmes/projects	Grant project proposals, loans, bilateral agreements, investment in infrastructure
Trade and marketing appraisal and support	All agribusiness programmes/projects	Market research, promotional campaigns, training, investment in infrastructure
Agro-industry and processing appraisal and support	MOAP, EMQAP, RTIMP	PPPs, R&D, promotional campaigns, training, market research, investment in infrastructure
Development of policy and strategy papers	Various projects and programmes; an MOFA core function	Stakeholder consultations
Lobbying and advocacy in the agribusiness sector	Establishment of ASD	Stakeholder consultations
Sharing of knowledge and information pertaining to the agribusiness sector	Various projects and programmes; an MOFA core function	PPPs, publications, stakeholder consultations

Source: Authors' elaboration.

TABLE 10

Service areas and capacity analysis

Service area	Staff allocation (estimated number of staff working in the area)	Relative importance in terms of funding/income generated*	Capacity level**	Services for which MOFA has inadequate capacity
Appraisal of business models	Data not available	7	3	Research
Value chain analysis	Data not available	1	3	Business training, developing commodity value chains
Building of business and entrepreneurial skills	Data not available	9	2	Training in strategic and business planning and basic accounting
Reinforcement of business and market linkage services	Data not available	6	3	Technical assistance in market analysis
Support to collective action and alliance building	Data not available	8	3	
Finance and investment appraisal and support	Data not available	4	3	Sourcing funds, signing bilateral agreements
Trade and marketing appraisal and support	Data not available	11	2	Identifying international markets, providing infrastructure such as roads and improved market centres
Agro-industry and processing appraisal and support	Data not available	3	4	Linking processors and exporters to local and international markets, R&D
Development of policy and strategy papers	Data not available	2	4	
Lobbying and advocacy in the agribusiness sector	Data not available	10	2	
Sharing of knowledge and information pertaining to the agribusiness sector	Data not available	5	4	

* 1 = highest budget allocation; and 11 = lowest budget allocation.

** 1 = none; 2 = basic; 3 = moderate; and 4 = advanced.

Source: Authors' elaboration.

Improved safety and quality compliance: Poor food safety and quality issues have had negative impacts on the performance of Ghana's non-traditional export sector. For example, revenue per tonne of pineapples was US\$3.79 million in 2001, but had fallen to US\$2.74 million by 2006 (GEPC annual reports 2001–2007), largely because of downgrading as a result of quality challenges. It therefore became necessary for Ghana to train value chain actors in quality management systems such as GAP, GMP, HACCP and quality assurance certification schemes such as GlobalGAP – a private certification scheme that involves high investments, although MOFA has ensured that both smallholders and large-scale farmers are certified. By the end of 2006, a total of 38 farmers had obtained GlobalGAP certification and 15 others were in the process of doing so (Ghana Fresh Produce Exporters' Directory, 2007). These interventions have contributed to the growth of agribusiness

and its contribution to the country's economy. For example, the revenue from pineapple exports grew from US\$10.6 million in 2009 to US\$13.6 million in 2010 – an increase of 27.5 percent (ISSER, 2011).

Increased agricultural production: Some agribusiness projects have focused on increasing production to ensure the availability of crops for export, agro-processing industries and domestic consumption. In this regard, MOFA has ensured that farmers have access to adequate planting materials, such as the MD2 pineapple suckers. Overall, MOFA's agribusiness projects have been successful because of their holistic nature.

SWOT analysis

MOFA's performance in developing agribusiness and agriculture is enhanced by its key strengths and opportunities. Its key strength is its mandate

to oversee the development and growth of agriculture in Ghana. As a result of this mandate, the ministry is well structured, with well-qualified staff and many years of experience, so it is capable of handling both large and small agribusiness projects, MOFA is also well equipped and capable of sourcing funds for its projects. It has built strong linkages to MDAs, the private sector and development partners, so most of its projects and programmes are successfully executed.

Besides these strengths, MOFA has opportunities that when fully exploited can enhance its performance in agribusiness support. FASDEP II emphasizes agribusiness as part of its mission, enabling MOFA to provide strong support to agribusiness development. Development partners and NGOs (local and international) are supportive of agribusiness development, and banks are willing to grant loans for agribusiness investments. Ghana's MDAs and other institutions are willing to support and collaborate with MOFA because agriculture is the mainstay of the country's economy. Over the years, research institutions and universities have developed agricultural production and processing technologies that can be obtained and used by players in agribusiness, most of whom are willing to develop their enterprises; technology development and innovation are also carried out within agribusiness firms. A study of agribusiness innovations found diverse innovations involving hardware technologies, processing techniques and organization (Essegbey, 2009), and these efforts can be enhanced by more constructive engagement with research institutions and universities. Agribusiness development is also emphasized in Ghana's trade policy, with MOTI and its agencies playing various roles in the sector. Ghana has competitive advantages in the production of high-value horticultural crops such as pineapples; focusing on these products would enhance performance of the agribusiness sector.

Despite these strengths and opportunities, however, MOFA is also confronted by weaknesses and threats that could compromise agribusiness development if not properly addressed. MOFA's key weaknesses include a shortage of experts in value chain development, market analysis, product promotion on international markets, the sourcing of funds through grant proposals, strategic and business planning, and R&D. MOFA also lacks the ability to lobby for credit facilities for agribusiness clients, while regional and district directorates have inadequate technical staff, budgetary support and logistics.

Threats in the agriculture sector that could hinder the development of agribusiness include the

predominance of elderly farmers in Ghana's primary agriculture production sector, most of whom use primitive farming methods and are reluctant to adopt new technologies. The sector is unable to attract youth because of the poverty faced by most agricultural actors. With interventions from MOFA and other organizations, the sector is gradually becoming more commercialized, but some producers, processors and traders still lack marketing skills, market orientation, and the culture of following GAP or GMP, and this situation poses food safety and quality challenges for Ghana's products, on both domestic and international markets. Compliance with standards has generally increased among value chain actors, although the increasing demands and numbers of food safety and phytosanitary standards in international trade present a growing challenge to market access. Agribusiness is also threatened by the underdevelopment of some commodity value chains and by problems such as inadequate infrastructure, the high cost of capital, lack of irrigation facilities, poor logistics management and insufficient research capacity.

3.6 COMPARATIVE ADVANTAGES

In addition to MOFA, MDAs that provide agribusiness services in various forms include MOTI and its agencies, MEST and its agencies, and GIPC.

Ministry of Trade and Industry

MOTI is the government's leading adviser on trade, industrial and private sector development. Its objective is to ensure effective trade and industrial development. Its core functions are to:

- i. formulate and implement policies for the promotion, growth and development of domestic and international trade;
- ii. advocate for private sector involvement in government programmes;
- iii. monitor and implement the government's private sector development programmes and activities;
- iv. strengthen trade relations;
- v. promote development of non-traditional export industries, leading to the development of an export-led economy.

MOTI's divisions include:

- i. the Trade Facilitation Division, responsible for customs clearance, handling of airport cargo, provision of storage and cold chain facilities, and creation of free ports;
- ii. the Export Support Division, responsible for facilitating improved access to development

TABLE 11

SWOT analysis of MOFA's agribusiness support

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. It is mandated to oversee the development and growth of agriculture in Ghana 2. It is a well-structured institution 3. It has well-qualified experts and specialists 4. It has years of experience, so is capable of handling both large and small agribusiness projects 5. It has strong linkages with MDAs, the private sector and development partners 6. It is well equipped and resourced 7. It is capable of sourcing funds for projects 	<ol style="list-style-type: none"> 1. It has too few experts in value chain development, market analysis, and strategic and business planning 2. It has limited staff capable of sourcing funds 3. It has limited capacity to identify international market and has to rely on other MDAs 4. It has to collaborate with other MDAs to provide infrastructure such as roads 5. It lack R&D capacities 6. It has weak capacity to link processors and exporters to local and international markets 7. It lacks the ability to lobby for credit sources for agribusiness clients 8. Regional and district directorates have inadequate technical staff, budgetary support and logistics
Opportunities	Threats
<ol style="list-style-type: none"> 1. Agribusiness features prominently in its mission 2. FASDEP II supports agribusiness development 3. Development partners and NGOs are supportive of agribusiness development 4. Banks are willing to grant loans for agribusiness investments 5. Ghana's trade policy emphasizes agribusiness development 6. Ghana has comparative advantages in the production of some high-value horticultural crops 7. Many MDAs and institutions in Ghana are willing to support and collaborate with MOFA 8. Many agribusiness players are willing to develop their enterprises 9. Ghana is a largely agricultural country 10. Well-developed agricultural production and processing technologies are available 	<ol style="list-style-type: none"> 1. Ghana's agriculture sector is unable to attract youth 2. Some producers and processors lack marketing skills and market orientation 3. Some commodity value chains are undeveloped 4. Although compliance has improved, the increasing demands and numbers of food safety and SPS standards in international trade present a growing challenge to market access for farmers, processors and traders 5. Agribusinesses lack the culture of following GAP and GMP, creating food safety and quality challenges for Ghana's products in both domestic and international markets 6. The agribusiness sector has inadequate infrastructure, high costs of capital, a lack of irrigation facilities, poor logistics management and insufficient research capacity

and trade finance, mainly through EDIF, in conjunction with the Private Enterprises Foundation;

- iii. the Standard Division, responsible for upgrading standards institutions, ensuring compliance with international standards, enforcing standards on the domestic market, and facilitating productivity improvements in industries;
- iv. the Domestic Trade and Distribution Division, responsible for improving trade and distribution systems and infrastructure, promoting products made in Ghana, and consumer protection;
- v. the Bilateral and Multilateral Trade Division, responsible for improving structures for international trade negotiations, and formulating trade negotiation strategies.

Agencies under MOTI include GSB, GEPA, NBSSI and the GRATIS Foundation.

Ghana Export Promotion Authority: GEPA was established as the Ghana Export Promotion Council (GEPC) by Act No. 396 in 1969 as an MOTI agency with the mandate to develop and promote Ghanaian exports. GEPA acquired its authority status in 2011 and was publicly launched at the seventy-second National Exporters' Forum in September 2011. The change from council to authority status is in accordance with the Revised Laws of Ghana Act 1998 (Act No. 562) of the Ghana Export Authority Act 1969 (NLCD No. 396) and helps to clarify the core functions of GEPA in marketing and promoting non-traditional export products. GEPA's clients include more than 3 000 registered private sector exporting companies organized into 17 export product associations; GEPA works with these clients both on an individual corporate basis and as groups or associations, including by acting as an interface between exporters and other public organizations.

GEPA engages in an extensive range of activities. Its strategic areas of focus are:

- i. market access and development through market access and penetration programmes, programmes for facilitating contacts, trade fairs and exhibitions, buyer–seller meetings and conferences, and group marketing schemes;
- ii. product development and supply base expansion for selected products, through contract production and supply schemes, village export production schemes, technical advisory services to facilitate product and market development, and supply chain management;
- iii. dissemination and communication of export trade information through the maintenance of a trade library, trade publications and an Internet-based export trade information centre;
- iv. strengthening of human resources' export capacity through an export school offering export management, product development, market development and other specialized trade-related courses, workshops and seminars for export companies, trade facilitators and businesses;
- v. coordination of export development activities through consensus building with various stakeholders at consultative exporters' fora and round tables, to coordinate export-related programmes.

GEPA is governed by a board of directors made up of a chairperson and ten representatives from MOTI, MOFA, the Ministry of Foreign Affairs, GIPC and the private sector, such as the Ghana National Chamber of Commerce and Industry. The Chief Executive Officer of GEPA is a member of the board and also responsible for day-to-day management of the authority.

GEPA has five main divisions: Product Development; Marketing and Promotion; Research and Information; Finance; and Administration and Human Resource. Its five zonal offices in Bolgatanga, Tamale, Kumasi, Takoradi and Ho are responsible for the management and coordination of export-related activities in their respective zones.

National Board for Small Scale Industries: NBSSI is a non-profit, public sector organization established under MOTI in 1985 by Act No. 434 and mandated to promote the growth and development of micro and small enterprises. NBSSI has a head office in Accra, secretariats in all ten regional capitals and business advisory centres in 110 district capitals.

The core activities of NBSSI fall into two broad categories: financial and non-financial services. Financial services include extending credit to entrepreneurs through loan schemes for both

working capital and the acquisition of fixed assets. The interest rate on NBSSI loans is 20 percent and repayments are by monthly instalments; to ease the burden of loan repayment, borrowers are usually granted a grace period of two to four months. Personal guarantors are accepted as security because small-scale entrepreneurs do not usually have collateral security. Beneficiaries are encouraged to open bank accounts and transact their business – especially loan repayments – through these accounts, to give them experience of the banking culture.

NBSSI's business advisory centres provide financial and non-financial services, including information, training and guidance to ensure all-round, competent and confident entrepreneurs. The centres focus on four crucial areas for the development of small businesses:

- i. facilitating access to an enabling environment through the provision of information and assistance to entrepreneurs in exhibiting at local and international fairs, by acquiring space for them and transporting their products to and from the fairs;
- ii. facilitating access to credit by providing advice and guidance, assisting entrepreneurs in identifying sources of funds and completing funding applications, helping to improve and streamline entrepreneurs' accounting and business records, and facilitating credit delivery and recovery;
- iii. training and counselling in management skills, marketing practices, the preparation of business plans and the selection of equipment, among other themes;
- iv. supporting business associations by promoting and strengthening small-scale business associations, training association executives and members to strengthen their operational capabilities, identifying goals and objectives, and drafting bylaws that are in the interest of association members.

GRATIS Foundation: This foundation evolved from the Ghana Regional Appropriate Technology Industrial Service (GRATIS) Project, which was established by the government in 1987 and mandated to promote small-scale industrialization in Ghana.

To accomplish this mandate, GRATIS established intermediate technology transfer units – now known as regional technology transfer centres – in nine regions of Ghana, to transfer appropriate technologies to small-scale industrialists through training, manufacturing and the supply of machine tools, plant and equipment.

GRATIS coordinates activities and provides technical backstopping to its network of regional technology transfer centres, and supports activities of the pioneer intermediate technology transfer unit established in 1980 at Suame in Ashanti region.

Training and associated services constitute the GRATIS Foundation's core business, and are mainly classified into engineering and non-engineering services, which include extension services to support the development of rural industries, especially those employing women in food and agroprocessing. GRATIS assists businesses by providing training and technical, marketing and business advisory services, working capital, and equipment on hire purchase, to facilitate business improvement and expansion.

Ghana Investment Promotion Centre: GIPC is a government agency, re-established under the Ghana Investment Promotion Centre Act of 1994 (Act No. 478) and mandated to encourage, promote and facilitate investments in all sectors of the economy except mining and petroleum. GIPC facilitates and supports local and international investors in both the manufacturing and the service sectors as they seek more value-creating operations, higher sustainable returns and new business opportunities. GIPC coordinates and monitors all investment activities under Act No. 478, assisting both domestic and international investors by:

- i. initiating and supporting measures that enhance the investment climate in the country for both Ghanaian and non-Ghanaian companies;
- ii. promoting investments in and outside Ghana;
- iii. collecting, collating, analysing and disseminating information about investment opportunities and sources of investment capital, and advising on the availability, selection and suitability of partners for joint ventures;
- iv. registering and keeping records of all the enterprises to which Act No. 478 applies;
- v. identifying appropriate projects and inviting interested investors to invest in them by initiating, organizing and participating in promotional activities such as exhibitions, conferences and seminars;
- vi. liaising among investors, MDAs, institutional lenders and other authorities concerned with investments;
- vii. collecting and disseminating up-to-date information on the incentives available to investors.

Ministry of Environment Science and Technology

MEST has four main agencies and departments: the Council for Scientific and Industrial Research (CSIR), the Ghana Atomic Energy Commission (GAEC), the Environmental Protection Agency (EPA) and the Town and Country Planning Department. The core functions of MEST, its departments and agencies include:

- i. providing leadership and guidance in the environment, science and technology across the whole economy through policy formulation and implementation;
- ii. ensuring the establishment of regulatory frameworks and standards to govern science and technology activities and environmental management for sustainable development;
- iii. promoting activities to underpin standards and policies for the planning and implementation of sound scientific and technological development activities;
- iv. ensuring the coordination, supervision and M&E of environment, science and technology activities that fulfil national benefit sharing commitments;
- v. establishing the parameters for environment, science, technology and human settlement programmes in consultation with the National Development Planning Commission, to guide district assemblies as the local-level planning authorities;
- vi. analysing and coordinating all programmes and budgets in the environment, science and technology sectors of the economy, to create a single integrated management system;
- vii. initiating, facilitating and coordinating research, including the development and review of policies, laws, rules and regulations in the environment, science and technology sectors of the economy.

Council for Scientific and Industrial Research: CSIR originated as the National Research Council, which was established in 1958. In its current form, CSIR was established by the Council for Scientific and Industrial Research Act of 1996 (Act No. 521) and is mandated to coordinate the scientific and industrial research activities of its institutes in support of the national economy, especially in food and agriculture, industry (particularly intermediate technologies for small and medium enterprises) and frontier technologies such as biotechnology and Nano sciences. Currently, CSIR oversees the activities of 13 insti-

tutes, of which nine are agriculture-related. As mentioned in Section 2.5, MOFA is one of CSIR's largest clients. The council works with MOFA to generate new and improved technologies, planting materials, improved crop varieties, aquaculture, and livestock breeds among other activities.

Ghana Atomic Energy Commission: GAEC was established under Act No. 204 (1963) but now functions under the Ghana Atomic Energy Commission Act of 2000 (Act No. 588). The commission is mandated to advise the government on peaceful uses of nuclear energy for development; evolve legislative instruments to regulate the use, handling and management of nuclear materials and their waste; monitor the application of nuclear energy sources throughout the country; and promote the commercialization of R&D results. GAEC has four institutes: the National Nuclear Research Institute, the Biotechnology and Nuclear Agriculture Research Institute (BNARI), the Radiation Protection Institute, and the Radiological and Medical Sciences Research Institute.

Other organizations

Other organizations providing agribusiness services are development partners, international and local NGOs, private sector organizations such as FAGE, and commodity associations. These organizations provide enormous support, but most of them address only specific aspects of agribusiness and may withdraw their support at any

time. Examples include the Millennium Challenge Account (MCA), a five-year anti-poverty programme with a budget of approximately US\$547 million, which provides policy frameworks for agricultural development, including agroprocessing. MCA was signed between the Millennium Challenge Corporation⁶ (MCC) of the United States of America, and the Republic of Ghana in August 2006. The Millennium Development Authority (MiDA) is the public corporation responsible for implementing the five-year programme. A total of US\$241 million from the MCA has been allocated to the agriculture sector to enhance the profitability of commercial agriculture among small farmers. Its focus areas include facilitating strategic investments in post-harvest infrastructure – including cold storage and processing facilities – by FBOs and other businesses, and enhancing compliance with international food protection standards. A summary of budget allocations for MCA agricultural activities is shown in Table 12.

It is clear that no single ministry has all the relevant capacities and competences to implement

⁶ MCC is a United States government corporation that works with some of the poorest countries in the world. Established in January 2004, MCC is based on the principle that aid is most effective when it reinforces good governance, economic freedom and investments in people. MCC's mission is to reduce global poverty through the promotion of sustainable economic growth.

TABLE 12
Budgets for MiDA agriculture projects

	Activities	Budget
Farmer and enterprise training	1. MCC to develop framework for FBO training 2. Regional implementation consultants to implement FBO training 3. MOFA to prepare FBOs for training	US\$66.0m
Post-harvest activities	1. Provide 3 public pack houses in Southern Zone 2. Provide pre-coolers for nucleus farmers 3. Construct perishable cargo centre at Kotoka International Airport 4. Upgrade the institutional capacity of 3 institutions 5. Establish a small-scale grain storage facility	US\$20.3m
Irrigation development	1. Provide 10 weirs, 110 dams and at least 5 000 ha under irrigation	US\$27.7m
Agricultural and other credit	1. Provide short- and medium-term credit to the agriculture value chain 2. Provide post-harvest infrastructure (storage facilities)	US\$40m US\$8m

Source: MiDA 2011 Monitoring and Evaluation Plan, http://www.mcc.gov/documents/reports/me_plan_Ghana.pdf.

agribusiness programmes. MOFA has a comparative advantage in agricultural production activities because these are its core function and so it has the necessary technical expertise, budget allocations and experience. MOFA's comparative advantages could be strengthened by the establishment of ASD, provided the unit engages personnel with relevant competences and collaborates with relevant MDAs.

MOTI, its agencies and GIPC have the technical expertise, budget allocations and logistics

to carry out the activities related to market and business development that fall under their mandates. CSIR, GAEC and the universities, which are under MEST and the Ministry of Education respectively, have competences in conducting agricultural research. It is therefore important that MDAs collaborate with one another to implement agribusiness programmes holistically and successfully. ASD's role should be to identify collaborators and establish strong linkages among them.

Chapter 4

Capacity development priorities

This section presents thoughts on the future path for ASD. It assesses the priorities for capacity building and makes recommendations on the role that FAO could play to improve MOFA's capacity and help it to achieve its agribusiness objectives.

4.1 DEVELOPMENT PATH

Over the years, MOFA has performed remarkably well in the development of agribusiness, providing the necessary technical assistance and resources to key actors in the agriculture sector, particularly farmers, small-scale processors and traders, and serving as the channel for government interventions in agriculture. However, it faces challenges, particularly in agricultural research and post-production activities such as post-harvest handling, processing and marketing. The entire scope of agribusiness operations in Ghana needs concentrated attention to bring it into line with modern, worldwide developments in agribusiness. The establishment of ASD is expected to take account of these challenges. It is recommended that while ASD translates its terms of reference into reality, refining its goals, objectives, mission and functions, it focuses on the ultimate vision of stimulating agribusiness productivity sustainably. This study has shown that ASD will have to meet challenges from all dimensions, especially in infrastructure development, technology transfer and diffusion, market development, knowledge sharing and information dissemination, and capacity development.

4.2 PRIORITY AREAS FOR CAPACITY BUILDING

Technical staff in primary production

MOFA has technical staff to deal with primary production activities, but there are too few of these staff members. The extension agent-to-farmer ratio is very low, leaving most farmers without the necessary technical advice to enable them to improve the quantity and quality of their products. Support is needed to train more extension staff and to motivate and retain them in the sector.

Business and market development

MOFA lacks expertise in business and market development and uses external experts for these

activities. ASD must be resourced with business and market development specialists who can incorporate business and marketing elements into the agriculture sector, identify domestic, regional and international markets, link processors and exporters to local and international markets, and perform market research and analysis.

Research and development

MOFA lacks resources to conduct agribusiness research and has relied on other institutions such as CSIR, GAEC and the universities for research inputs over the years. Most of these research institutions lack adequate laboratory equipment, chemicals and other resources for conducting research in a timely manner. In addition, the links among research, policy and industry remain very weak, and the agribusiness sector derives few benefits from research findings and products. Capacities need to be built to bridge the research-policy-industry gaps. It may also be useful to forge linkages with relevant institutions such as the Science and Technology Policy Research Institute (STEPRI) for conducting some of the required studies.

Sourcing of funds

Most agribusiness projects are funded through loans, grants and contributions from development partners. Government counterpart funding is usually small, and its release is sometimes delayed. MOFA therefore needs to seek external funding, but is constrained by its lack of adequate expertise in writing award-winning grant proposals; capacity building is required in this area.

Advocacy and lobbying

MOFA generally lacks the urge to advocate on issues concerning the private sector. It needs to be sensitized to the fact that the private sector is the engine of growth and must be supported by the government. MOFA staff require training in advocacy and skills such as lobbying for credit sources for agribusiness clients.

Support for regional and district directorates

Most agribusiness projects are implemented in the regions and districts but the directorates at these

levels usually have inadequate technical staff, budgetary support and logistics. The regional directorates require support in upgrading their technical skills and developing the capacity to seek funding for their activities.

4.3 POTENTIAL ROLES OF AND INSTRUMENTS FOR FAO SUPPORT

MOFA's ASD may improve the performance of the agribusiness sector, and must be appropriately designed and resourced from the outset, to avoid future problems. At these initial stages, FAO's assistance is required in ensuring that ASD becomes functional, resourceful and useful. FAO can participate by advising the committee that is establishing the unit and helping to recruit and train personnel for it. Funding support is also needed to equip ASD until it is capable of seeking its own funding.

FAO's support is also needed in strengthening research–policy–industry linkages, including through consultative workshops where possible ways of strengthening these linkages can be discussed. Agribusiness development requires high-cost investments in infrastructure, equipment and other resources, and FAO can provide support in these areas.

FAO could also sponsor the MOFA officers responsible for establishing ASD to carry out study tours of one or two similar offices operating in developing countries, for sensitization and education.

To make ASD fully functional, the following issues should be considered:

- i. ASD's operational staff should include representatives from all relevant MDAs.
- ii. External experts should be recruited to provide services for which MOFA is deficient.
- iii. ASD should have strong links to development partners and NGOs.
- iv. It ASD should have expertise and capacities to source funding for projects.
- v. It should be transparent and have clear objectives and functions, to avoid overlapping efforts and conflicts with other agencies.
- vi. It should concentrate on policy formulation, legal and regulatory issues and the putting in place of a conducive and enabling business environment.
- vii. It should be equipped to transform the private sector, making it more business-oriented.
- viii. It should be a source of information for knowledge institutions (universities) so they can structure curricula to train students to be business-oriented and to participate in the agribusiness sector.
- ix. Its activities should reflect the country's needs in terms of value chain development.
- x. It should avoid high levels of bureaucracy and slow implementation processes, as these lead to lower efficiency.
- xi. It should have personnel with high tolerance for risk taking.

Chapter 5

Conclusions

MOFA is in the process of establishing an agribusiness unit – ASD – with the overall goal of enhancing agribusiness operations and increasing the productivity of critical actors. Among other objectives, ASD aims to provide data for investors (including development partners) who want to know about the available alternatives for investing in the agriculture sector. The unit will also provide information on areas for future investment. Attention will be given to collaboration with GIPC on matters related to agriculture, particularly agribusiness. Individual and institutional investors in Ghana will obtain information about relevant priority areas of MOFA for agricultural investments, and ASD will coordinate and gather information

on the agribusiness projects and programmes being undertaken by MOFA. When fully functional, the unit will (among other activities) support linkages between international investors and private sector agribusiness.

This case study highlights challenges pertaining to resources and organizational systems. Constructive initiatives and agribusiness projects are enabling Ghana to generate dividends from agribusiness, and include both the public and private sectors. These initiatives will be strengthened through the enhancement of capacities in relevant sectors, better coordination of efforts, and streamlining of institutional functions and responsibilities.

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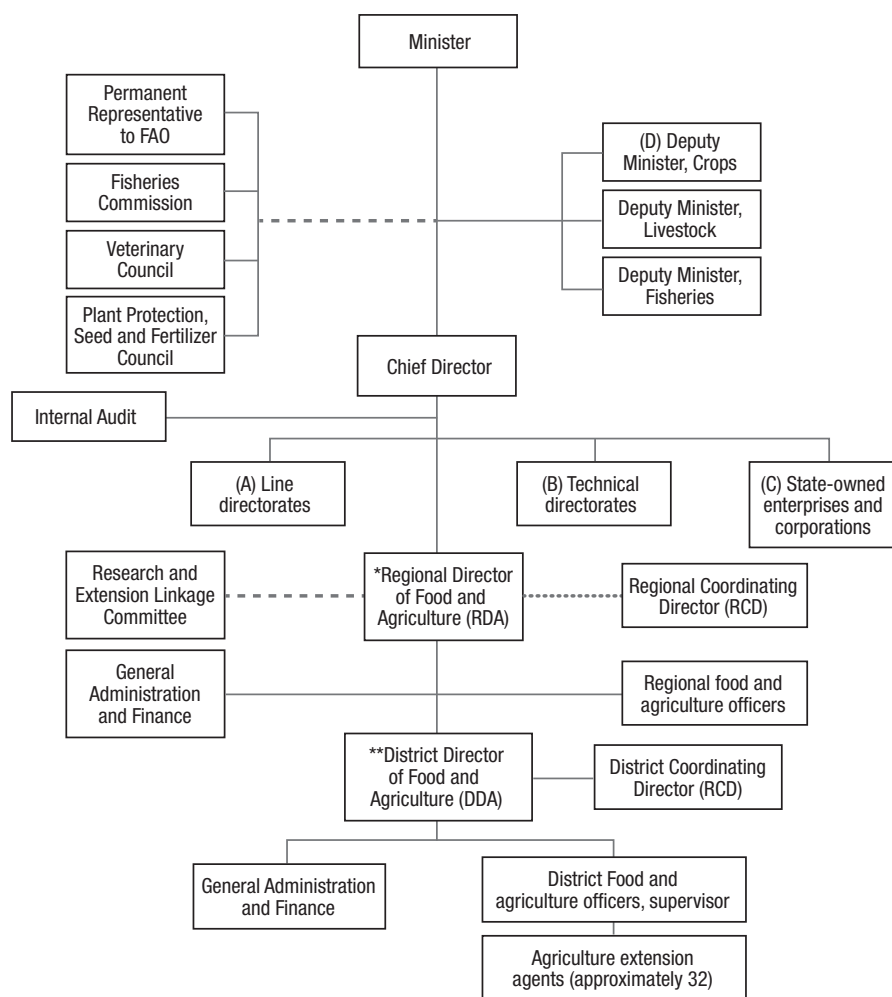
Annex 1

People interviewed

Date	Name	Position	Institution/project
8 December 2011	Mr Alabi Bortey	Coordinator	GCAP
13 December 2011	Mr Francis Gao	Deputy Coordinator	YIA, MOFA
14 December 2011	Mr Adjekum	Coordinator	RTIP, MOFA
16 December 2011	Mr George Ashiabi	Director	PPMED, MOFA
16 December 2011	Ms Angela Dansson	Deputy Director	PPMED, MOFA
10 January 2012	Dr Dale Rachmeler	BUSAC Fund Manager	DANIDA
12 January 2012	Ms Gifty Adjei-Sam	Director Research	GEPA
12 January 2012	Mr Peter Obeng	Deputy Director Agriculture	GEPA
16 January 2012	Mr Tabi Karikari	Agricultural Specialist	AfDB
18 January 2012	Ekow Coleman	Technical Officer	MOFEP
18 January 2012	Mr Patrick Ofori	Senior Agricultural Economist, M&E Specialist	PPMED, MOFA EMQAP, MOFA
18 January 2012	Mr Emmanuel Garti	Assistant Agricultural Economist	PPMED
18 January 2012	Mr Nicholas Neequaye	Deputy Director	ASD, MOFA
18 January 2012	Mr George Ashiabi	Director	PPMED MOFA
19 January 2012	Dr K. Osman Gyasi	Agricultural Economist	WB
19 January 2012	Mr J. Nijhoff	Senior Agricultural Economist	WB
20 December 2011	Mr Mawuli Agboka	Deputy Director, Project Coordinator	CSD, MOFA EMQAP, MOFA
20 January 2012	Mr Cephas Ametefe	Technical Director	VEPEAG
18 January 2012	Peter Keller	Director Development Operations Cashew Project	GIZ
16 January 2012	Susan Yohuno	Tree Crops Development Officer	MOFA
10 January 2012	George Osei Poku	Tree Crops Development Officer	MOFA
20 January 2010	Mr Laud Adjei	Executive Secretary	HAG
3 February 2012	Mr Henry Tackie	Senior Drafting Officer	Drafting Division – Attorney General’s Department
3 February 2012	Mr John Mullenax	Senior Agricultural Advisor	USAID
3 February 2012	Ms Janine Cocker	First Secretary	High Commission of Canada
3 February 2012	Ms Ruby Niels Palm	Senior Agricultural Economist	PPMED MOFA

Annex 2

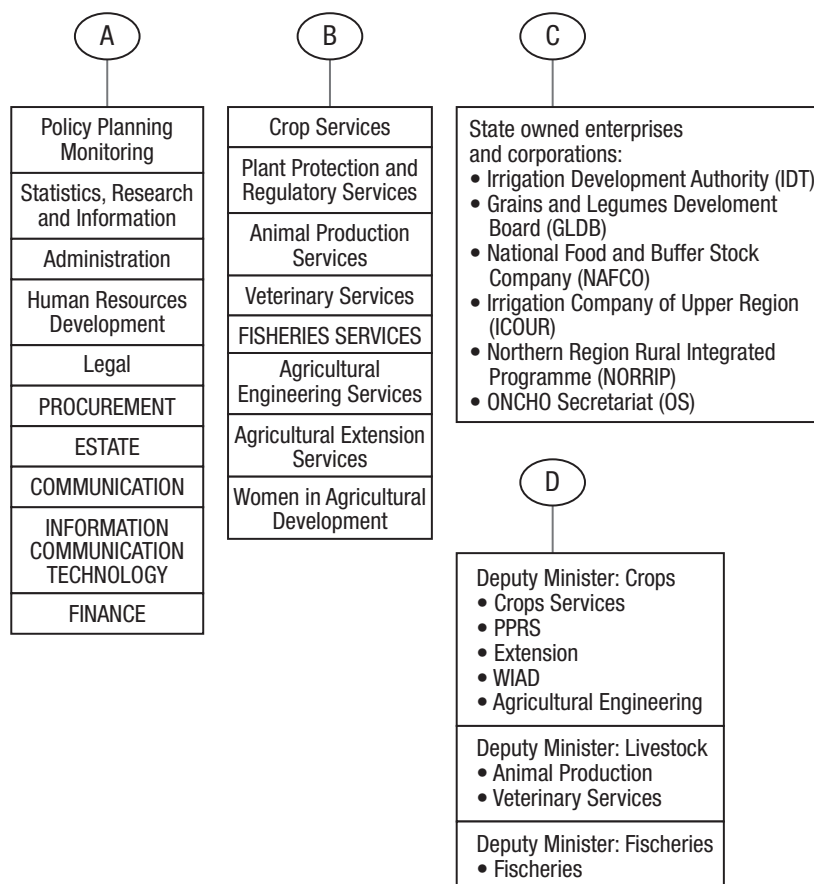
Structure of MOFA



Source: MOFA.

The ministry is made up of:

- the Minister's Office;
- the Deputy Ministers' Office;
- the line directorates;
- the technical directorates;
- subvented organizations and State-owned enterprises;
- councils and commissions;
- the regional directorates;
- the district directorates.



Annex 3

MOFA technical directorates and their agribusiness-related units, projects and functions

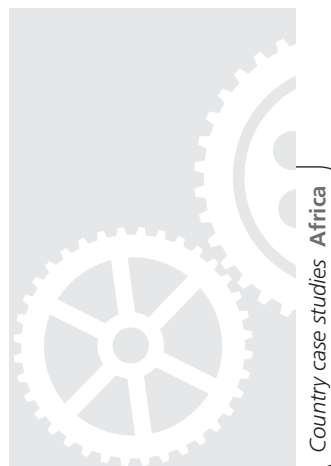
Directorate	Units	Projects	Functions
1. Crop Service Directorate (CSD)	<ul style="list-style-type: none"> ▪ Seed Service/Agricultural Stations/Block Farm Unit ▪ Food Crops (Root/Tubers and Plantain, Cereals and Legumes) ▪ Tree and Industrial Crops Unit (cotton, oil palm, cashew, rubber, coconut, etc.) ▪ Environment, Land and Water Management Unit ▪ Horticultural Crops (Fruit and Vegetables) 	<ul style="list-style-type: none"> ▪ Horticultural Export Improvement Initiative (HEII) (ended) ▪ Export Marketing and Quality Awareness Project (EMQAP) (ongoing) ▪ Rubber Outgrower Plantation Project III ▪ Buabin Oil Palm Outgrower Project 	<ul style="list-style-type: none"> ▪ Liaise with stakeholders to share information for improved production, packaging and marketing of crops and crop products ▪ Facilitate and promote the development and production of food, industrial and export crops ▪ Provide technical advice/information on crops ▪ Make recommendations for exemptions of VAT, import duty and the national health insurance levy ▪ Advise entrepreneurs and investors on technical feasibility of agriculture-related projects
2. Animal Production Directorate (APD)			<ul style="list-style-type: none"> ▪ Promote development of the dairy industry ▪ Promote the development of processing and marketing of livestock and poultry ▪ Regulate animal feed imports ▪ Recommend issuance of permits and waivers for imports of animal production inputs
3. Plant Protection and Regulatory Services Directorate (PPRSD)	<ul style="list-style-type: none"> ▪ Crop Pests and Disease Management ▪ Seed Inspection and Certification ▪ Pesticides and Fertilizer Regulatory ▪ Plant Quarantine 		<ul style="list-style-type: none"> ▪ Provide technical backstopping for exporters ▪ Monitor the outlets of seed importers and exporters ▪ Conduct inspections on agricultural produce and issue quarantine certificates ▪ Provide information and training on export requirements ▪ Provide information on IPPC, WTO, SPS agreements
4. Agricultural Engineering Services Directorate (AESD)	<ul style="list-style-type: none"> ▪ Farm Power Machinery and Transport ▪ Post-Harvest Management ▪ Soil and Water Conservation Engineering ▪ Rural Technology Information 		<ul style="list-style-type: none"> ▪ Ensure the availability of farm power and other engineering technologies for all categories of farmers, fishers and agroprocessors for agricultural production and related activities

see next page

Directorate	Units	Projects	Functions
5. Women in Agricultural Development (WIAD)	<ul style="list-style-type: none"> ▪ Nutrition ▪ Food Safety ▪ Value Addition ▪ Gender/Livelihoods 		Provide technical backstopping to regional and district staff for effective transfer of appropriate technologies to farm families in crop, livestock and fish production, processing, utilization and marketing through regional officers and other stakeholders
6. Fisheries Directorate		<ul style="list-style-type: none"> ▪ Development of harbours and landing sites ▪ Development of artisanal cold chain network 	Monitor fish imports
7. Directorate of Agricultural Extension Services (DAES)			<ul style="list-style-type: none"> ▪ Provide technical advisory services ▪ Provide information on NGOs and CBOs involved in agricultural development ▪ Provide information on FBOs ▪ Provide information on agricultural technologies
8. Regional agricultural development units (RADUs)			<ul style="list-style-type: none"> ▪ Manage and coordinate the District Department of Food and Agriculture within the District Assembly ▪ Ensure the development and effective implementation of district agricultural programmes ▪ Lead the development of agricultural strategies and programmes ▪ Oversee district food and agricultural departments and ensure their effective performance ▪ Ensure adequate human resource capacity ▪ Forge linkages with relevant stakeholders ▪ Coordinate all agricultural programmes in the region, including those of NGOs, donors and the private sector
9. District agricultural development units (DADUs)			<ul style="list-style-type: none"> ▪ Manage and coordinate the District Department of Food and Agriculture within the District Assembly ▪ Ensure the development and effective implementation of district agricultural programmes

PUBLIC SECTOR SUPPORT FOR INCLUSIVE AGRIBUSINESS DEVELOPMENT

An appraisal of institutional models in Ghana



The agrifood system is changing rapidly in response to agricultural modernization and shifting consumer and societal demands for safer, better-quality and more convenient food. This new scenario coexists with more traditional types of family and subsistence farming.

This changing environment places increased pressure on Ministries of Agriculture (MOAs) in developing countries to engage in agribusiness and agro-industry development. For this reason, over the past decade, many MOAs have established agribusiness units with technical, policy and coordination functions. To perform well, these units should be given clear mandates and sufficient financial resources and qualified staff familiar with current agribusiness developments, such as value chain programmes, climate-smart agriculture, contract farming and public-private partnerships. However, this ideal scenario rarely occurs. A change in the mind-set of MOA staff is required to move beyond the traditional focus on production towards a more holistic, farm-to-fork approach that includes post-production issues; and this might prove to be quite a challenge.

To shed light on the role, performance and empowerment of these agribusiness units, FAO conducted a scoping survey of 71 countries and in-depth analyses of 21 case studies from Africa, Asia and Latin America. The primary objective was to draw lessons that can provide guidance to member countries on how to establish and operate well-performing agribusiness units. The outcome is presented in this series of country case studies, which contribute to enriching knowledge and sharing information on institutional responses for enhancing the public commitment to inclusive agribusiness and agro-industrial growth and job creation.