Review of smallholder linkages for inclusive agribusiness development

FAO INVESTMENT CENTRE

GOOD PRACTICES IN INVESTMENT DESIGN

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GOOD PRACTICES IN INVESTMENT DESIGN
prepared under the FAO/World Bank Cooperative Programme

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
Rome, 2013

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FOREWORD

In recent years, an unprecedented increase in the flow of investment to agriculture has been recorded worldwide. Investment was spurred by: (i) rising commodity prices (attracting foreign investment companies from Europe and North America); (ii) the implementation of food security strategies by investing countries such as the Gulf States, China and the Republic of Korea; and (iii) the search for alternative energy sources (e.g. biofuels).[1] Private-sector investments resulted in large-scale acquisitions of farmland in lower and middle income countries, which prompted a long standing controversial debate about "land grabbing or development investment", as land is critical to livelihoods and food security (Cotula et al., 2009).[2] These investments and their impacts on "eroding land rights and the livelihoods of smallholders"[3] are raising concerns worldwide, e.g. at the L'Aquila G8 Summit in 2009, where Japan called for "responsible investment".[4] To this end, a number of international organizations, together with governments, developed an international code of conduct for responsible investments that respect rights, livelihoods and resources.[5]

The scope of this study is to introduce the conceptual framework for the promotion of the commercialization of agriculture[6] through the use of collaborative business models[7] (i.e. contract farming, outgrower schemes and joint ventures), thus providing an alternative to large-scale land acquisitions as well as opportunities for smallholder farmers. This study reviews and describes a range of models with the objective of assessing: (i) their advantages and disadvantages; (ii) the conditions under which they could develop and be sustainable; (iii) the roles of each stakeholder; and (iv) the inclusiveness and fairness of trading relationships between smallholders and companies according to the four basic criteria of ownership, voice, risk and rewards (Cotula and Leonard, 2010). Given the breadth of the available literature on and the global relevance of contract farming in Ghana, this review will primarily focus on this model and only briefly review the alternative business models in Ghana and the experience of other countries[8] with alternative business models.

This study is based on a literature review of inclusive business models, experiences of project initiatives, and policy interventions across a range of countries and sectors.[9] It is complemented with information and data gathered

1 Cotula and Leonard. 2010; also Hamman. 2011.

2 For details, please see Cotula, L., Vermeulen, S., Leonard, R. and Keely, J. 2009.

3 Amanor, KS. 2011.

4 This concept was recently reiterated by various African experts at the annual meetings of the African Development Bank Group held on 8 June 2011 in Lisbon, Portugal.

5 Principles for Responsible Agricultural Investment (PRAI) that Respects Rights, Livelihoods and Resources. 2010. A discussion note prepared by FAO, IFAD, UNCTAD and the World Bank Group to contribute to an ongoing global dialogue. Responsible investments in that: they respect the rights of existing users of land; water and other resources; they protect and improve livelihoods at the household and community level; and they do no harm to the environment.

6 Commercial agriculture is defined as medium- and large-scale farming and agribusiness, whereby most of the goods are produced and marketed in return for payment as opposed to a food security farming system.

7 The definition of business model used in this paper is the rationale of how a company creates and structures its relationships to capture value.

8 Other countries include Thailand, Kenya, Uganda and India.

9 Glover 1994; Eaton and Shepherd 2001; 2007; de Silva 2005; Cotula and Leonard 2010; Cotula et al. 2009; Vorley, Lundy and MacGregor 2008; Vermeulen and Goad 2006; Vermeulen and Cotula 2010; Baumann 2000; Minot 2011; and Poole 2010.

during fieldwork,[10] through extensive consultation (face-to-face and group discussions) with: (i) practitioners in agribusiness communities and private companies involved with contract farming and outgrower schemes, particularly in horticulture (pineapple), oil palm and rubber; (ii) key institutional actors involved in the agriculture sector; and (iii) development partners (DPs) and financial institutions[11] supporting arrangements benefiting smallholders.

The first mission was fielded in May 2011 and included a national workshop entitled Outgrower Schemes and Socially Inclusive Commercial Agriculture. Six case studies were developed with private investors[12] and smallholder farmers engaged in contract farming and outgrower schemes. This review does not address food crops except for the traditional exports such as maize, cocoa and oil palm, as they are seldom grown under contractual arrangements. The follow-up work took place mid-July 2011 when group discussions with outgrowers and in-depth interviews with farmers' representatives were conducted.[13] When possible, both quantitative and qualitative data were gathered during the interviews. The quantitative data included financial data on investment and production costs of the schemes. The qualitative data was used to understand the objectives, strategies, risks and constraints that underlay the quantitative data. This enabled the mission participants to verify some of the information drawn from the literature review, obtain farmers' perspectives on the schemes and identify farmers' limitations.

This paper includes four chapters:

Chapter 1 presents a literature review on collaborative business models that provide the framework for a more equitable distribution of benefits to smallholder producers in the host country.

Chapter 2 describes the context in which the existing inclusive business models are practiced in Ghana. It also includes nine case studies of companies that follow inclusive business models. Six of the case studies were developed with private investors and smallholder farmers engaged in contract farming and outgrower schemes (refer to the Annexes for an in-depth discussion) and three of the case studies were drawn from a literature search.

Chapter 3 presents the key findings from the case studies of the companies that follow inclusive business models, including the challenges and constraints.

Chapter 4 provides conclusions about supporting inclusive commercial agriculture.

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10 A mission comprising Lisa Paglietti, Mission Leader/Economist, FAO Investment Centre Division, Roble Sabrie, Economist, FAO Investment Centre Division, Alain Onibon, Institutional Specialist, Ghana FAORAF (Regional Office) and Mr Ampofo, National Consultant, was fielded from 2–19 May 2011. The mission worked in close cooperation with Mr C. Jackson, World Bank Task Team Leader (TTL). Specific tasks included identifying (i) existing inclusive business models and (ii) main features, constraints and opportunities of these business models in selected value chains: maize, rice and horticulture in Ghana. A second mission was fielded in July 2011 comprising Lisa Paglietti, Team Leader, FAO Investment Centre Division and Roble Sabrie, Economists, FAO Investment Centre Division.

11 The Agence Française de Développement (AFD), the Kredit für Wiederaufbau (KfW), IFAD and the Agricultural Development Bank (ADB) of Ghana.

12 In the AFIFE case study the ownership of the land belongs to GoG, see Annex 1 for more details.

13 The second mission comprised Lisa Paglietti, Mission Leader/Economist, FAO Investment Centre Division, and Roble Sabrie, Economist, FAO Investment Centre Division. The mission worked in close cooperation with the World Bank TTL and the government taskforce.

ACKNOWLEDGEMENTS

This study was part of a pre-investment work on commercial agriculture in Ghana, financed by the FAO/World Bank Cooperative Programme. The study analyzes collaborative models that provide opportunities for smallholder farmers to improve their linkages to markets and that could serve as an alternative to large-scale land acquisitions.

This study was reviewed by Chris Jackson, Task Team Leader, World Bank; Graham Dixie, Senior Agricultural Specialist, World Bank; Hermann Pfeiffer, Senior Agricultural Officer, Investment Centre Division, FAO; Eugenia Serova, Director, Rural Infrastructure and Agro-Industries Division, FAO; and Calvin Miller, Senior Officer and Agribusiness and Finance Group Leader, Rural Infrastructure and Agro-industries Division, FAO.

The FAO team would like to thank all of the Ghanaian officials and other stakeholders for their time and insights during the field visits. Sincere thanks are also extended to senior management of the Investment Centre Division, FAO, for the support provided for the publication of this study.

The authors would also like to thank: Nadine Azzu, Plant Production and Protection Division, FAO; Turi Fileccia, Frank Hollinger, David Lugg from the Investment Centre Division, FAO; Alberta Mascaretti, Chief, Africa Service, Investment Centre Division, FAO; and the staff of the FAO Sub-regional Office in Ghana, in particular Alain Onibon, for their input to this study.

Sincere thanks also go to Nada Zvekic, Communications Officer, Investment Centre Division, FAO, and Ilona deBorhegyi, Communications Officer, Investment Centre Division, FAO, who guided this study through the publishing process.

ACRONYMS AND ABBREVIATIONS

ACEP	Africa Centre for Energy Policy
ADB	Agricultural Development Bank (of Ghana)
ADRA	Adventist Development and Relief Agency International
AFD	Agence Française de Développement
AGFS	Agricultural Management, Marketing and Finance Service (FAO)
AGRA	Alliance for a Green Revolution in Africa
AgSSIP	Agricultural Services Sub-sector Investment Program
BAAC	Bank of Agriculture and Agricultural Cooperation
BOPP	Benso Oil Palm Plantation
CAADP	Comprehensive Africa Agriculture Development Programme
CCSNFA	Cocoa, Coffee and Shea Nut Farmers Association
CCSR	Codes of Corporate Social Responsibility
CDC	Challenge Development Corporation
CF	Contract farming
CFC	Common Fund for Commodities
CIDA	Canadian International Development Agency
CSR	Corporate Social Responsibility
DFID	Department for International Development (UK)
DOC	Department of Cooperatives
DPs	Development partners
EU	European Union
EurepGAP	Euro-Retailer Produce Working Group Good Agricultural Practices
FAO	Food and Agriculture Organization of the United Nations
FASDEP	Food and Agriculture Sector Development Policy
FBOs	Farmer-based organizations
FDI	Foreign direct investment
FFB	Fresh fruit bunch
GAP	Good Agricultural Practices
GCAP	Ghana Commercial Agriculture Project
GDP	Gross domestic product
GEPC	Ghana Export Promotion Council
GGB	Guinness Ghana Breweries
GHS	Ghanaian cedi (currency unit)
GIDA	Ghana Irrigation Development Authority
GIPC	Ghana Investment Promotion Centre
GIZ	Gesellschaft für Internationale Zusammenarbeit (former GTZ) (German Society for International Cooperation)
GLOBALG.A.P.	Global Good Agricultural Practices
GNAFF	Ghana National Association of Farmers and Fishermen
GNOTTA	Ghana National Onion Traders and Transporters Association
GNTTTA	Ghana National Tomato Traders and Transporters Association
GOG	Government of Ghana
GOPDC	Ghana Oil Palm Development Company
GREL	Ghana Rubber Estate Limited

GSGDA	Ghana Shared Growth and Development Agenda
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IIED	International Institute for Environment and Development
ILO	International Labour Organization
ITFC	Integrated Tamale Fruit Company
JICA	Japan International Cooperation Agency
KfW	Kredit für Wiederaufbau (German Financial Cooperation)
KKL	Kuapa Kokoo Limited
KTDA	Kenyan Tea Development Agency
LADP	Land Administration Development Project
MAFA	Masara N'Arziki Farmers Association
MBSA	Mali Biocarburant SA
MCA	Millennium Challenge Account
MCC	Millennium Challenge Corporation
MDGs	Millennium Development Goals
MESW	Ministry of Employment and Social Welfare
METASIP	Medium Term Agriculture Sector Investment Plan
MiDA	Millennium Development Authority
MIGA	Multilateral Investment Guarantee Agency
MOFA	Ministry of Food and Agriculture
MOFEP	Ministry of Finance and Economic Planning
MOTI	Ministry of Trade and Industry
NAADS	National Agricultural Advisory Service
NARO	National Agricultural Research Organization
NDPC	National Development Planning Commission
NEPAD	New Economic Partnership for Africa's Development
NGO	Non-governmental organization
NIB	National Investment Bank (Ghana)
NRGP	Northern Rural Growth Programme (IFAD)
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OPOA	Oil Palm Outgrowers Association
OVCF	Outgrower and Value Chain Fund
PAFC	Punjab Agro Foodgrains Corporation
PKC	Palm kernel cake
PPP	Public-private partnership
PRAI	Principles for Agricultural Investment
PRSP	Poverty reduction strategy paper
RELC	Research Extension Liaison Committee
ROAA	Rubber Outgrowers and Agents Association
ROPP	Rubber Outgrowers Plantation Project
SARI	Savannah Agricultural Research Institute
SEND	Social Enterprise Development (Foundation)
SME	Small and medium enterprise
SNV	Netherlands Development Organisation
SSA	Sub-Saharan Africa
TA	Technical assistance
TIPCEE	Trade and Investment Program for a Competitive Export Economy
TNCs	Transnational companies

TNS-GH	TechnoServe-Ghana
TOPP	Twifo Oil Palm Plantation Limited
UK	United Kingdom
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
USA	United States of America
USAID	United States Agency for International Development
USD	United States dollar
VC	Value chain
VCTF	Venture Capital Trust Fund
VEPEAG	Vegetable Producers and Exporters Association of Ghana
WBCSD	World Business Council for Sustainable Development

Currency equivalents

Currency unit = Ghanaian Cedi (GHS)

USD 1.00 = 1.5 GHS (as of June 2011)

Fiscal year 1 January to 31 December

EXECUTIVE SUMMARY

The main purpose of this study is to gain insight into "collaborative business models"[14] that provide opportunities for smallholder farmers to improve their linkages to markets and that could serve as alternatives to large-scale land acquisitions. This study covers a broad range of business models[15] and practices as well as explores key factors that have led to successful and sustainable partnerships. It incorporates existing knowledge, reviews the literature on the topic and presents several examples from Ghana and other countries (Thailand, Uganda and India), where such models have been successful.

The desk research was complemented with fieldwork undertaken in-country. Nine case studies of private companies in Ghana that use inclusive business models were developed. Of the nine case studies, six case studies were researched in the field and the three case studies were drawn from a literature review. The nine case studies addressed the following crops: horticultural crops (pineapple), oil palm, rubber, rice, sorghum and maize. This study does not address food crops, except for traditional export crops such as cocoa and oil palm, as they are seldom grown under contractual arrangements.

This study draws on an extensive amount of literature,[16] experiences in project initiatives, and policy interventions across a range of countries and sectors. The nine case studies were analyzed using the conceptual framework developed by the International Institute for Environment and Development (IIED) and FAO (Cotula and Leonard, 2010) on inclusiveness and fairness of the trading relationships that are fostered between smallholders and companies (§101–104).[17] This analysis identified the collaborative business models used by the companies in the nine case studies. For the purpose of this study each business model has been grouped into one of the following four categories as developed by Cotula and Leonard: (2010): (i) contract farming; (ii) management contract;[18] (iii) joint venture;[19] and (iv) farmer-owned business.[20] These categories are not meant to be exhaustive.

This study provided inputs for the design of the Ghana Commercial Agriculture Project (GCAP) prepared by the Government of Ghana (GoG), the World Bank and the United

14 The collaborative business models are grouped into four categories for the purposes of this study: management contracts, joint ventures, farmer-owned business and contract framing.

15 The definition of a "business model" used in this study is the rationale of how a company creates and structures its relationships to capture value.

16 Baumann, P. 2000. Bijman, J. 2008. Vermeulen, S. and Cotula, L. 2010. Silva, C. da. 2005. Minot, N. 2011. Eaton, C. and Shepherd, A. 2001. Prowse, M. 2007.

17 IIED, FAO and IFAD developed a conceptual framework to assess the inclusiveness of different business models. The more the business model involves partnerships with local smallholders or community and the more the value is shared among the partners, the greater its inclusiveness, Cotula and Leonard (2010).

18 A management contract is the arrangement under which a farmer or a farm management company works and manages agricultural land on behalf of the owner in return for a lease fee or share in profits.

19 A joint venture is a business agreement in which two independent market actors, for example an agribusiness company and a farmers' organization, agree to develop a new business by contributing equity, and, therefore, sharing asset ownership, revenues and expenditures.

20 Farmer-owned businesses are formal business structures in which farmers collectively enter into particular types of businesses (e.g. processing or marketing) to gain access to finance or limit the liability of individual members.

States Agency for International Development (USAID).[21] The broad project objectives are to improve the domestic and foreign investment climate for agribusiness as well as to establish public-private partnerships (PPPs). The PPPs would be inclusive of smallholder farmers and would aim to increase on-farm productivity, value addition and farmers' incomes in supported value chains.

Ghana's annual agricultural growth averaged more than 5 percent a year during the last 25 years, and the country is ranked among the world's top five performers in agricultural growth. Most of the growth has occurred in the south of the country and a greater effort needs to be made to develop the northern regions (Leturque, H. & Wiggins, S. 2011). The lack of available financing is a major obstacle to the modernization and commercialization of the agriculture sector, which is further aggravated by: (i) inadequate land rights; (ii) lack of farmers' access to inputs and improved techniques; (iii) inadequate farmers' skills; (iv) a poor regulatory environment; and (v) the lack of physical infrastructure (World Bank, 2012a).

Ghana has been eager to attract foreign private investment to raise the efficiency of its agriculture sector. The private sector is seen as the engine of agricultural development, and to this end the country is implementing several policies[22] intended to increase the flow of foreign direct investment (FDI) into the economy. The highest worldwide level of FDI inflows ever recorded was in 2010, when more than half of FDI[23] was directed towards developing and transition economies (Hedebrand, 2011). FDIs in Ghana have markedly increased in recent years. However, the share of investment in agriculture to total investment has been fairly low, accounting for USD 110 million and 78 projects during the period 2003–2008, which represents 0.98 percent of total inflow (FAPRI, 2008). The agriculture sector attracted only USD 3 million to finance ten agriculture-related projects in the first six months of 2009, following the global food price spike of 2008 (FAPRI, 2008).

The experience of some selected countries has been focused on contract farming schemes, which in Ghana are also the most common arrangement. Internationally, contract farming has been used to promote commercial agriculture and to link smallholders to markets. The results indicate that contract farming yields positive returns for smallholder farmers. Evidence indicates that a genuine interest on the part of investors to work with local farmers and communities is a key factor for successful smallholder linkages. Access to quality inputs and technical advice was identified as another critical factor for successful smallholder production. The parties engaged in contract farming schemes, namely, the government, private companies and smallholders, played an instrumental role in the development and sustainability of such schemes, as shown particularly in the case of India and Thailand.

In Ghana, the majority of smallholder farmers continue to sell their produce to local markets and to spot buyers due to either the limited availability of well-structured markets or their inability to access available structured markets. Efforts to link smallholder farmers to markets in the past have produced mixed results. However,

21 World Bank Board approved the USD 100 million project for scaling up Commercial Agriculture in Ghana on March 22, 2012.

22 To name a few policies, the creation of the Ghana Investment Promotion Centre (GIPC), which covers investments in all sectors of the economy, the Ghana Free Zone and the Ghana Export Promotion Council (GEPC).

23 FDI inflows in percentage of worldwide total FDI (2009) were the following: developed countries 50.7 percent and developing countries 43 percent. Africa's share of the total was 5.3 percent, while for transition economies, the share was 6.2 percent (UNCTAD, 2009).

many companies in Ghana have explored a range of business models to integrate smallholder farmers with their raw material supply chains. Common business models include contract farming (centralized and outgrower models), management contracts and joint ventures. Contract farming is the prevailing business model and ranges from an informal model to an outgrower scheme with a nucleus estate. It has been implemented with a varied degree of success by several companies and for various commodities. The degree of success depends on the type of commodity under consideration and the level of support provided by the facilitating bodies and the government. Outgrower schemes are broadly based on predetermined value chains, purchase commitments and supply inputs against cost recovery upon delivery of harvest. Hybrid models that combine spot buying and contract farming have been slowly emerging.

The second most important business models identified in Ghana are the management and lease contracts, which are also commonly used in tree crop plantation operations (oil palm, rubber). There is also a successful farmer-led business named Kuapa Kokoo Limited (KKL), which also involves a joint venture with international players for processing and distribution. In Ghana, the use of such business models by companies and farmer-based organizations (FBOs) tends to be rare and KKL was the only case mentioned in the reviewed literature.

The most viable business model was the nucleus estate with outgrowers, followed by models which involve only processing. This is also confirmed by experience worldwide, and by a recent study on large-scale agricultural investment projects over 50 years carried out by the World Bank (2012b).[24]

Several factors have spurred and motivated the development of the abovementioned four business models in Ghana (as seen in the case studies on companies involved in the oil palm, pineapple and rubber value chains).[25] One main factor is the complexity of land tenure with regard to agricultural investments, as large-scale land acquisitions by private investors constitute a threat to the land rights of poor farmers, and at the same time farmers' land rights limit investors' access to land and investment in commercial agriculture. Given that the concession of both government and community land for commercial agriculture is a controversial issue, some inclusive outgrower schemes with or without a nucleus plantation may provide to all stakeholders a better alternative to large-scale land acquisitions. When the expectations of each party involved are met, everyone benefits as indicated by the Thailand example discussed in Chapter 1. Nevertheless, the government should facilitate land acquisition by companies as well as farmers and avoid direct land ownership.

Another major factor is limited access to credit for the development of the agriculture sector in the country. Currently, access to credit, in particular medium- and long-term credit, by smallholder farmers and companies is limited. Farmers have difficulty accessing credit owing to high commercial interest rates (between 29.5 and 33 percent) and cumbersome loan application procedures. As the case studies reviewed in this paper have shown, companies have played the role of guarantor and facilitator in accessing credit on behalf of the farmers. The role of donors and government in

24 The World Bank study also identified that new investments are the most risky, while investments in existing businesses yield higher returns. See chapters 2 and 3 for further details.

25 'Nawir, A. Adiwinata, Holding Anyonge, C., Carle J. 2003.

providing long-term capital has been instrumental in the development and sustainability of outgrower schemes.

Contract enforcement is weak and the courts with jurisdiction to settle disputes arising from contract arrangements are inefficient. The key issues are the quality of local-level institutions and the state's capacity to enforce contracts. The role of the state is crucial in addressing contract enforcement as both the regulatory framework and rule of law enforcement are key to the establishment and sustainability of contract farming schemes. Many partnerships between farmers and companies failed in the past due to a lack of transparency and accountability in the process of setting up the contract.[26] In the absence of formal contracts, and given the socio-cultural context in Ghana of smallholders, clear contract obligations and mutual commitment to ensuring fair play in price setting, reliable and fast payments, and reliable and prompt product deliveries are crucial to the sustainability of the contractual arrangements.

Generally, farmers are the weakest party in a contractual arrangement and a value chain. Access to market outlets and information was reported to be an essential ingredient for strengthening the farmers' position as shown in most of the case studies discussed in this study. Similarly, enhancement of their knowledge and management skills enabled farmers to improve their productivity and make informed decisions with regards to their farm investments. FBOs constitute a means by which farmers can enhance their market power. There are a few strong FBOs in Ghana, representing, in particular cocoa and coffee producers, but for the most part they are fairly weak. The strengthening of farmer-based organizations is a critical issue in the country.

A first step in this direction would be to enhance the newly formulated Cooperative Decree which is still pending approval. Support from the government and/or interventions by DPs would be instrumental in promoting the development of inclusive smallholder business models.

Business models that allow farmers to keep or strengthen their control over land and that may create linkages to the surrounding markets seem more likely to provide benefits to all stakeholders (Liu, 2011).[27] The development and sustainability of the collaborative business models presented in this review depend on an integrated and comprehensive set of policies, services and actions rather than separate policies such as those that allow for the provision of credit, seeds or extension services. Thus, public- and private-sector partnerships (organizations and companies) are essential to an integrated approach.

The idea about which business model is most suitable will vary from investor to investor and from community to community: there is no blue print. Collaborative business arrangements are multifaceted and the choice of which model to apply will depend on specifics such as: (i) the negotiations between communities and companies (one community may be interested in an equity stake, while another may prefer a different arrangement); and (ii) considerations concerning commercial viability, which may vary from crop to crop.

26 Nawir, A. Adiwinata, Holding Anyonge, C. and Carle, J. 2003.

27 Findings from the Expert Meeting on International Investment in the Agricultural Sector of Developing Countries, Rome, Italy, 22–23 November 2011. Rome, Trade and Markets Division, FAO.

Chapter 1 - Inclusive business models: an overview

Inclusive smallholder business models

This chapter describes and reviews a range of collaborative business models that are inclusive of smallholder farmers, assessing advantages and disadvantages, opportunities and constraints of the various modes of governance, and the conditions under which the models could be best developed. This general overview provides some examples from the experiences of various countries, including Ghana. In Chapter 2, the analysis is specifically tied to the Ghana context.

The term "business model" used in this paper is defined as the rationale for how a company creates and structures its relationships to capture value. The term "company" refers to a company working in the agricultural value chains. The more a business model involves partnerships with local smallholders or the community and the value is shared among the partners, the greater its inclusiveness. The inclusive business models discussed in this paper have been grouped under four categories according to Cotula and Leonard (2010): (i) management contracts; (ii) joint venture; (iii) farmer-owned business; and (iv) contract farming. These categories are not meant to be exhaustive as there are many other models.

Management contracts

Management contracts are the arrangements under which a farmer or a farm management company works and manages agricultural land on behalf of the owner in return for a lease fee or share in profits. While land tenure remains with the landholder, the farmer or farm management company acquires a land-use right to operate the farm. A management contract may involve a variety of functions, such as the technical operation of a production facility, the management of employees, accounting, and/or marketing services.

Management contracts are commonly used by estate holders and farm management companies for the management of plantations on their behalf. The estate holder may be an individual company, state bodies, local communities or smallholders and may hold the plantation based on ownership or long-term lease (Cotula, 2010). The management contract arrangements may include a range of possible options: (i) a basic lease contract whereby the lessee/operator manages the farm in return for a fixed cash rental fee broadly based on the size of the land area; (ii) a scheme of profit-sharing whereby the operator and landholder share profits on the basis of a negotiated formula; (iii) a scheme of produce sharing, whereby each party independently stores and markets the produce; and (iv) a custom-made package (Cotula and Leonard, 2010).

In the case of a management contract that covers many farms in the area, the main advantages arising from this type of contract are the cost savings due to economy of scale from bulk input supply, mechanization of operations, shared value addition through processing, quality control and marketing. A management contract can be simple to implement and financially viable for both parties. This type of contract prevails in countries with high agriculture potential and where ownership is commonly separate from farm management, as is the case in the United States, Brazil and South Africa (Cotula and Leonard, 2010). Management contracts are an alternative to FDI as they do not involve as high a risk, can yield higher returns for the company and can promote commercialization of smallholders. The main advantages and disadvantages of management contracts are summarized in Table 1.

Tenant farming. Tenant farming is a subset of the management contract agreement. It is an arrangement whereby an individual farmer works

the land of a landowner or of other farmers, or a larger-scale company in return for a fixed rental fee or share of the crop produced. The tenants bear the full production and marketing risks.

Sharecropping. Like tenant farming, sharecropping is a subset of the management contract arrangement. Sharecropping is a form of land lease whereby the sharecropper works a portion of the land of the larger-scale company in return for a share of the crop (or proceeds from sale) in terms of a pre-agreed percentage of the total crop. The agreement could include the provision of inputs, which are usually supplied by both parties. Compared with tenant farming, sharecropping has the advantage that the risk of harvest failure and/or price fluctuations is shared. Additionally, sharecropper farmers have the incentives to work and to invest in better inputs as they benefit from larger harvests. Under this agreement, the most common disagreement occurs over the share of outputs. Disagreement can be avoided by defining dispute resolution procedures before concluding the agreement. Critics of sharecropping view it as an exploitative arrangement; however, positive evidence from around the world suggests that (i) it enables the sharing of production risk and (ii) allows access to arable land for landless farmers,[28] particularly

28 An example is found in the IFAD Northern Rural Growth Programme (NRGP) in Ghana. Landowners of irrigated fields, who only cultivate the land under the rainfed system, lease parcels of land to sharecroppers in return for (i) a share of the crops and (ii) the cost for the land preparation before the rainfed growing season. There are a few cases in which the sharecropper is allowed to use the irrigation equipment (project director, personal communication, 2011).

Table 1: Management contracts: advantages and disadvantages

	Advantage	Disadvantage
Management company/ landowner	• Straightforward to implement and financially viable • Opens up new economic opportunities to smallholders and community landholders • Enables economies of scale (mechanization, land access, inputs) if farm management operates a few farms in one area • Provides better returns • Offers protection from production and marketing risks for the landowner	• Landholder is only recipient of payment in cash or in kind • Landholder does not make decisions concerning farm management • Small-scale subsistence farmer is excluded • Landholder is bound to long-term contract at a fixed-lease fee that does not reflect the market price

Source: Adapted from Cotula and Leonard, 2010.

Table 2: Tenancy and sharecropping: advantages and disadvantages

	Advantage	Disadvantage
Share-cropper	• Enables risk sharing of harvest failure and/or price fluctuations • Overcomes land access constraints • Shares provision of inputs with company	• Arrangements can be exploitative • Sharecropper's decision-making about production is limited • Sharecropper has weaker negotiating power
Tenant	• Tenant has incentives to work and to invest in better inputs as he/she benefits from larger harvests • Overcomes land access constraints	• Tenant provides all inputs (seeds, fertilizers) • Arrangements can be exploitative as fixed rent is minimal • Tenant has weaker negotiating power
Large-scale company	• Land is owned or leased by the company • Provides better returns • Shares production risk • Simple to implement and financially viable for both parties	• Produce is low in quantity and poor in quality • Side-selling can occur • Diversion of inputs can occur • Farmer's skills are limited

Source: Adapted from Cotula and Leonard, 2010.

women in countries where land rights are held by men (Cotula and Leonard, 2010). The sharecropping agreement is the prevailing form of land leasing in agriculture throughout Asia, Africa and Latin America.[29] The main advantages and disadvantages of tenancy and sharecropping are summarized in Table 2.

Joint ventures

A joint venture is a business agreement in which two independent market actors, for example an agribusiness company and a farmers' organization, agree to develop a new business by contributing equity and, therefore, sharing assets, ownership, revenues and expenditures. The particular features of this arrangement are the sharing of financial risks and benefits and, in most but not all cases, the sharing of decision-making and equity (e.g. tea sector in Rwanda and Kenya). The sharing of risks (production, marketing, financial) is perhaps one of the major shortcomings for smallholders, coupled with unsubstantial rewards if growers/shareholders are numerous. Conversely, the main advantages for smallholders are the sharing of benefits and their empowerment to make decisions. There is a growing experience in agriculture of joint ventures that involve equity participation by local landholders and farmer-owned organizations. There are joint ventures in the tea sector in Kenya[30] and Rwanda (Box 1) and the jatropha project involving Mali Biocarburant SA in Mali (Box 2). In South Africa, supportive government policy has resulted in the establishment of a substantial number of joint ventures that have produced mixed results (Lahiff, Davis and Manenzhe, 2010).

29 See Ravenscroft, N., Benny, R. and Lastarria-Cornhiel, S. 2001. Rome, FAO.

30 See Ruotsi, J. 2003. Africa Division II. Rome, IFAD.

Box 1: Kenya Tea Development Agency (KTDA). In Kenya, there is a long experience in joint ventures between smallholder farmers and private companies in the tea sector. KTDA has played a pivotal role in promoting such arrangements. It is a fully private company owned by 51 tea factories which in turn are limited liability companies owned by farmers. There is no government involvement in production and marketing operations in the smallholder tea sector. The total number of tea farmers participating in KTDA is 406 000. KTDA provides technical advice, management services, including marketing, procurement and accounting, and crop payment systems. Powerful FBOs also played a key role in bargaining with companies to obtain very good prices for their tea and second premium payments based on the final price of tea at Mombasa auctions. An attempt was made to replicate the arrangement in Rwanda but the absence of strong FBOs resulted in a low price to farmers for their tea and a disincentive to farmers to invest in their own farms, in terms of both inputs and labour.

Source: Dannison et al., 2004.

Box 2: Mali Biocarburant SA (MBSA). MBSA is a private company that produces biodiesel and works under contract farming with more than 4 000 small-scale jatropha farmers in three regions of Mali. The main innovative feature of MBSA is that a union of local farmers (Société Coopérative de Producteurs de Pourghere a Koulikoro) owns 20 percent of the shares of the company. The union provides technical assistance to farmers through a network of field staff to improve their agricultural practices. Jatropha is integrated into existing farming systems through intercropping. Thus, farmers benefit directly from the sale of products, the increased value of the shares and any distribution of dividends.

Source: Cotula and Leonard, 2010.

Table 3: Joint venture business model: advantages and disadvantages

	Advantage	Disadvantage
Agribusiness company	• Allows companies to enter new businesses or geographic markets while sharing the risks with a venture partner • Can be flexible in that it has a limited life span and covers only part of the business operation, thus limiting both commitment and the business exposure • Companies can eventually sell their share of the business to other partners • Companies benefit from reduced legal, political and reputational risks	• Difficult to implement as it takes time and effort to build the right relationship and partnership with another business • Can have imbalances in terms of the amount of expertise, investment or assets contributed to the venture by the various partners • Can have poor integration and cooperation due to different cultures and management styles
Farmers' cooperative	• Enables access to greater resources, including specialized staff and technology • Enables co-ownership of business assets, including processing facilities • Provides equitable returns to smallholders and landowners • Is part of the decision-making process • Decision-making process is transparent	• Allows sharing of risks with a venture partner • Distributes small or no dividends (depending on the number of farmers involved)

Source: Authors' compilation, adapted from Cotula and Leonard, 2010.

Farmer-owned businesses

Farmer-owned businesses are formal business structures in which farmers collectively enter into particular types of businesses (e.g. processing or marketing) to gain access to credit or to limit the liability of individual members. Such businesses are often owned by cooperatives in order to facilitate business transactions (Cotula and Leonard 2010). A cooperative is owned by its members, who share business decision-making and profits. Collective action is an important means to increase smallholder participation in modern markets. Cooperatives have been used as a means to promote community empowerment and improve farmers' access to agricultural services (Vorley et al., 2008). According to the International Labour Organization, cooperatives worldwide have some 800 million members.[31] Box 3 illustrates the case study of a cocoa-buying farmer-owned company in Ghana, while Box 4 presents an example of a fresh vegetable cooperative in Guatemala. Table 4 presents the advantages and disadvantages of farmer-owned business model.

31 ILO. 2001. Report V (1). Refer http://www.ilo.org/public/english/standards/relm/ilc/ilc89/rep-v-1.htm. 2. Refer https://www.ilo.org/.

Contract farming

Contract farming refers to long-term supply agreements (3–10 years) between farmers and agribusiness processing and/or marketing company/buyers for mutual gains. Normally price[32] and supply arrangements (date, quantity and quality) are agreed beforehand. Contractual arrangements may be verbal or written and vary greatly, depending on the country, crop and company. Schemes usually entail a range of activities (services) to secure access to produce: either in-kind input supply or on credit, extension services, transport of produce and credit guarantees. There are three widely recognized classifications of contract farming: (i) market specific, whereby local farmers produce and deliver agricultural produce for a specified quantity and quality; (ii) resource provider, which specifies the type of crops to be cultivated, some of the production practices to be followed and the quality of the crop; and (iii) production management, which defines and controls the

32 See Eaton, C. and Shepherd, A. 2001. Rome, FAO. Verbatim. Agribusiness/government/ DPs (sponsors) should calculate realistic yields in order to forecast whether production by farmers can be profitable at prices the sponsors are able to pay. Once estimates are compiled and production costs known, the sponsors are in a sounder position to calculate a realistic pricing structure that is mutually profitable. Guaranteed, regular and attractive incomes should encourage farmers to make a long-term commitment.

Box 3: Kuapa Kokoo Limited in Ghana. KKL is a licensed cocoa-buying company that is 100-percent owned by farmers who are members of the Kuapa Kokoo Farmers Union (KKFU). It holds the largest equity share (45 percent) in the London-based company named Divine Chocolate. KKL includes various companies and structures which undertake trading activities and operate efficiently to provide the farmers with improved services, better prices and a share in the profits. It is managed by professionals who are non-farmers employed by the board of directors of the company to work on the company's behalf. A managing director oversees the management of the various departments. For more details see Annex 6.

Source: Dannson et al., 2004.

Box 4: Cuatros Pinos Cooperativa in Guatemala. Cuatros Pinos Cooperative is a smallholder farmers' cooperative that exports fresh vegetables to the United States and the United Kingdom. The associate producers number 580 and cultivate an arable 350 ha per season. The producers sign a legally binding contract with the Cuatros Pinos Cooperative specifying quantity, quality, production schedule and a fixed annual price. The cooperative provides a number of services: (i) organization of vegetable production for exportation; (ii) provision on credit of technical assistance and training at the field level; (iii) provision of inputs on credit; (iv) collection of produce; (v) selection and storage of products; (vi) dissemination of marketing and trade information; and (vii) support for food and education. The credit that Cuatros Pinos extends to its members is recovered at harvest delivery. The cooperative received a seed fund and technical assistance from a private Swiss company and the public institutions of Guatemala provided the farm technology and credit for the producer members. One of the main success factors was the support received by the private company and the links to foreign organizations, such as the Latin American Agribusiness Development Corporation, and private Swiss exporters. Other major factors contributing to success were the commitment of cooperative members, good leadership and an assured market.

Source: Santacoloma, P., Suarez, R. and Riveros, H. FAO, 2005.

production and labour processes of the farmers. The production management class of contract farming is associated with large outgrower and nucleus-estate schemes (Eaton and Shepherd, 2001; Baumann, 2000).[33]

The role of contract farming in development has been the subject of intense debate. Opponents argue that large agribusiness companies generally exploit the low labour cost of smallholders and transfer production risks to farmers, others that smallholder are often excluded from contract farming schemes. This means that such schemes result in greater income inequality and social tensions in rural areas, particularly due to land grabbing. Proponents see contract farming as a means of: (i) linking smallholder farmers to expanding local and export markets, thus removing some of challenges faced by smallholders (Baumann, 2000); and (ii) directing foreign investment to agriculture to support/promote more inclusive business models with smallholders. In recent years, the practice of contract farming has spread widely in developing countries and is considered a potentially viable model for coordinating production and ensuring higher-quality, safer food and lower production and marketing costs (UNCTAD, 2009).

Contract farming has also been used in rural development strategies as a tool for: (i) linking smallholder farmers to supply chains; (ii) overcoming factors that constrain smallholder commercialization, such as institutional deficiencies (lack of access to inputs, technology

33 Baumann, P. 2000. See also Eaton, C. and Shepherd, A. 2001. Rome, FAO.

Table 4: Farmer-owned business: advantages and disadvantages

Advantage	Disadvantage
• Enables access to greater resources and stronger bargaining power for members • Enables smallholders to be on equal terms with companies • Simple registration regulations and operational procedure for cooperatives in many countries • Enables participation in the decision-making process • A cooperative might be granted lower taxes or license fees • Enables increased access to credit and credit worthiness • Provides collection and bulking of produce • Provides technical assistance and training to members	• Complex governance structure • Slow decision-making • Lacks managerial, leadership and production planning skills • Limited entrepreneurial orientation • Membership heterogeneity (in terms of land and non-land assets) leading to conflict of interests*

* See Vorley, B., Lundy, M. and MacGregor, J. 2008. p. 11.

Source: Authors' compilation, adapted from Cotula and Leonard, 2010.

and credit); and (iii) providing the secure market and fixed prices necessary for sustainable crop intensification (Vermeulen and Goad, 2006). Such arrangements have the potential for securing markets for some crops, particularly those that need processing and may otherwise not be produced. Due to its potential to induce smallholder commercialization, contract farming has been given a prominent role in the context of the Comprehensive Africa Agriculture Development Programme (CAADP).

Contract farming is used to reduce the transaction costs and uncertainty that would exist if crops were purchased on the spot market, to provide some control over the production process, and often as a tool to manage a value chain or segments of it (Bijman, 2008). According to Minot (2007), contract farming can be successful for products that:

- require vertical integration[34]/coordination of the activities of the producers and sellers;
- allow for economies of scale in the processing and distribution chain; or
- need higher levels of organization/integration where spot markets cannot satisfy the quality/quantity of the demand.

In general, spot market transactions are preferred to contract farming arrangements and other coordination mechanisms when: (i) the produce is non-perishable and the quality of the produce is standard and easily verifiable; (ii) the farmers and/or producers are familiar with production techniques and quality requirements; and (iii) the market transaction costs are low (Bijman, 2008). Generic commodities such as grains, root crops and pulses are usually traded through the spot market rather than contract farming arrangements. Contract farming is often adopted by companies primarily for produce such as fresh vegetables for export or supermarkets, dairy products, poultry, rubber, palm oil, sugar, tea, tobacco and cotton.

Typically, both farmers and companies benefit from the contract: the company ensures its raw supply, while farmers receive fixed prices, which reduces their income uncertainty. A guaranteed and fixed price structure is broadly negotiated between the parties based on prevailing spot market prices or as a percentage of world prices, and in some cases it is even indexed to stock market prices (e.g. tea, coffee, rubber).[35] However, given that contract farming is based on profit-making practices and is, thus, not always synonymous with equity practices, there are numerous examples where it is the company

34 Vertical integration is the degree to which a firm owns its downstream suppliers and its upstream buyers. Vertical integration is typified by one firm engaged in the various phases of production (e.g. growing raw materials, manufacturing, transporting, marketing and/or retailing). Bijman, J. 2008.

35 An example in Ghana is rubber production by Ghana Rubber Estates Limited (GREL) (See Annex 1) and the nucleus estate model (see page 7).

(e.g. processor) which unilaterally establishes prices unfavourable to farmers (Dannson et al., 2004).[36] For some cash crops (e.g. tea, cocoa), there are several instances whereby parastatals fix the price on a seasonal basis to hedge against world market price fluctuations. Evidence shows[37] though that when farmers are organized and well represented by associations or cooperatives, they gain from better price negotiation and access to market information, which enables them to make informed production decisions based on fair price. Furthermore, well organized contract farming schemes provide market linkages and would appear to offer an important way for smallholder producers to farm in a commercial way (Eaton and Shepherd, 2001).

Contract farming arrangements can be structured in a variety of ways and are country-crop-company specific. Eaton and Shepherd (2001) classified contract farming into five different categories, depending on the type of product, type of company, number of actors involved and degree of integration between the activities of the sellers and the buyers.

The centralized model. Often referred to as an outgrower scheme, the centralized model is the traditional model by which a company (buyer, processor, packer) buys produce from a large number of (small-scale) farmers. The level of involvement of the company during production may vary. Usually, quantity is determined at the start of the season, while price is fixed to be competitive for the company and to be attractive to farmers so they will commit to selling their produce. Quality is strictly controlled and direct linkages exist between the farming and processing activities, which are undertaken by the same business entity (vertical integration). Generally, commodities produced and traded under this model are those requiring a high degree of processing (e.g. sugar cane, tea, coffee, paprika, banana, cocoa, rubber, horticulture products). Given the specificity of the commodity, the risk of opportunistic behaviour is greater and mutual trust is crucial to the success of a long-lasting relationship (Box 5). The relationship can be reinforced by respecting the terms of the contract and through an ongoing dialogue between parties regarding changes and issues arising during the production cycle. If the buyer deals with just one commodity and the buyers in the area are many, the processor and/or buyer would have the incentive to work with a large number of farmers to ensure a steady supply of raw material (Box 6).

The nucleus estate model. This is a model whereby the company has close supervision of production: the company supplements its own production (on an estate plantation) with the production of outgrowers, who farm on their own/rented land under contract. Typically, the nucleus estate guarantees the bulk of the produce required by the processing plant

36 See Dannson et al., 2004. See also Baumann, P. 2000.

37 For example, farmers are well represented by associations or cooperatives in Uganda (sorghum, rice), India (rice, horticulture), Zambia (cotton), Kenya (tea, horticulture), Rwanda (coffee), Ghana (rubber, oil palm, fruits) and Thailand (rice). Also see individual case studies presented in other chapters of this study.

Box 5: RWACOF in Rwanda. RWACOF has been a coffee processor and exporter (full vertical integration) since 1996. It has a contract with thousands of smallholder farmers who supply high quality coffee at a pre-agreed price. Farmers receive (i) private extension service at no cost, which is crucial to achieving high yields and meeting the quality standards; (ii) timely inputs on credit to be recovered at the time of sale; and (iii) a higher price (for specialty coffee) resulting in higher income. The company secures a constant and reliable raw supply and ensures high quality. The main disadvantages of the arrangement are side-selling (i.e. selling contracted crops to a third party) and credit default by the farmers. This is particularly problematic in the coffee industry given there is only one harvest per year and, thus, the company loses both the credit advance and the production for the entire year.

Source: Poole et al., 2010.

Box 6: Homegrown Company Ltd in Kenya. Homegrown Company Ltd in Kenya produces and exports packaged horticulture products. It entered into partnership with local farmers to complement its own production. Homegrown Company Ltd has expanded its outgrower network to over 1 000 contracted small-scale farmers who produce about 25 percent of its requirements. Outgrowers are small-scale farmers who have for the most part organized themselves into self-help groups or farmers' associations. Farms are up to 5 acres (2 ha) in size and use family labour and seasonal casual labour. Homegrown Company Ltd provides the farmers' groups with technical assistance and training to ensure their produce meets the high standards demanded by its customers, e.g. European market. Technical assistance includes provision of seeds and chemicals on credit. The advantages of this arrangement to the farmers include a market assured by the company; a written formal contract, which establishes the price, quantity and quality of produce; the provision of inputs on credit; and the latest farming technology and assistance, which ensure farmers an optimal output in terms of quantity/quality. Regarding disadvantages, price insecurity is the farmers' main concern. The price is determined in the contract but fluctuates from season to season. Farmers would like a more transparent pricing process and structure that determine a final price that does not vary by the season but is fixed over a pre-established period of time. Another major drawback for farmers is the rejection of produce that does not meet predefined standards.

Source: Dannson et al., 2004.

(70–80 percent) and can be used as well for research and breeding. The estate provides outgrowers with inputs, technical assistance and close production monitoring and, in some cases, credit. It offers outgrowers a reliable market and a pre-agreed final sale price. This model is commonly used for the farming of perennial crops, primarily tree crops, but it is also used for the production of fresh vegetables and fruits for export, perishable products that often require a fast and high degree of processing after harvest (Eaton and Shepherd, 2001). Equally, it is used by companies that operates under a monopolistic or monopsonist regime.[38] The uneven balance of power in favour of companies over farmers under these market conditions could lead to exploitative systems; however, there are ways of counteracting the power disparity between companies and farmers. For example, in Ghana, Ghana Rubber Estates Limited (GREL) moderates its position by offering transparent price mechanisms and fair prices; farmers' representatives engage in yearly price negotiations with the company and the first payment is based on a price indexed on the SICOM-Singapore Commodity Exchange (64 percent of the listed SICOM price). A second payment is foreseen based on the real rubber content of the product at the end of the year (Box 7). In addition, the financial operator and the company allow farmers a flexible loan repayment period: the loan repayment cannot exceed 25 percent of a farmer's annual income and it is deducted directly from the selling price. This model has been used by governments and multinational companies when displacement of a local community was involved, as in the case of the Twifo Oil Palm Plantations Limited (TOPP) in Ghana (for details see Annex 5).[39]

Business models used for the production of vegetables and tropical fruits for export require high management skills and the involvement of semi-commercial farmers with a business orientation and a minimum of 2–4 ha of land in order to be economically viable and

38 In economics, a monopsony is a market form in which only one buyer faces many sellers. It is an example of imperfect competition, and similar to a monopoly in which only one seller faces many buyers. As the only purchaser of a good or service, the "monopsonist" may dictate terms to its suppliers in the same manner that a monopolist controls the market for its buyers.

39 TOPP was established by the Government of Ghana in 1977 as an agricultural project with loan financing from the European Union (EU), the Challenge Development Corporation (CDC) and the Government of the Netherlands. When work on the plantation commenced in August 1978, about 254 farmers who had been working on the land were displaced. The EU funded a project to involve the displaced farmers on government acquired land. That was the beginning of a smallholder project which is now in phase 3. For more details see Annex 5.

mutually beneficial to companies and farmers. Consequently, these requirements may limit the number of farmers who can be linked to the nuclear estate model and may negatively impact smallholder agricultural commercialization (UNCTAD, 2009). Outgrower schemes are often organized around a processor; however, they may be established by traders, exporters (e.g. Blue Skies, Ghana), input suppliers, governments or government agencies and non-governmental organizations. Outgrower schemes, in particular, have played a special role in agricultural development because they deal with many of the production and marketing challenges facing smallholder farmers. Specifically, some of these schemes played a key role in increasing the profitability of farming through the introduction of quality inputs and extension services, in reducing marketing risks by providing an assured market outlet and in opening up new markets for non-traditional cash crops (Eaton and Shepherd, 2001; UNCTAD, 2009).

The multipartite model. This model usually involves government agencies and private companies which jointly participate with farmers. Farmers, agribusiness companies, public or private providers of credit, government statutory bodies, extension services and inputs suppliers are part of the arrangement. They undertake credit provision, production, management, processing and marketing. There is usually significant public involvement of donors in schemes using the multipartite model. The multipartite model was often used by many developing countries in their efforts to liberalize national markets in the 1980s and 1990s (Cotula et al., 2009). Many schemes following this model originated as resettlement schemes, as was the case with GREL in Ghana (Box 7). They are particularly common in Indonesia and Malaysia (rubber, oil palm) and in Africa (oil palm, sugar, tea).

The informal model. This is a model whereby an informal, verbal agreement between a company and farmers is reached on a seasonal basis; the company may provide seeds and other inputs. This model is used particularly for the production of crops that require only a minimal amount of processing and is often chosen when quality control is not the main concern, as is the case with the cassava producers and processors in El Salvador (Box 8). It is considered one of the most speculative models of contract farming as it involves a high risk of default on both sides. Typically, problems that may arise are side-selling (i.e. selling contracted crops to a third party) or input diversion (Cotula et al., 2009) by farmers.

The intermediary model[40]. This is a model whereby a company (trader, processor) has formal contractual arrangements with various intermediaries (collector or middle person), who then informally contract a larger number of farmers, a practice widely used throughout Southeast Asia (Cotula et al., 2009). This model (Box 9) blends elements of the centralized and the informal models.[41]

The common denominator of the various contract farming models presented here is the linkage-dependent relationship wherein a company provides inputs and technical advice to smallholder farmers who in turn supply produce. Access to quality inputs and technical advice is a critical factor for successful smallholder production. In a number of cases, companies help farmers to overcome their financial constraints by providing advance credit or in-kind credit or by acting as guarantor to the commercials banks. The close relationship between farmers and companies allows the latter to have a comparative advantage over banks in monitoring and enforcing credit contracts. Usually, companies recover their credit when they take delivery of the farmers' harvests (UNCTAD, 2009).[42] Critical ingredients for the sustainability of contract farming are mutual trust and the honouring of agreed-upon contracts (Elepu and Nalukenge, 2008:3) both of which will be assured if terms are fair: on the one side, reliable and fast payments by buyers and on the other side, reliable and prompt product deliveries by farmers (Eaton and

40 Also known as "facilitated model".

41 ACDI/VOCA raises living standards and creates vibrant communities. Based in Washington, DC, ACDI/VOCA has worked in 145 countries since 1963.

42 Reference found in UNCTAD. 2009. World Investment Report 2009. New York and Geneva, UN. See also Key, N. and Runsten, D. 1999.

Box 7: Ghana Rubber Estates Limited in Ghana. GREL is the largest industrial rubber plantation in Ghana, controlling 98 percent of the rubber producers. It holds a 36-year concession on 15 000 ha, of which more than 13 000 ha are planted. To increase its supply, GREL started an outgrower scheme in 1995 under the Rubber Outgrowers Plantation Project (ROPP) with financing and guarantees from the Agence Française de Développement (AFD), the Kredit für Wiederaufbau (KfW)/ and the GoG. The structure of the outgrower scheme is tripartite: the Agricultural Development Bank is the financial operator, which has an agreement with AFD, and provides loans to farmers; GREL is the technical operator and provides technical assistance and planting material to the farmers; and the farmers have a contractual arrangement to sell their production to GREL. The success of this scheme is due to GREL's close relationship with farmers and its advantageous monopsonist position. GREL counterbalances its advantage by offering transparent price mechanisms and fair prices; farmers' representatives engage in a yearly price negotiation with the company and the price is indexed on the Singapore Commodity Exchange (64 percent of the price). See Annex 1 for details.

Source: Fieldwork findings, 2011.

Box 8: Cassava producers and processors in El Salvador. Farmers make verbal agreements with the starch factories and deliver their production in situ. The success of this model often depends on the availability of support services, sometimes provided by government agencies. Sometimes the factories pay farmers in cash at the time of sale and other times the cassava producer must wait until the processor sells the starch. A factor which contributes to the success of business linkages between the cassava processors and intermediaries is mutual trust built through the fulfillment of verbal agreements and in the absence of alternative markets.

Source: Santacoloma, Suarez and Riveros, 2005.

Box 9: ACDI/VOCA in Ghana. ACDI/VOCA, an economic development organization that fosters broad-based economic growth, has been promoting the intermediary model in the maize value chain to address the problem of disaggregated production and to link small-scale farmers to the value chain. The Ghana feed market is underdeveloped and most of the feed mills import yellow maize to supplement their own supply. A precondition for intermediary model success is for the processor to be able to control the quantity. ACDI/VOCA selected lead farmers and individual farmers who promote new agricultural practices and who act as aggregators, each one servicing from 1 000 to 2 500 farmers, and, thus, acting to centralize management. The lead farmers have contracts with the mills for the sale of the bulk of maize and verbal subcontracts with the farmers for a portion of their maize production in return for technical advice, inputs and services (ploughing services at the reasonable price of GHS 20–25).

Source: Fieldwork findings, May 2011.

Shepherd, 2001). Another critical ingredient for success is the underwriting of a fair contract that takes into consideration contingencies and anticipated problems; for example, a contract that includes a clause on compensation for production risks or crop insurance (Dannson et al., 2004).[43] However, no contracting scheme can be successful or remain sustainable if the institutional and political setting is not conducive to it (de Silva, 2005:5).

The great disincentives for companies to engage with smallholders appear to be the high transaction costs associated with monitoring production due to the dispersion of farms, the disloyalty of farmers and the unreliability of supply both in term of quantity and quality. To facilitate working with smallholder farmers and to reduce transaction costs derived from land fragmentation and/or participant dispersion, companies sometimes organize participating farmers into small groups and around a certain crop. In general, these groups, driven by the farmers' common interests, are officially registered as associations or cooperatives. This happens at a time when the number of farmers is significant. FBOs play key roles in commercial agriculture, as they constitute a means by which farmers can enhance their market bargaining power and can counterbalance the great market power of companies, particularly in a regime of monopsony.

The key advantages and disadvantages of contract farming for both companies and farmers are summarized in Table 5.

Experience worldwide with contract farming

This chapter provides an overview of selected experiences with contract farming in Thailand, Uganda and India. The aim of this overview is to identify the factors that have contributed to the prominent success of several contract farming schemes in these countries. These countries were selected on the basis of the relevance of

43 Dannson et al. 2004. Rome, FAO.

Table 5: Contract farming: advantages and disadvantages

	Advantage	Disadvantage
Farmers	• Are guaranteed reliable markets and fixed pricing structures • Can do medium- and long-term planning • benefit from the introduction of technologies and improved varieties • Can access credit, inputs, technical advice and extension services • Can increase productivity and output with reduced input costs • Participate in decision-making • Receive assistance to comply with vital sanitary and phytosanitary standards • Benefit from increased credit worthiness	• Lose autonomy and control over farm enterprises • Subject to inequitable distribution of benefits and risks • Are in an exploitative relationship (low labour cost and possible production risks) • Subject to depressed producer prices and increased indebtedness due to late and partial payments or defaults • Have weak bargaining power owing to dependence on the companies' firms • Household members (especially women) experience a greater burden as labour requirements for production increase
Companies	• Improve supply quantity and quality • Promote efficiency in farming and management, compared with plantations • Maximize productive capacity and reduce overhead costs • Transfer or shift sharing of production risks to farmers • Benefit from alternative supply mechanism (e.g. plantations constrained by land shortage) • Manage their reputational risk • Benefit from group negotiation and improved communication • Improve quality of services and expand scope of services	• Incur high transaction costs in dealing with individual farmers • Incur higher overhead costs (extension staff on the ground) • Incur disloyalty of smallholders • Incur diversion of produce, unfair competition and side-selling • Productive capacity not maximized due to a lack of technical skills of farmers

Source: Compiled by the authors and adapted from mission findings and literature review.

their value chains to Ghana and because the stages of development and pace of contract farming are different from those in Ghana. Thailand and India provide the most interesting experiences in contract farming with regard to the role of the state and the participation of smallholders. Contract farming in Uganda has helped to raise small-farm income, as shown by empirical evidence.[44]

According to the World Investment Report 2009 (UNCAD, 2009), the share of contract farming to total farming is great in the five countries presented in Table 6.

Of all the Asian countries, Thailand has the most wide-ranging experience in contract farming. It has been a useful institutional instrument for linking smallholders to markets. The government has promoted and regulated contract farming for a broad range of crops and livestock products. Involving the private sector has ensured the sustainability of such schemes (Singh, 2005). In Thailand, the business model has been characterized by: (i) a high degree of government planning; (ii) the involvement of the private sector; and (iii) a focus on high-value crops (e.g. basmati rice, Japanese cucumber) (Sriboonchitta and Wiboonpoongse, 2008). Evidence suggests that farm size does not influence a farmer's decision as to whether to participate in a contract farming scheme, nor does the type of land tenure, as tenant farmers also participate in such schemes.

Smallholder farmers in Thailand are motivated to participate in contract farming schemes for two main reasons: (i) market certainty for their produce; and (ii) price stability (Sriboonchitta and Wiboonpoongse, 2008). The main feature in the development of contract farming in this country is the competition among buyers and between buyers and intermediaries. Evidence suggests that farmers are more loyal to brokers than to companies (Singh, 2005). The factors contributing to the success of smallholder contract farming include:

- Favourable government policies oriented towards promoting contract farming with the private sector and intended to promote fairness in relationships. In particular, the 6th National Economic and Social Development Plan (1987–1991) included clear guidelines for promoting agribusiness, agro-industry and agriculture. Twelve large projects were approved between 1987 and 1991 and implemented by private companies. Not all of the projects were successful; however, the government learned from the failures. One of the lessons learned was to exclude direct involvement of government agencies with companies and farmers. Key issues identified in the evaluation of the 12 projects were addressed in subsequent national plans (7th and 8th) by: (i) promoting new policies; (ii) targeting specific commodities; and (iii) promoting fairness and enforcement of contracts.

- Public research and extension services that support the introduction of new and high-value crop varieties and follow through to their adoption at farm level, strengthening the linkages between research, extensions and farmers.

44 See Elepu, G. and Nalukenge, I. 2008. See also Singh, S. 2005; Sautier, D., Vermeulen, H., Fok, M. and Biénabe, E. 2006.

Table 6: Share (in percentage) of contract farming to total farming in selected countries

Brazil	Poultry (75%), pork (40%), soybean (35%)
Mozambique	Cotton (100%), tobacco (100%)
Zambia	Cotton (100%), tobacco (100%), paprika (100%)
Viet Nam	Cotton (90%), tea (50%), rice (40%)
Kenya	Tea (60%), sugar (60%)
Thailand	Poultry (70%), sugar (100%)

Source: UNCTAD, 2009.

- Provision of credit to the agriculture sector through the Bank of Agriculture and Agricultural Cooperatives (BAAC). The bank was set up in 1966 and capitalized through a government policy which required commercial banks to allocate a minimum of 13 percent of all lending to agriculture, either directly or through BAAC.

- Public infrastructure development such as dams to better support agricultural production and roads to promote economic development.

- Competitive private sector, Thai agricultural marketing systems generally are competitive. In contract farming, a quasi-monopoly/ monopsony has been necessary for success. (e.g. Japanese cucumber);[45] smallholders' positive attitude towards commercial agriculture (e.g. produce surpluses to be marketed and create long-term relationships with intermediaries).

The combination of these factors resulted in the significant development of the agriculture sector in Thailand, with the country becoming the world's number one exporter of rice and one of the top agricultural exporters worldwide (Singh, 2005; Sriboonchitta and Wiboonpoongse, 2008; Benchaphun et al., 2007). As a result, improved revenues of and linkages to commercial agriculture were realized for smallholders.

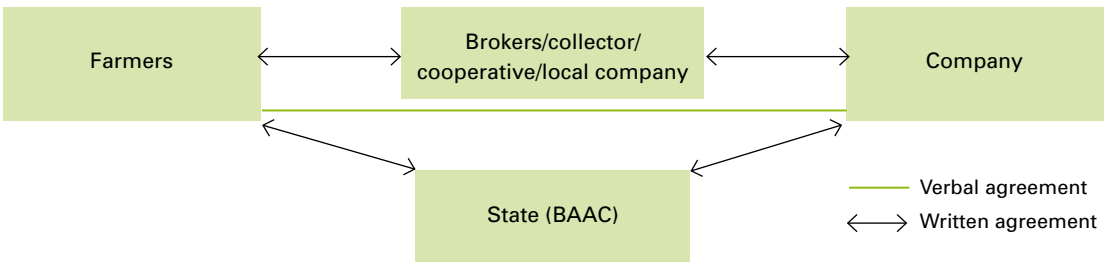
The industries most suitable for contract farming are those processing tomatoes and potatoes in northern Thailand. The agreements between farmers and brokers for the most part were verbal, while those between brokers and companies were written. The nature of the agreements, whether verbal or written, between parties is illustrated graphically in Figure 1.

Evidence from the literature indicates that in addition to increasing production significantly, the contract farming schemes assisted smallholder farmers in securing the market and in stabilizing their income. Recent data on organic basmati rice production showed that smallholder incomes of contracted farmers were between 70 percent and 100 percent higher compared with incomes of conventional farmers (Sriboonchitta and Wiboonpoongse, 2008).

In Uganda, contract farming has historically focused on traditional export crops such as sugar cane and tea. In recent years, outgrower schemes have emerged in various supply chains such as cotton, tobacco, sunflower, maize, oilseeds, organic products (cotton, coffee, sesame), rice, honey and poultry (Elepu and Nalukenge, 2008). Some of these schemes played a key role in increasing the profitability of farming (see Table 8), reducing marketing risks and opening up new markets for non-traditional cash crops. Contracted farmers have usually been individual smallholders but in the case of sunflower and sorghum production,

45 Songsak Sriboonchitta and Aree Wiboonpoongse, 2008. Verbatim: Japanese cucumber contract farming in the early 1990s appeared to be a monopsony when it had a small and specific market. There was only one company making contracts with farmers, and the nature of contracts and close supervision was similar to other crops new to farmers where the final market required exacting specifications. Presently, the crop has become more common despite the strict specifications and quality is maintained by the few companies exporting to Japan.

Figure 1: Flow pattern of written and verbal agreements among agribusiness partners



Source: Adapted from Sriboonchitta and Wiboonpoongse, 2008.

they have been represented by farmers' organizations and this has been a critical factor for success.

Two of the most common problems faced by business actors (farmers and private companies) in such schemes have been, and still are, inadequate contractual law and weak enforcement. Another major problem was a lack of awareness on the part of the smallholders about the terms of a contract, a problem which was compounded by the weak capacity of their representative FBOs to inform, with the exception of the FBOs representing sorghum and sunflower farmers. In general, contract farming played an important role in Uganda in promoting commercial agriculture and linking smallholders to markets.

A study conducted by Elepu and Nalukenge (2008) analyzed three sectors where the use of contract farming agreements has been established: sorghum, sunflower and rice. Nile Breweries Limited and Mukwano Industry Limited initiated the sorghum and sunflower contract farming schemes with the support of the Government of Uganda.[46] These schemes of these two companies include 8 000 and 32 000 smallholder farmers, respectively. The rice scheme follows a centralized model whereby a company named Tilda Limited supplements its own production with that of outgrowers: about 600 farmers participate in this scheme. In terms of profitability, when comparing contracted farmers with non-contracted farmers, the farmers participating in the sorghum and sunflower schemes appear to have higher incomes. Although the rice farmers show lower incomes than the farmers in the other two schemes, the rice farmers still benefit from an assured market, provision of technical assistance and credit availability. Table 7 illustrates the comparative profitability of the contract farming schemes for the three crops. The comparison is also made between contracted and non-contracted farmers.

A success factor (Elepu and Nalukenge, 2008) was the high degree of involvement of the private sector in production, which ranged from the provision of inputs, credit and extension services to the identification of markets for supplies. Improvements are critically needed in raising awareness about the role that contract farming can play, promoting FBOs to increase the bargaining power of smallholders, formulating a more transparent law and enforcing contracts. Equally important ingredients to the success of contract farming are access to improved seeds, extension services and credit. In Uganda, private companies were the main seed suppliers in the case of sorghum and sunflower production, while rice farmers planted seeds saved from a previous harvest. The public sector mainly provided the extension services to sorghum growers but farmers considered them to be insufficient. According to the study (Elepu and Nalukenge, 2008), only 15 percent of sorghum growers received extension services. Much higher rates of service were provided by the companies to rice growers (98 percent) and sunflower growers (47 percent) (Elepu and Nalukenge, 2008).

46 The National Agricultural Advisory Service (NAADS) and the National Agricultural Research Organization (NARO).

Table 7: Comparative profitability of contract farming schemes

Item	Sorghum		Sunflower		Rice	
	CFs No. 130	NCFs No. 116	CFs No. 143	N CFs No. 54	CFs No. 130	NCFs No. 116
Gross revenues (USD)	113867	89475	101960	76619	402000	414000
Total variable (USD)	85765	84650	81513	84388	334000	330000
Gross profit (USD)	28102	4825	20456	7769	68000	84000

Source: UNCTAD, 2009.

In India, contract farming is widespread and involves many national as well as international agribusiness companies. Companies engaged in contract farming include: Pepsi which contracts farmers to procure basmati rice; Frito-Lay, a subsidiary of Pepsi, procures tomatoes directly from farmers; and Hindustan Lever, a subsidiary of Unilever, procures basmati rice for export from farmers. United Breweries, the world's second largest brewer and the largest brewer in India, in collaboration with the state government's Punjab Agro Foodgrains Corporation (PAFC), grows malting barley under contract farming (Sharma, 2007).

Since the late 1980s, the Indian central and state governments have been promoting contract farming in agriculture and the involvement of the private sector with the objective of improving farmers' access to better inputs, extension services and credit from agribusiness companies. Contract farming was also considered as a mitigating measure to eliminate and/or reduce the main constraints faced by farmers, namely inadequate market linkages and price risks. Contract farming has been used primarily to overcome: (i) inadequate linkages with markets; (ii) landholding fragmentation; (iii) lack of capital; (iv) inadequate information dissemination; (v) obsolete tenancy laws; (vi) lack of modern market and rural infrastructure; and (vii) inappropriate input pricing policies. In 2002, the Punjab State launched a comprehensive programme of diversification of agriculture through contract farming[47] with the main objective of saving natural resources such as land and water (Sharma, 2007).

The role of the state in promoting contract farming included:

- establishment of PAFC and provision of equipment through PAFC to promote mechanization among smallholders on a free or custom-hiring basis;
- financial infrastructural support to agribusiness companies engaged in contract farming;
- abolishment of the restriction on the movement of foodgrains, sugar and edible oil; and
- reduction of state government taxes and levies from 2 percent to 0.25 percent.

PFAC was selected as the contract farming state implementing agency. PFAC provides:

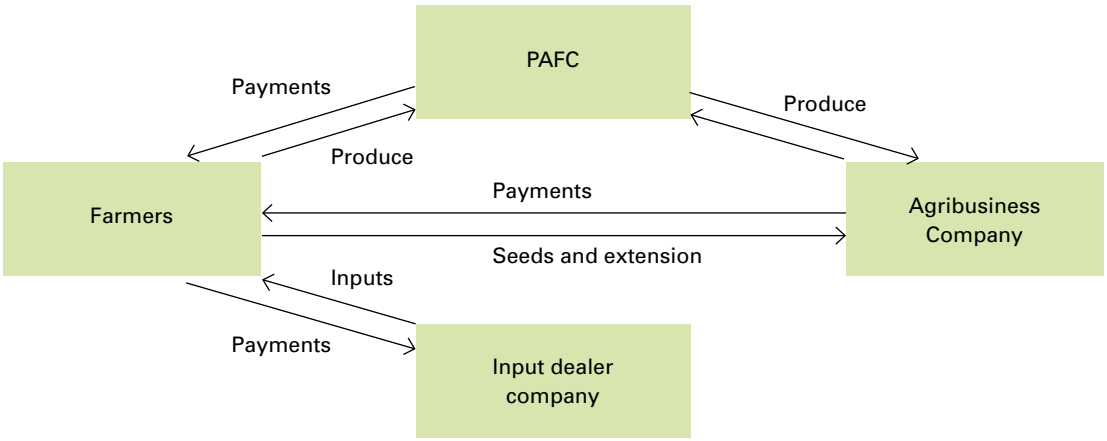
- high-yielding varieties of seeds;
- technical assistance to farmers and monitoring of agronomic practices; and
- assurance of produce purchase at the agreed price or market price, depending on the crop.

The contract farming arrangement is usually a tripartite structure including farmers, private agribusiness companies and the government/PAFC, with PAFC as the facilitator between the farmers and the agribusiness company (Sharma, 2008). Farmers have a close relationship externally with input dealer companies. Figure 2 depicts the relationships between the various actors.

The direct contract between farmers and agribusiness companies is fully functioning when trust has been established and assurance has been given that both parties will respect the underwritten agreements. However, during a year when prices were unstable, PAFC had to intervene and purchased a large quantity of basmati rice because the price had plummeted and the buyers had pulled out of the contract, undermining farmers' confidence. Based on this experience, contracts were made more flexible and farmers were also allowed to sell outside the contract if market prices changed dramatically. At the time of the Punjab study, almost 50–60 percent of the farmers had no incentive to breach the contract, while some 40 percent of the farmers sold the contracted quantity outside the contract if prices on the spot market were higher than the agreed contract price (Sharma, 2007). It is important to highlight that a recent study (Sharma, 2008) showed that in Punjab only 15 percent of the contract farmers can be classified as small or marginal. The majority of farmers have medium

47 Major crops under contract farming were pulses (3.8 percent), hyola (19.2 percent), sunflower (7.9 percent), cotton (8.0 percent), maize (27.3 percent), durum wheat (19.2 percent), basmati rice (8.0 percent) and others (6.9 percent).

Figure 2: Tripartite structure including farmers, private agribusinesses and PAFC



Source: Adapted from Sharma, 2008.

to large landholdings of over 4 ha. The share of crops under contract farming in the Punjab State is presented in Figure 3.

The three main reasons why smallholders join contract farming schemes are: a guaranteed market and price for their produce; access to good quality extension services; and higher incomes. Conversely, contracted farmers discontinue the contract arrangements or switch company for various reasons: (i) their inability to meet the quality standards, and thus the high rejection rates; (ii) a lower contracted price than the market price; (iii) the long distance to the sales delivery point; and (iv) a delay in payments by companies.

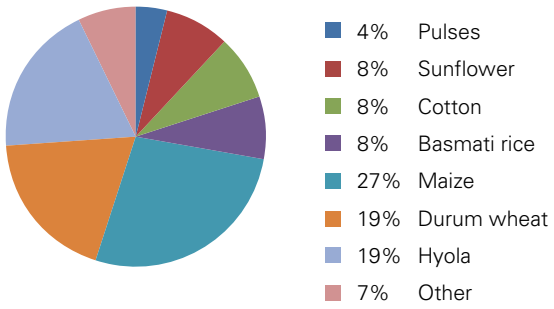
Empirical evidence from the Punjab study suggests that government policies (2002–2007) influenced the agriculture sector and farmers through contract arrangements succeeded in shifting to high-value crops and in increasing their productivity and income (Sharma, 2008). Figure 4 shows the change in cropping patterns during the period 2002–2007.

Evidence suggests that the existence of strong FBOs is beneficial to the commercialization of smallholders. FBOs enhance the smallholders' bargaining power by negotiating on their behalf with the company. At the same time, companies reduce their transaction costs by dealing more efficiently with FBOs rather than individual farmers. Smallholder farmers were able to effectively participate in changing markets and establish links with new market chains (supermarkets, agribusiness companies, processors, exporters) only if they had access to basic infrastructure and quality inputs and services, and were better organized.

Despite the wide use of contract farming, there are a number of reasons why it has failed to generate expected benefits. These include, but are not limited to:

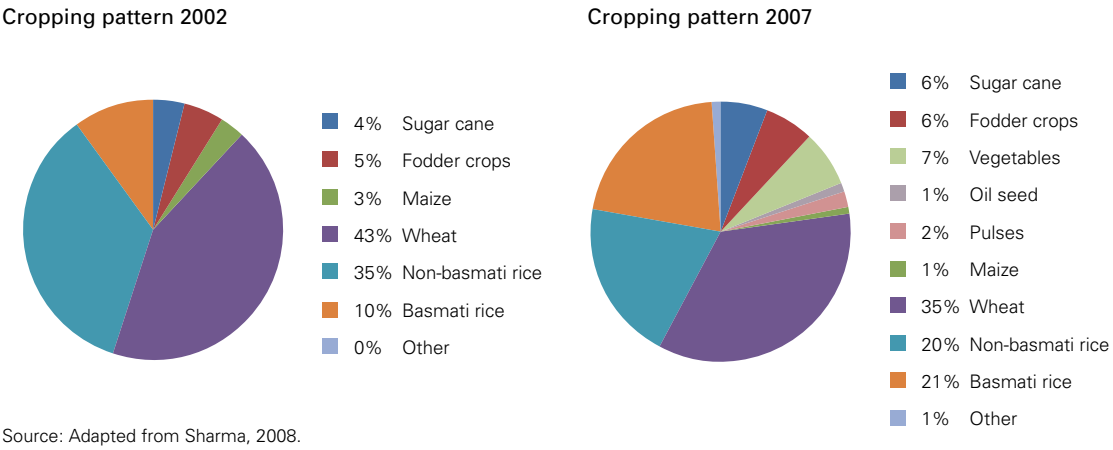
- high transaction costs for companies owing to the fact that farmers are dispersed over large areas and infrastructure is poor;
- farmers' organizations that are weak and lack managerial, leadership and production skills;
- international trade agreements which create barriers to trade and deny agricultural products from developing countries (particularly from Africa) and fair access to world markets;
- high production risks due to crop failure, resulting in insufficient volumes, or to produce rejection because produce does not meet the international quality standards;
- breach or end of contracts by farmers and/or FBOs due to inability to predict prices or factor in unfavourable exchange rates and other marketing risks;
- high incidence of side-selling;

Figure 3: Major crops under contract farming in the Punjab State, 2006–2007



Source: Based on PAFC, 2007.

Figure 4: Change in cropping patterns in the Punjab State, 2002–2007



Source: Adapted from Sharma, 2008.

- inadequate agricultural practices and lack of initiatives (both public and private) to address them;
- companies which take advantage of the farmers' weak bargaining position to exploit them; and
- lack of access to land and land disputes which remain unsettled.

Criteria for assessing inclusiveness

For real-world investing in agriculture, there is no single clear-cut business model to follow but rather a combination of the various models presented in this chapter. No single business model seems adequate for all purposes and to recommend a single best-practice model would be difficult, if not impossible. Far more important than the type of model is the degree of a model's inclusiveness, how the value is shared among business actors and whether the relationship is mutually beneficial to smallholders and companies.

The IIED and FAO have developed a conceptual framework to assess the inclusiveness of different business models (Cotula and Leonard, 2010). The following four basic criteria are used:

- ownership: equity share and key assets (land and processing facilities);
- voice: ability to influence key business decisions (weight in decision-making on price setting);
- risk: commercial, political and reputational risks; and
- reward: sharing of economic costs and benefits, including price setting negotiations and financial arrangements.

The more a business model involves partnerships with smallholders or communities and the more the value is shared among the business partners, the greater is the model's inclusiveness. These four criteria are interdependent in that one criterion can influence or affect the others. For example, ownership can influence voice, while voice can significantly affect the sharing of economic benefits derived from price negotiations. Shared ownership of assets implies sharing of business risks and, thus, ownership can influence risk. However, in a business model such as a joint venture, where ownership is shared between the venture partner and smallholders, the smallholders are more exposed to business risks (Cotula and Leonard, 2010). Table 8 presents a summary profile for each business model according to the four criteria for inclusiveness. This conceptual framework has been used to assess the case studies of the business models practiced in Ghana that are presented in Chapter 3.

Table 8: Business model profile according to the four criteria for inclusiveness

Inclusiveness criteria	Contract farming			Management contract	Joint venture	Farmer-owned organization
	Centralized	Nucleus estate	Informal			
Ownership	The company owns the business, while land rights generally remain with smallholders. Smallholders own production facilities.	The company owns the business, while land rights generally remain with smallholders. Smallholders own production facilities.	The company owns the business, while land rights generally remain with smallholders. Smallholders own production facilities.	Land tenure remains with smallholders or community. Other assets may have shared ownership. Tenant has land tenure security and owns production facilities.	Ownership is shared between the business partners (company and FBO/cooperative). Smallholders' investment may comprise land.	Farmers own and run the business and own the assets collectively. Farmers are on more equal terms with partner companies.
Voice	Price and terms of payment are negotiated between parties. The adoption of standard weight measures and grading may empower farmers.	Price and terms of payment are negotiated between parties. Farmers' voice may be weak in the quality control process and in the case of a non-performance dispute.	Smallholders agree to apply the spot market price and can easily renege on the agreement.	Landholders do not make business decisions. Tenant negotiates the sharing of the harvest and revenue; has weaker negotiating power.	Sharing in the decision-making process. Smallholders' voice depends on the equity share. Decision-making process is transparent.	Decisions are based on the criteria "one member one vote".
Risk	Smallholders bear production risks, the full risk of investment costs, production and rejection of produce.	Smallholders bear production risks, the full risk of investment costs, production and rejection of produce.	Risk of contract reneging by both smallholders and companies is high.	In profit-crop sharing, risks are shared by both parties. For fixed rent management, the company carries the risks. Rental fee for landowners is low.	Financial risks are shared between partners. This is the major disadvantage for farmers. Government may guarantee for more vulnerable partners.	Risks are shared among members and the limited liability should protect farmers from personal risks.
Reward	Smallholders are paid based on the price negotiated. They benefit from the services that the company provides to them (inputs, credit and extension services).	Smallholders are paid based on the price negotiated. They benefit from the services that the company provides to them (inputs, credit and extension services).	Spot market price prevails. Smallholders do not share any benefit or business cost.	Revenues are shared according to common practice. Bulking supply inputs reduces costs.	Smallholders' dividends are proportional to ownership (no. of shares). They may receive little or no dividends, depending on the number of farmers involved.	Members share the costs and benefits.

Source: Authors' compilation based on Cotula and Leonard 2010.

Chapter 2 - Inclusive business models practiced in Ghana

Setting the scene[48]

The agriculture sector in Ghana has four main subsectors: crops, cocoa, forestry and fisheries.[49] In 2010, agriculture[50] accounted for 35 percent of the country's GDP,[51] while the major export commodities (oil, cocoa, gold) accounted for about two-thirds of the export earnings. Major agro-exports are cocoa, timber and wood products, and horticultural crops (pineapple, pawpaw, mango).[52] The agriculture sector provides for the livelihoods of 56 percent of the country's workforce, of which up to 85 percent live in the rural regions. Ghana's agriculture is primarily smallholder dominated,[53] although there are some large farms and plantations, particularly for rubber, oil palm and coconut, and to a lesser extent for rice, maize and pineapple. The main farming systems are traditional, subsistence and rainfed. Average area cropped per household is typically small (on average 1.2 ha) and productivity remains low, although recently there have been some recorded improvements (World Bank, 2012a). The country is well endowed with natural resources, presenting attractive attributes for commercial farming, large tracts of available land, good soils and suitable climatic conditions for the production of many crops.

Labour cost is low with typical farm wages between GHS 3–5 per day (about USD 2–4 per day). The combination of Ghana's vast resources of agricultural land, plentiful water for irrigation and available low-cost labour make it ideal for commercial farming of key staple crops such as maize, soya and rice.

Annual agricultural growth in Ghana has averaged more than 5 percent during the last 25 years and the country is ranked among the top five performers in agricultural growth in the world. Most of the growth has occurred in the south of the country and a bigger effort needs to be made to develop the northern regions (Leturque, H. & Wiggins, S. 2011). Lack of available financing is a major obstacle to the modernization and commercialization of the agriculture sector, which is further aggravated by (i) inadequate land rights, (ii) farmers' lack of access to inputs and better techniques, (iii) inadequate farmers' skills and regulatory environment, and (iv) the lack of physical infrastructure (World Bank, 2012a).

Current public investment in the agriculture sector hovers between 5 percent and 10 percent of GDP. Donor-supported projects also play an increasing role in the commercialization of agriculture. Donor support for agriculture reached USD 226 million in 2008. In accordance with the pillars of the Food and Agriculture Sector Development Policy II (FASDEP), these funds have been channeled to modernize the sector. However, they have been largely devoted to the export cash crop segment rather than to the food crop segment (OECD, 2008).

FDI flow to Ghana has markedly increased in recent years, reaching a stock[54] of USD 5 575 million in 2008, equivalent to 35.7 percent of GDP, and a flow of USD 2 120 million or 37.3

48 This section has two objectives: to describe the Ghana context and discuss the conceptual links between agricultural investment and sustainable development.

49 The other contributions to GDP include: crops plus livestock 65.42 percent; cocoa 12.39 percent; forestry 9.51 percent; and fisheries 12.68 percent.

50 The words agriculture and agribusiness are used interchangeably in this report. However, there are major distinctions. Agriculture generally refers to crop and livestock production while agribusiness refers to the full value chain, from production to processing and distribution.

51 Thirty-five percent corresponds to about USD 6 billion. Breadbasket Transformation of Ghana's Northern Region, Ministry of Food and Agriculture and Alliance for a Green Revolution in Africa (AGRA). July 2010.

52 Facts and figures. Ministry of Food and Agriculture. Statistics, Research and Information Directorate (SRID), April, 2010.

53 Approximately 3 million smallholder farmers with average farm sizes between 0.5–2 ha currently produce 95 percent of the country's food crops. Breadbasket Transformation of Ghana's Northern Region, Ministry of Food and Agriculture and AGRA. July 2010.

54 Stock is the value of the capital and reserves in the economy attributable to parent enterprises resident in a different economy.

percent of gross fixed capital formation[55] (FAPRI, 2008).[56] However, the share of agricultural investment to total investment during the period 2003–2008 is fairly low, accounting for USD 110 million and 78 projects, which represents 0.98 percent of total investment. In the first six months of 2009, following the global food price spike of 2008 (FAPRI, 2008), the agriculture sector attracted only USD 3 million to finance ten agriculture-related projects. Table 9 presents an overview of the FDI flow in Ghana, in Africa and in other developing economies.

Ghana has been eager to attract foreign private investment to raise the efficiency of its agriculture sector. The private sector is seen as the engine of agricultural development and, to this end, the country is implementing a number of policies and initiatives[57] to increase the flow of FDI to the economy. Investment could take the form of FDI, whereby the investor is directly involved in equity ownership in the country, and benefits could be limited to the wages paid by investors to employed labourers. Alternatively, investors may extend their impact by establishing a variety of arrangements (e.g. outgrower schemes, land leasing)[58] that offer opportunities to effectively coordinate and promote production and marketing without necessarily entailing direct ownership (UNCTAD, 2009). Outgrower schemes[59] are often established on investor initiative and are purely profit driven. For example, they can improve and expand produce supply, or be promoted by host countries to better link smallholders to commercial farmers and markets to boost productivity and production.

Globally, the bulk of FDI and other economic interventions are provided by transnational corporations (TNCs). In 2010, more than half of the total FDI[60] flow was directed to developing and transition economies, the highest level ever recorded (Hedebrand, 2011). In agriculture, the role and involvement of TNCs vary greatly by type of commodity being produced. Generally,

55 Statistically, it measures the value of acquisitions of new or existing fixed assets by the business sector, governments and "pure" households (excluding their unincorporated enterprises), minus disposals of fixed assets.

56 FAPRI. 2008. Abidjan. Ivory Coast, Afrique Bureau. Email: Fapriafrique@Hotmail.com.

57 Among others, the creation of the Ghana Investment Promotion Centre (GIPC), which covers investments in all sectors of the economy, the Ghana Free Zone and GEPC.

58 Silva, C. da. 2005. Rome, FAO. One of the main ways of regulating the linkages between investors and smallholders in the value chains. Companies control assets through non-equity ties.

59 See Section 2. The term outgrower scheme is defined as a model whereby a company supplements its own production facilities (an estate plantation) with production of outgrowers who produce on their own land under contract.

60 FDI inflows in percentage of world total FDI in 2009 were 50.7 percent into developed countries and 43 percent into developing countries. For African economies, the share of world total FDI was 5.3 percent, while for transition economies the share was 6.2 percent (UNCTAD, 2009).

Table 9: Foreign direct investment – overview of flow in selected years, in USD million

						As a percentage of gross fixed capital formation			
FDI flow	1990–2000 (Annual average)	2005	2006	2007	2008	1990–2000 (Annual average)	2006	2007	2008
Ghana									
Inward	118	145	636	855	2 120	9.2	15.2	16.1	37.3
Outward	18	–	–	–	4	3	–	–	0.1
Africa									
Inward	6 890	38 222	57 058	69 170	87 647	7.3	27.3	27	29
Outward	1 913	2 316	7 171	10 614	9 309	2.2	3.9	4.6	3.4
Developing economies									
Inward	130 778	329 328	433 764	529 344	620 733	9.9	13	13.1	12.8
Outward	52 929	122 707	215 282	285 486	292 710	4.1	6.5	7.1	6.1
World									
Inward	490 196	973 329	1 461 074	1 978 838	1 697 353	8.2	13.4	16	12.3
Outward	490 009	878 988	1 396 916	2 146 522	1 857 734	8.2	12.9	17.4	13.5

Source: UNCTAD. World Investment Report, 2009.

the involvement of TNCs is minimal in the value chain of staple food commodities such as rice and maize. They have a more important role in the value chain of coffee and soybeans; however, it is mostly limited to purchase contract arrangements. TNCs play a far more important role in the production of export cash crops such as rubber, flowers and sugar, where often they are fully involved along the value chains.

The impacts (positive and negative) of foreign capital investment in agriculture on host countries are extensively documented in the literature (academic and other). They can be grouped under economic, environmental, and social impacts (Gerlach and Liu, 2010; UNCTAD, 2009). The emphasis in this study is on the impacts on smallholders, who provide the core of agricultural production in developing countries, and their linkage to commercial agricultural producers.

A recent study conducted on behalf of the German Ministry for Economic Cooperation and Development (BMZ) and the German Technical Cooperation (GTZ)[61] shows some positive FDI spillover effects in Ghana. However, the full exploitation of these effects is hindered by the lack of access to land and registration of property land titles and poor labour market conditions (regulation, shortage of skilled labour and low labour productivity) (Barthel, Bussi and Osei, 2008). Similarly, the study highlighted that access to land is one of the main obstacles that companies face in the country (22 percent of the sample rated land access as the main obstacle), together with access to credit, registration of land titles and employment of workers.[62]

There is growing interest in addressing these issues in Ghana as the country has many attributes that make it an attractive country for investment in agriculture and agri-business. According to the Ghana Investment Promotion Centre (GIPC), in the third quarter of 2011 alone, three new agriculture-related investments with a value of over USD 200 million were registered (World Bank, 2012a).

Despite the potential benefits that would accrue from agriculture-related investments, they also raise concerns about the impacts on the poor local people, who risk losing access to and control over land upon which their livelihoods depend. In Ghana, there have been instances of compulsory land acquisitions in the "public interest" that have not been evidently in the public interest but rather resulted in an inequitable distribution of public land (Alhassan, 2006b). Given that a major portion of Ghana's rural population (56.2 percent) depends on land for their livelihoods, it is crucial that agricultural investment, particularly when it involves land acquisition or change in land use, is designed in ways that will reduce the threat of smallholders' exclusion and will promote opportunities for all parties involved. Moreover, Cotula (2010) argues that dynamic public debate and public scrutiny are crucial for ensuring sound strategic decisions about what the best investment for the country would be. Arrangements by which host countries and communities can benefit from foreign and domestic private investment in agriculture are varied. Given the importance of these investments for income growth and poverty reduction, policy-makers of developing countries should place particular emphasis on supporting productivity growth in smallholder agriculture (World Bank, 2008).

Current status

Traditionally, sharecropping has been one of the longest practiced business models used by families and community members. In the south of Ghana, both tenancy and sharecropping are widespread (Kasanga and Kotey, 2001). In Ghana, the traditional farming system which follows the sharecropping and tenancy model is the "abunu" or "abusa" system. The abunu and abusa models are fairly commonly used in the tree planting industries (rubber, cocoa, oil palm, mango) and usually include informal, mostly verbal contract agreements. They are a type of

61 Barthel F., Busse, M. and Osei, R. 2008. The paper is based on a study conducted on behalf of the German Ministry for Economic Cooperation and Development (BMZ) and the German Technical Cooperation (GTZ), and in cooperation with the Association of Ghana Industries (AGI), the Ghana Investment Promotion Centre (GIPC) and the Ghana Chamber of Mines.

62 Aryeetey et al. 2009.

sharecropping tenancy, in which the landlord extends farming rights for a specific parcel of land for an agreed period of time. In the abusa model, the harvest or revenue is shared in three equal parts: one-third goes to the landowner, one-third goes to the tenant and one-third is used for farm maintenance. This traditional model is recognized and used by private companies operating outgrower schemes. In two of the case studies on Ghanaian models (rubber and oil palm), landless farmers, by virtue of holding a traditional sharecropping agreement, are allowed to participate in the outgrower schemes. In the abunu model, the harvest or revenue is shared equally between landowner and tenant. If a caretaker is employed by either the landlord or the sharecropper, then the model is known as the "dibimamidibi" model, which is a variation of the abunu and abusa models and not very commonly practiced.

Ghanaian cultural values play a key role in the negotiation and enforcement of contracts between smallholder and companies. Equity value is reflected in the traditional land tenure system which gives long-term usufructuary rights or continuous cultivation rights, conferring a kind of ownership to tenants. According to most companies, fairness of contractual terms and ongoing dialogue determine the strength of the relationship with smallholders. Given the absence of effective enforcement and dispute-settling mechanisms in the formal legal framework, recourse to the traditional system becomes particularly important. Indeed traditional authorities build their legitimacy on their fight for the social welfare of their people. Traditional leaders are the custodians of culture and customary laws. They maintain law and order, including presiding over and settling disputes. The effectiveness of oral agreements and even formal contracts is determined by cultural values and arbitration by traditional authorities.

The majority of smallholder farmers in Ghana continue to sell their produce to local markets and to spot buyers due to either the limited accessibility of well-structured markets or their inability to access available structured markets.

Efforts to link smallholder farmers in the past have produced mixed results. However, many companies in Ghana have continued to explore a range of models in an effort to integrate smallholder farmers into their raw material supply chains. Common business models include contract farming (centralized and outgrower models), management contracts and joint ventures. Outgrower schemes are broadly based on predetermined value chains, purchase commitments and supply inputs against cost recovery upon delivery of harvest. Hybrid models that combine spot buying and contract farming have been slowly emerging.

Table 10 provides an overview of the various inclusive business models identified in Ghana. It is organized by value chain, business entity and initiator (private, GoG, donors). The list of the companies presented in the table is not exhaustive.

Contract farming is the prevailing business model in Ghana. It has been implemented with varied degrees of success by various companies and for various commodities. Contractual agreements vary from informal

Political map of Ghana.

Table 10: Classification of selected companies in Ghana by business model

Business model	Business entity	Value chain	Initiator/sponsor
Contract farming – outgrower scheme	Afrique Link Ltd	Tomato	n.a.
	Blue Skies*	Fruits	Private
	Ghana Nuts	Soy	n.a.
	Golden Exotics*	Pineapple & banana	Private
	Masara N'arziki *	Maize	Private
	Millennium Foods	Maize	Private
	Scan Farms	Fruits & vegetables	n.a.
	Vegpro	Vegetables	Private and GoG
Contract farming – nucleus farmer scheme	Afife Rice Irrigation Project*	Rice	GoG
	Benso Oil Palm Plantation (BOPP)	Oil palm	DPs and GoG
	Ghana Oil Palm Development Company Ltd (GOPDC)	Oil palm	Private and GoG
	GREL*	Rubber	DPs (EU, AFD, KfW)
	Guinness Ghana Sorghum Project*	Sorghum	TechnoServe, private, KfW
	Integrated Tamale Fruit Company	Mango	Private (Dutch Govt. support)
	Twifo Oil Palm Plantations Ltd (TOPP)	Oil palm	Private, GoG, AFD
	Twifo Oil Palm Plantations Ltd (TOPP)*	Oil palm	Private, DPs and GoG
Management contract (nucleus estate with smallholder scheme)	Benso Oil Palm Plantation (BOPP)	Oil palm	Private, GoG
	Ghana Oil Palm Development Company Ltd (GOPDC)	Oil palm	Private, GoG
	Twifo Oil Palm Plantations Ltd (TOPP)	Oil palm	Private, GoG, EU, CDC**
Farmer-ownership	KKL*	Cocoa	Private, DP (DFID)
	Single Mothers Association (SMA)	Rice	Private, GoG
Farmer-ownership/joint venture	Afrique Link Limited	Tomato	Private, GoG, GIZ
	KKL	Cocoa	Private
Hybrid = spot buying plus contract farming	Ghana National Onion Traders and \ Transporters Association (GNOTTA)	Onion	GoG, GIZ, USAID
	Ghana National Tomato Traders and Transporters Association (GNTTTA)	Tomato	GoG, GIZ, USAID

* Business entity interviewed during fieldwork.

** CDC = Challenge Development Corporation.

Source: Compiled by the authors.

verbal and written agreements to formal contracts signed by farmers and companies. Over the last decades, contract farming has seen great improvements, shifting from the typical two actors' model, farmer and company, to a tripartite model that incorporates governmental bodies and non-governmental organizations (NGOs) as facilitators or initiators of the schemes. The outgrower scheme is the most widespread typology of contract farming and covers a broad range of crops, including oil palm, rubber, cotton, maize, soy, fruits and vegetables. It is important to note, however, that the degree of success depends on the type of

commodity under consideration and the level of support provided by the facilitating bodies and the government.

Traditionally, the initiators of outgrower schemes have been the GoG and DPs, the World Bank, the EU, AFD, KfW, USAID, and the Government of the Netherlands, among others (Table 10). In recent years, private companies have fostered these arrangements to gain strategic business advantages, notably the differentiation of their supply base and the expansion of their production capacity. For example, Blue Skies is a privately-owned fruit processing company that has successfully developed an outgrower scheme[63] for high-value crops (pineapple) to meet the quality standards of GLOBALG. A.P. (formerly EurepGAP).[64] Similarly, private companies developed outgrower schemes to overcome the constraint of having to access land; land grabbing was identified as one of the major issues in the country. A representative example is the Integrated Tamale Fruit Company (ITFC), which is an integrated mango orchard, pack house and distribution operation. The company with a view to expanding its production acreage had considered the acquisition of 2 000 acres (approximately 809 ha) of land. This land belonged to individual families holding a customary land title. The transaction would have come at great cost and resulted in a very unpopular decision within the community. This led the company to decide against the acquisition and to initiate an outgrower scheme with smallholder farmers (Osei, 2008). It is reported that this privately-led initiative benefited from the technical assistance of a USAID-financed programme, the Trade and Investment Program for a Competitive Export Economy (TIPCEE) programme, which helped the company to establish and disseminate appropriate agricultural production practices with the mango outgrowers (USAID, 2009).

Ghana appears to be at a conventional[65] stage in the development of contract farming. This review shows that with regard to the traditional tree cash crops such as rubber and oil palm, the schemes are well developed and sustainable. Emerging and successful stories are found in horticulture production for export (Blue Skies, ITFC). While for grains and crops that target the domestic market, contract farming is at an early stage of development and less successful due to crop failures or high rate of diversion of produce. The foodgrains sector includes a few outgrower schemes, although less structured and in many cases not yet financially viable. Some promising examples of outgrower schemes are found in sorghum and maize production. Guinness Ghana Breweries Limited (GGBL) engaged in an outgrower scheme with the help of TechnoServe (a United States NGO) to ensure a sustainable supply and reduced costs by partly substituting barley imports with locally grown sorghum. To date, it has not achieved financial sustainability. Another example is the Masara N'arziki scheme developed by the private investor Wienco.[66]

There are several reasons for the low level of development of contract farming in the grain industry. These include: (i) the low level of market integration; (ii) the lack of research on high-yielding adapted varieties; (iii) the unavailability of new technology such as seed varieties and

63 The total number of outgrower farmers engaged in the scheme is 140 (May, 2011), a sufficient number to enable the processing company to keep a constant supply of produce throughout the year. The largest proportion of farmers (80) grows pineapple, the low sugar type (smooth cayenne); the other farmers grow other types of pineapple (MD2, low and high sugar organic pineapple), mango, papaya and passion fruit. Outgrower schemes for pineapple cover about 386 ha, with an average land size of 12 acres (4.6 ha) per farmer. Interview with the Senior Agronomist of the company in May 2011.

64 European Retailer Partnership Good Agricultural Practices (EurepGAP) is a common standard for farm management practice and was created in the late 1990s by several European supermarket chains and their major suppliers. GAP, an acronym for Good Agricultural Practices, is now the world's most widely implemented farm certification scheme. Most European customers for agricultural products now demand evidence of EurepGAP certification as a prerequisite for doing business. Some requirements include: availability of appropriate toilets on farm premises; construction of appropriate farmhouses; presence of good water supply e.g. borehole, Polytank with water or pipe-borne water; availability of first aid kits; and a fruit-quality inspection system.

65 The term "conventional" refers to the usual situation wherein such schemes are developed for tree crops (oil palm and rubber) with a nucleus estate.

66 Masara N'arziki emerged from the Ghana Grains Partnership (GGP), which consists of public institutions and private companies: an international and national consortium of private-sector actors such as Yara and Wienco; the Africa Enterprise Challenge Fund (AECF); farmers' associations; the Ghana Ministry of Food and Agriculture; commercial banks; and output buyers (including processors) and traders. The objective of the partnership programme is to support small and medium holder farmers to adopt good agricultural practices, such as good land-use and management practices, and group cohesion and dynamics, to increase productivity and in turn, increase yields and income, thereby coming to understand farming as a business to increase profit. The programme also aims to create the opportunity for these farmers to obtain better prices as a result of better access to markets and buyers.

agro-chemicals (e.g. for sorghum and maize production); (iv) the cumbersome process for introducing new varieties (e.g. legal issues, biological issues); and (v) a general lack of investment in the Ghanaian maize industry. The maize industry presents underdeveloped market integration, and produce can be sold to many local buyers, thus providing no incentives for both farmers and companies to be tied to a contract arrangement (Wabbs Consulting Ltd, 2008).

The second most important business model identified in Ghana is the management contract model. The use of this model is also common on tree crop plantations. However, this review revealed that other agribusiness market operators are trying to adapt the model for the food crop value chain (e.g. tomato). Such arrangements are mainly characterized by a nucleus estate with an organized smallholder scheme. While in the outgrower contract scheme smallholder farmers are contracted to grow a crop on their own or rented parcel of land, under the management contract model, the contracting company engages smallholder farmers to work on its parcels of land, acquired or leased, in return for a tenancy fee. Companies operating under this model are mainly the oil palm companies such as GOPDC, TOPP and BOPP (Table 10). However, it is reported that other companies are adopting the management contract model: Afife Rice Project for irrigated rice production and Afrique Link Limited, a fruit and vegetable processing company located in Wenchi, in the Brong Ahafo region, for tomato production and processing.

A new commercial model was identified and defined in this review as "hybrid", which combines spot buying with contract farming. This emerging model appears to be significant in terms of both the volume of produce and the number of smallholders involved. A typical example of this model can be found in the fresh market for the tomato and onion industries, where traders establish mainly informal agreements with farmers. For example, a tomato trader may finance seeds, fertilizers and agrochemicals for farmers to undertake tomato production, which production is then purchased by the same trader. In other instances, farmers may allow a trader to buy tomatoes on credit and pay later after the product is sold. These traders are growing in power and legally registered in associations. Initially, members of these associations were individual traders engaged mainly in spot buying and then they organized themselves into formal structured associations to improve their trade and influence government policies at both the local and national levels. Typical examples of such associations are the Ghana National Tomato Traders and Transporters Association (GNTTTA) and the Ghana National Onion Traders and Transporters Association (GNOTTA). However, the formation of these associations has also seen a certain degree of formalization of both production and marketing arrangements with smallholder farmers.[67] The two associations also benefited from capacity building as provided by the TIPCEE programme. The key factor that enabled the development of the tomato and onion value chains was the reliability of buyers, and their involvement in training activities was important for strengthening the links (USAID, 2009).

A successful example of a farmer-led business is KKL, which also involves a joint venture with international players for processing and distribution.[68] KKL includes various structures to undertake trading activities, provide credit to farmers and manage a Fair Trade premium for development projects. Joint ventures between companies and farmers and/or FBOs tend to be rare in Ghana and KKL was the only joint venture mentioned in the reviewed literature. Such arrangements can be particularly promising, when properly structured, because they entrust the real ownership of a business to the smallholder farmers and provide them with a regular flow of income (dividends). Ownership of shares enhances the farmers' voice in decision-making and can enable greater control over business activities. However, if inadequately structured, the arrangements can provide either low dividends or no dividends

67 Robinson, E.J.Z. and Kolavalli, S.L. 2010.

68 KKL is also a joint venture that holds the largest equity share (45 percent) in the London-based company Divine Chocolate. See Shuman, M., Barron, A. and Wasserman, W. 2009.

Table 11: Case study findings on nine companies in Ghana by business model, smallholder characteristics and providers

	Case studies drawn from the field						Case studies drawn from a literature Review		
	AFIFE	Blue Skies	GGB	GREL	MAFA	TOPP	GOPDC	KKL	ITFC
Business model	Tenant farming	Contract farming	Outgrower nucleus farmers	Outgrower nucleus estate	Contract farming	Outgrower nucleus estate and tenancy	Outgrower nucleus estate	Farmer-owned/ joint venture	Outgrower nucleus estate
Objective	Welfare programme	Improve quality supply	CSR, import substitution	Expand production	Expand production	Expand production		Help cocoa farmers to do own trading	Land acquisition
Value chain	Rice	Fruits (pineapple)	Sorghum	Rubber	Maize	Oil palm	Oil palm	Cocoa	Fruits (mango)
Technical assistance	Government	Blue Skies	TechnoServe	GREL	Wienco	TOPP	GOPDC	KKL	ITFC
Credit provider	n.a.	Bank/company may act as facilitator	Sinapi Aba Trust	ADB/GREL may act as guarantor	Yara/Wienco/ AGRA	ADB	GOPDC/ Bank	KKL credit union	In-kind loan interest free ITFC
Input provider	Private	Private	Private	GREL	Yara/Wienco	TOPP	GOPDC	Private	ITFC
Development partner	JICA	None	CFC	AFD, World Bank, EU	Dutch company	AFD, KfW		DFID/Twin Trading	EU/USAID
Nucleus estate (ha)	None	None	None	15 000	n.a.	4 234	7 500	none	155
Number of smallholders	1 024	140	7 000	5 450	3 500	1 000	7 000	45 000	1 400
Smallholders (ha)	880	386	17 500	21 555	6 250	3 000	13 000	n.a.	830
Average area per farmer	1	2–4	2.5	4	1.9	3	2	0.4–7.5 ha	0.4
Average investment at farmer level USD/ha	n.a.	n.a.	n.a.	2 400	n.a.	2 000	2 000	n.a.	2 300
Interest rates	n.a.	20 percent	n.a.	6.45 percent	n.a.	11.5 percent	n.a.	n.a.	Interest free

ADB = Agriculture Development Bank
AGRA = Alliance for a Green Revolution in Africa
CFC = Common Fund for Commodities
CSR = Corporate Social Responsibility
GGB = Guinness Ghana Breweries
GOPDC = Ghana Oil Palm Development Company
GREL = Ghana Rubber Estate Limited
ITFC = Integrated Tamale Fruit Company
JICA = Japan International Cooperation Agency
MAFA= Masara N'arziki Farmers Association
TOPP = Twifo Oil Palm Plantations Limited

Source: Authors' compilation.

(Cotula et al., 2009). Evidence suggests that there is a growing international experience with joint ventures in agriculture such as those in Mali, Kenya and Rwanda, as mentioned in Chapter 1. In these countries, joint ventures are a common occurrence in the tea sector. The development of the joint venture model in the tea sector in Kenya and Rwanda has been possible due the specificity of the produce and the involvement of the state during the privatization of the tea sector (Dannson et al., 2004). In Kenya, the strong presence of FBOs and the strong management skills of the members have given an additional push to the development of this business model and been a key ingredient for the sustainability of the businesses. In contrast, FBO members in Rwanda have inadequate skills that limit the voice of FBOs in business decisions and benefit distribution.

Nine case studies of business models used by private companies in Ghana were developed. Of the nine case studies, six are drawn from the field and three are drawn from a literature review. Each case study is concerned with one private company and the smallholders engaged in contract farming and outgrower schemes. Table 11 shows the nine companies by business model, smallholder characteristics and providers. All of the companies blended elements of the different business models and share the following common features: five of the companies operate a nucleus estate with an outgrower scheme; most of the companies have benefited from external support either in terms of financing and/or technical assistance (TIPCEE, TechnoServe); all of the companies provide technical assistance and quality inputs (on credit and/or bulk supply) to outgrowers; and all of the companies include the provision of loans to farmers either at subsided rates ranging between 6.45 percent and 20 percent or interest free in the case of ITFC outgrowers. Generally, the outgrower schemes have a tripartite structure including: the financial operators (the Agricultural Development Bank (ADB) of Ghana and the National Investment Bank Ghana (NIB); the companies (GREL, TechnoServe, TOPP, Blue Skies) as technical operators which provide technical assistance and planting material; and the farmers' associations or nucleus farmers, as in the case of Guinness Ghana Breweries, which is not involved in production.[69]

The case studies show that enhanced knowledge, adapted technology, management skills and secure markets enable farmers to improve their productivity in a sustainable manner. This is particularly true for tree crop production (rubber, mango, oil palm), wherein the companies are directly involved in the production, processing and marketing of the produce (vertical integration), and their constant monitoring and advice play a key role in the efficient use of inputs, and consequently increased productivity. The case study of GGB presents an innovative approach in which smallholder farmers are organized around selected local commercial farmers (nucleus farmers) and engage with local service providers (of credit, seed, chemicals and transport). This approach is more complex than that used in rubber and palm oil production as it aims to develop the whole sorghum value chain rather than only farmers' production. However, the multiple layers – the NGO, nucleus farmers, and the research institute and service providers – between the company (as the final buyer) and the farmers have created inefficiency, engendered lack of trust and caused miscommunication among the parties involved.

The contractual arrangements had positive effects for the outgrowers, who benefited from a significant increase in income as well as improved access to technology, extension service, and social and economic infrastructure (roads, schools, processing facilities) provided by the companies. A full description of the case studies can be found in the Annexes, while information on the degree of inclusiveness of smallholders in the various business models is presented in the following paragraphs.

69 Annexes presents a list of figures depicting the structures of the case studies schemes.

Appraising the inclusiveness of smallholders

While business models must be critically assessed by conducting a solid economic analyzis, it is also important to appraise the way in which the value (benefits) is shared among partners and, thus, the inclusiveness of the model. The companies in the case studies have been analyzed using the conceptual approach developed by Cotula and Leonard (2010) (Table 9), who used the four criteria of ownership, voice, risk and reward.

Ownership

Companies own the business facilities, specifically the processing facilities, while smallholders own the production assets. Land access and security of tenure are key constraints for agricultural investment and among the most controversial issues in Ghana.[70] Most companies have a long-term concessional land lease agreement (25–40 years) on government land, and in a few cases on individual private land. In most case studies, the land under contract farming and outgrower schemes belongs to farmers, local communities or private individuals who rent it. Two cases were reported in which the land belongs to the state and is rented to farmers under a tenancy agreement. One case is the Afife Rice Irrigation Project wherein farmers rent up to a maximum of 2 ha. Farmers are granted the land rent fee but are charged for the irrigation service (GHS 100/ha).[71] Another case is TOPP, which has long-term tenant agreements with 254 farmers who produce for the company on government land. The TOPP oil palm scheme was created as a resettlement scheme to provide smallholders with their own oil plantation financed through an EU grant.[72] The tenant agreements are established on a medium- and long-term basis (e.g. 5 years for the Afife Rice Irrigation Project, 25 years for TOPP) with clear renewal rights, thus securing farmer "land-use rights".[73] However, there is a potential risk of a hidden form of elite capture in tenant and sharecropping agreements, as better-off local landholders could exploit farmers who do not own the land. Some instances have been recorded on the oil palm plantations of women and youth being the most vulnerable groups with regards to accessing land and securing land ownership.

It was noted that to enter an outgrower scheme some companies (GREL, TOPP, MAFA) require that farmers possess some kind of land entitlement, such as: (i) a certification for land, either traditional property or land-use rights given by the local chief; or (ii) a title for a sharecropping agreement, registered at the land registry. In the case of GREL and TOPP, the contracts also include a specific clause to avoid a land dispute over inheritance in the event of death of the outgrower: the outgrower has to indicate his/her successor to the plantation. In the event of a dispute, the companies have the right to manage the farm, repay the loan and return the land to the family upon settlement of the dispute (see the Annexes). This clause mitigates the land dispute issue and safeguards the investment for the company and for the family.[74]

Although farmers own the land, or have rights to it, they are tied to the crop cultivated under the outgrower scheme and cannot switch to other crops. This happens in the case of oil palm, rubber and mango outgrower schemes. The agreements within the horticulture and grains sectors are far more permissive as farmers can easily switch to other crops or side-sell their produce to other buyers (if a local market is readily available).

The only example of a 100 percent farmer-owned business is KKL, which is also a joint venture that holds the largest equity share (45 percent) in the London-based company Divine Chocolate.

70 This issue will be discussed further on in this chapter. See Alhassan. 2006b; Kasanga and Kotey. 2001.

71 For further details please see Annex 3 and the contract template in Annex 3.

72 Government of Ghana initiated TOPP in 1977 as an agricultural project with loan financing from the EU, the Challenge Development Corporation (CDC), and the Government of the Netherlands. The work on the plantation commenced in August 1978 at which time about 254 farmers were displaced from the land. The EU funded the Smallholder Scheme project as a resettlement scheme in 1983 to involve the displaced farmers on the TOPP government acquired land (see Annex 5).

73 Unfortunately, it has not been possible to obtain quantitative figures by scheme on the type and number of smallholder landholdings.

74 See contract templates presented in Annex 2.

Cocoa farmers either farm their land or access land through sharecropping agreements. The KKL farmers have complete control over what they produce and sell. The financial benefits derived from Fair Trade premiums and the assured markets motivate farmers to become shareholders (Annex 6).

Ghana's constitution allows the GoG to acquire land "for the public good" and state land can be leased to investors. Farmers and rural people incur the risk of being displaced and their land expropriated for the development of plantations and outgrower schemes (Kasanga and Kotey, 2001). The literature review suggests that compulsory acquisition of land for the cultivation of commercial oil palm, as in the case of the GOPDC outgrower scheme, has generated a scarcity of land for the community in that region (Kwaebibirem district, Eastern region). In addition, given the high profitability of modern hybrid oil palm cultivation, family elders prefer to distribute land to oil palm developers rather than to family members for food farming. This has resulted in large areas of household land being given out under sharecrop arrangements to farmers outside the family and community, leaving a large number of youth without secure livelihoods (Amanor, 2011). This represents a potential threat to food security and a further exclusion of the more vulnerable groups, namely women and youth.

Voice

Voice appears to be directly linked to the membership of FBOs: the more that FBOs are truly representative of farmers' needs, the stronger their voice. Farmers tend to belong to farmers' associations, which range from informal groups such as in the sorghum and maize outgrower schemes to highly formalized ones with recognized leadership such as in the rubber and oil palm schemes. Collective action of the group increases the bargaining power with input dealers and traders, and places the group in a better position to negotiate a contract. The associations not only play an intermediary role between the companies and the local farmers but also act as farmers mouthpiece and advocate (see the Annexes). In general, smallholders have a say in price negotiation and payment conditions through their associations, while in most cases they appear to have little influence on the production and quality control processes. Their voice may be weakened in the case of a non-performance dispute. However, it was reported that nucleus farmers of the GGB scheme and some farmers' associations (TOPP, Blue Skies) participate in the quality inspections carried out by the companies and have the task of ensuring quality.

The most organized farmers' associations are found in the rubber and oil palm outgrower schemes and are called the Rubber Outgrowers & Agents Association (ROAA) and the Oil Palm Outgrowers Association (OPOA), respectively. The ROAA is strong, represents the farmers in yearly price negotiations and price adjustments when required, and it provides its members a range of services. The OPOA is a relatively young association, although it is growing in importance and status. It was reported that both organizations are receiving support from GIZ.[75] Interestingly, these associations seem to be gender friendly as women represent 25 percent and 21 percent of their membership, respectively. However, women members are still limited in number, as the productive crops of rubber and oil palm tend to be male-dominated. It is important, thus, that the promotion and expansion of these plantations take into account the likely impacts that they might have on livelihoods and farming system patterns, e.g. exclusion of women.

In its smallholder tenancy scheme, TOPP imposes prices and conditions, and the agreement is based on a 30–70 percentage split of revenues, with the company deducting 30 percent from the farmers' income. For mango production at ITFC, the farmers are organized in an association, the Organic Mango Outgrowers Association (OMOA), to ensure their local participation in the management of the scheme. The association meets quarterly with farmers and monthly with ITFC. In the case of Blue Skies, there are two cooperatives, the Fotobi and

75 OPOA includes one national executive and several executive councils within 12 community-based zones. The association included 954 members, of which 21 percent were women 2011. It ensures the quality of production, participating in the usual company inspections.

Bisease Amanfro cooperatives, which have 33 members and 30 members, respectively. The cooperatives receive technical advice from Blue Skies, which they in turn provide to farmers. They also provide assistance with contract negotiation and certification issues. In the case of KKL, farmers themselves are the voice of the cooperative and they have full ownership of the decision-making process and the formulation of business strategies (see Annex 6).

In the maize (MAFA case study) and sorghum (GGB case study) schemes,[76] farmers are not involved in price setting. However, due to the specificity of the produce (easy to sell and store), the prices offered by the companies are attractive and competitive and the price set by the GGB is higher than the market price due to a subsidy. In the sorghum scheme, the price is not discussed directly with the farmers but agreed between GGB and TechnoServe, which has a facilitating role in the arrangement. In the Afife scheme, the farmers are organized in the Afife Rice-Vegetable Irrigation Cooperative. It was reported that better participation of members in decision-making and also at regular meetings enhanced the capacity of the cooperative to ensure transparency in the management of financial resources.

Risk

Risk sharing can be uneven, unfairly penalizing the weakest partner of a contractual relationship. In general, farmers bear the risks associated with production (non-adapted technology, crop failure, adverse weather conditions, incidence of pest and disease) and seldom does crop insurance feature in contracts. Farmers who cultivate only one crop are more subject to production risks. It was observed that in some schemes (e.g. GREL, TOPP, Blue Skies) farmers are encouraged to intercrop and/or hold a small parcel of land for food farming, particularly in the first 2–3 years before crop maturity. Contract negotiation should press for the provision of weather insurance or clauses that would allow for restitution for damages incurred during production. Inclusion of such terms in contracts would be beneficial to all parties, minimizing production risks for farmers and reducing marketing risks for companies. It would also help if technology adaptation issues as well as risks and uncertainties were spelled out clearly in contracts. It is important to establish an equitable sharing of production and market risks and to be able to make an accurate calculation of the benefits. In contract farming, it is important to determine in advance a guaranteed price for produce or a clear formula for its determination.

The level of a farmer's risk varies according to the commodity grown. Perennial tree crop production present a high risk for farmers because: (i) they entail long-term investments, including commercial loans ranging from 15 to 20 years (GREL, TOPP); and (ii) they face the risk of price fluctuations for cash crops related to international markets. Being commodity crops, tree crops are subject to substantial price fluctuations, which act as a disincentive to smallholders to enter the sector or invest in the improvement of their land. It was reported that TOPP farmers (both outgrowers and tenants) have not been happy with the price fluctuations but they admitted that every price reduction was jointly negotiated with the company and their association in a transparent manner. It was observed that the risk is even more pronounced with perennial crops, as farmers are tied to the investment and cannot switch to alternative land uses. In the case of rubber production, the risk is further aggravated as the produce can only be sold to one company in Ghana and that company is operating under a monopsony regime. Conversely, the rubber investment presents a lower risk in terms of crop failure and provides farmers a steady stream of income throughout the year.

76 Masara N'arziki Farmers' Association (MAFA) and GGB.

In the case studies of Blue Skies and ITFC (pineapple, mango), the main risks are associated with produce rejection (due to non-compliance with agreed produce standards) and change in varieties to meet international market requirements. The risk of produce rejection is mitigated when a company provides extension services and production monitoring throughout the production cycle, which happens with a majority of the companies studied. However, in the event of a sudden change in customer preferences in the international market for multiseasonal crops (i.e. pineapple), smallholder farmers may be unable to adapt quickly and can run the risk of being excluded from the market. For example, when the pineapple industry shifted production from the 'smooth cayenne' to the 'MD2' variety,[77] due to the strong competition from Latin America (Costa Rica, Brazil), the technical support offered by the pineapple producers was not sufficient to push the change down to smallholder level and thus smallholder pineapple producers were excluded from the market. The investment required for switching variety, coupled with the lag time to crop maturity, proved to be unaffordable for them.[78] The main concern is that the cost of compliance with certification requirements renders smallholder production unfeasible.

Reward

With regard to perennial crops, the financial cost assumed by farmers is much higher than the cost assumed for crops in other sectors. Farmers carry the investment costs and bear the full financial risks, while the companies provide highly specialized technical assistance and an assured market for the outgrowers produce in the case of rubber, oil palm and mango. For rubber, the ROAA and GREL jointly set the price. From the farmers' weekly payments for the rubber they deliver, the company deducts: fees for extension services, loan repayment and transport if it collects the production; ROAA's annual membership fee; and a percentage as savings for capital accumulation (fidelity bonus) on behalf of the farmers, which is refunded to them at the end of the year. The farmers' gross and net income formulas are synthesized below (see also Annex 1):

In the case of oil palm (TOPP case study), the pricing formula and payment terms are agreed and periodically reviewed by the parties in accordance with world market price adjustments. The price of the produce is indexed on the Rotterdam price index PALMROTT and farmers receive 10–13 percent of the world price. The method of payment differs depending on whether payment is made to a farmers' association or an individual farmer. The association delivers the produce and receives the payment at the end of the month, while the farmers are paid upon delivery. Also, as part of the contractual arrangement, there is a clear loan repayment schedule that is linked to the harvesting pattern of the oil palm. The investment per ha is less significant in amount but is, as in the case of TOPP, entirely supported by the farmers. The FBO is not involved in price setting but it engages in consultations when a reduction of price is proposed. Open dialogue and transparency in price setting enable farmers to understand the price structure and that the price to them depends on what the market is willing to pay.

Besides price, the main benefits to the farmers are the services provided to them by the companies. These services include technical advice on good agricultural practices, financial matters (record keeping, farm budgeting and

77 The MD2 variety is more savoury and has a longer shelf-life than the former export varieties (smooth cayenne).

78 Pineapple is a multiseasonal crop that requires 14 months to mature.

Pricing formula

$P = 64\% P_{m-1}SICOM$

$I_g = [64\%P_{m-1} * Q\ (58.5\%_{rc})]$

$I_n = I_g - (Ig * 2.5\%Ext) - (I_g * 1.5\%Ass) - (I_g * 4\%Sav) - (I_g * 25\%Loan)$

where P = price; Pm = monthly price; SICOM = Singapore Commodity Exchange; Q = quantity; rc = rubber content; N = net; Ext = extension services; Ass = association fees; Sav = savings; Ig = Income gross; In = Income net; and Loan = loan repayment deduction

cost analysis) and ways to increase yields per hectare, and provision of quality inputs. In return, the companies benefit from assured quality and quantity of produce. Access to credit or help in accessing credit is another major benefit that most outgrowers highly appreciate.

Blues Skies rapidly increased its processing capacity through the development of an outgrower scheme with smallholders that ensured it a steady raw material supply. It has a good reputation for offering a higher price and paying participating farmers promptly (farmers are paid within two weeks after the fruits are delivered). As a result, farmers are encouraged to save and invest in their farms. Similarly, farmers are motivated to participate in the outgrower scheme not only for the competitive prices paid but also for the high-quality extension service, close production monitoring and training that the company provides. In addition, the company offers, as part of the package, produce collection at farmgate, thus reducing the transportation costs of farmers. Smallholder pineapple farmers participate in one of two cooperatives (Fotobi and Bease) that represent the farmers in price negotiations and assist with contract and marketing issues. Blues Skies rejects fruit only when it does not meet the requirement on sugar content, which the company closely monitors. This means that farmers are able to sell most of their fruit to the company. When their fruit is rejected, they can revert to the processing market where requirements on sugar content and size are not so stringent. In the past, the company provided interest free loans to committed and loyal smallholder farmers. However, due to the credit crunch, the company stopped lending its own funds. Recently, it borrowed some money from a local commercial bank (Akuapam) and on-lent the funds to individual farmers at subsided interest rates (see Annex 4).[79]

In the maize scheme (MAFA case study), the price is agreed in advance by an informal farmers' association that was formed with the assistance of the company Wienco and the TIPCEE programme. However, the association is still unstructured and not financially viable, as farmers do not pay dues as yet. Theoretically, farmers are supposed to sell 70 percent of their produce to the company. In practice, the percentage sold to the company is around 50 percent. A compromise approach has been proposed, in which farmers are contracted to sell only a portion of their produce to the company, while the remaining produce is either sold to the spot market if the price is higher or saved for household consumption. In the sorghum scheme (GGB case study), the main issue is the unprofitability of the scheme for GGB; thus its sustainability is questionable at the current production level and selling price, as imported barley is significantly cheaper than local sorghum (see Annex 2).

The roles of various actors in promoting smallholder linkages

Government

Three main governmental bodies play a key role in the development of commercial agriculture and smallholder linkages: the Ministry of Food and Agriculture (MOFA), the Department of Cooperatives (DoC) of the Ministry of Employment and Social Welfare (MESW), and the Ministry of Finance and Economic Planning (MOFEP). In addition, the role of the National Development Planning Commission (NDPC), under the Presidency of the Republic, should be mentioned.

Ghana's MOFA is the ministry charged with the development of the agriculture sector, 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. Under the programme of the Medium Term Agriculture Sector Investment Plan (METASIP), MOFA has planned various activities for the promotion of commercial agriculture and

79 Company manager and some farmers, personal communications, July 2011. The commercial interest rate is 32 percent and the company applies a 20 percent interest rate to farmers, thus subsidizing loans by 12 percent. The motivation for on-lending to individual farmers was not fully explained, nor was the number of farmers benefiting from this credit service revealed.

smallholder linkages.[80] As these activities are not included in a comprehensive strategy for commercial agriculture, there is a high risk that their implementation will lack coherence and synergy. A comprehensive strategy needs to be developed and MOFA could undertake this task. This would enhance synergies among existing strategies and policies.

The mandate of the DoC is to facilitate the development of cooperatives to empower farmers. Specifically, the DoC is responsible for: (i) creating an enabling environment for the operations of cooperatives and non-cooperative groups; (ii) facilitating the formation of cooperatives; (iii) building the capacity of cooperatives and other groups (boards, managers and staff, and rank and file members) for effective and efficient service delivery.

The key roles of MOFEP in the promotion of commercial agriculture are: (i) the creation of an enabling environment (including fiscal policies) for investment; (ii) the promotion of the private sector; (iii) the allocation of public resources for the development of the various sectors of the economy (i.e. the resources that MOFA would need for the implementation of METASIP); and (iv) ensuring price and exchange rate stability. MOFEP is also responsible for the development of the cocoa and coffee subsectors.

The National Development Planning Commission (NDPC) was established to advise the President of the Republic of Ghana (and the parliament upon request) on the development of policy and strategy, to prepare and ensure the effective implementation of approved national development plans and strategies, and to coordinate economic and social activities countrywide. The commission leads the preparation of the Coordinated Program of Economic and Social Development Policies 2010–2016, and the Medium Term National Policy Framework – Ghana Shared Growth and Development Agenda (GSGDA) 2010–2013, and coordinates the implementation of these overarching policy strategies. NDPC has developed guidelines for sector and district planning, and monitoring and evaluation. In this vein, it will oversee the implementation of METASIP on behalf of the Presidency.

Farmer-based organizations

FBOs constitute a means by which farmers can enhance their market power. MOFA distinguishes five major types of farmers' organizations and/or groups in Ghana: (i) traditional associations; (ii) multipurpose associations; (iii) informal contact groups; (iv) agricultural (formal) cooperatives; and (v) national farmers' organizations (federations of FBOs). Traditional associations have their roots in the value system and customs of the various ethnic groups. They are usually formed during certain periods of the cropping season. Multipurpose associations are made up of a range of community-based groups, usually organized on a need basis. Financial institutions, NGOs, government agencies and religious groups also contribute to the formation of such groups, especially the women's groups. Informal contact groups are entry points for organizations such as the Extension Services Directorate of MOFA. They are perceived to be effective channels for the delivery of government development services. Agricultural cooperatives are farmers' organizations with a business and profit orientation and include production and marketing cooperatives, poultry and livestock cooperatives, fishing and marketing cooperatives, and food processing and marketing cooperatives. They can be a starting point for farmers' organizations in a contract farming scheme, but to be fully effective, they have to evolve into professional organizations.

Two good examples of FBOs that contribute to strengthening the farmers' voice are: the Ghana National Association of Farmers and Fishermen (GNAFF) and the Cocoa, Coffee and Shea Nut

80 MOFA has planned various activities under METASIP that cover the main roles the government is expected to play for the promotion of commercial agriculture and smallholder linkages These include: (i) strengthening the capacity of FBOs and promoting smallholder linkages; (ii) promoting producers' access to agricultural inputs and services, including financial, irrigation and mechanization services; (iii) developing and diffusing technology; (iv) developing rural infrastructures; (v) promoting off-farm activities, including the establishment of agro-processing small and micro enterprises; and (vi) promoting Ghanaian products in the domestic and international markets. However, the planned activities are dispersed among the programmes and components presented above.

Farmers Association (CCSNFA). GNAFF was formed on the initiative of MOFA and has been operational since 1993. Membership embraces all practicing farmers and fishers from both agricultural cooperatives and non-cooperatives. Specifically, GNAFF, being the 'umbrella' of all farmers' organizations, has the following objectives: (i) to unite all farmers and fishers into one strong body; (ii) to act as their mouthpiece; and (iii) to stimulate and increase public interest in farming and fishing. GNAFF has been a top-down creation and its influence is not very felt at the grassroots level. Its focus appears to be the distribution of inputs. However, GNAFF could become effective as the representative of FBOs in the dialogue with the government for the design and implementation of policy measures required for the promotion of commercial agriculture. CCSNFA functions as a lobbying organization for cocoa farmers' interests and is in a position to negotiate cocoa prices with the government.

Intermediary agencies

Intermediary organizations such as NGOs are playing a more active role in improving agricultural productivity by assisting farmers in a number of ways, including enhancing their access to agricultural technologies. Their increasing importance has been fuelled by their impartiality, financial independence, the stringent financial constraints faced by many public institutions, as well as the confidence placed by DPs in the capacity of NGOs to play a role in agricultural development. In Ghana, NGOs such as TechnoServe, the SEND (Social Enterprise Development) Foundation, the Adventist Development Relief Agency (ADRA), the Association of Church-based Development Projects (ACDEP) and ACDI/VOCA are engaged in fostering smallholder linkages.[81] They promote market access and business development activities and are actively engaged in supply-chain development. Their activities include providing market information, linking producers to buyers, building the negotiation skills of smallholders, building capacity in group formation, and accessing vital inputs and technical information. They also cooperate with the public-sector extension services, by providing logistic support and facilitating the mobility of extension agents to reach smallholders in remote areas. The growing role of aggregators as intermediate actors between farmers and processors has been recognized as previously mentioned in the above discussion on the maize and tomato value chains.

Research and extension service

Technology development plays a key role in successfully linking smallholders to commercial agriculture schemes. Research institutions could contribute to contract negotiation by helping to identify and analyze the specific problems that farmers are likely to face in growing a specific crop. In general, the use of adequate technology is necessary to ensure the successful linkage of smallholders to markets. In Ghana, uptake of research output has been slow. The main issues include: (i) limited participation of clients in extension programme planning and implementation; (ii) underfunding of the Research Extension Liaison Committees (RELCs); (iii) limited access to extension services, especially by smallholders in general; (iv) undeveloped capacity of FBOs to access or deliver services; (v) limited funding of public-sector extension; and (vi) poor accessibility to remote areas, which limits extension service delivery. A number of outgrower schemes have been addressing these issues by providing technical support and access to quality inputs to participating farmers. By linking the activities of the Ghanaian RELCs to the implementation of commercial agricultural schemes, the country would achieve a greater convergence of smallholders, research institutions and processing companies. Table 12 summarizes the strengths and weaknesses of the various actors presented above.

81 Refer to the examples of their interventions presented in previous chapters.

Table 12: Strengths and weaknesses of the actors involved in promoting smallholder linkages

	Strength	Weakness	Proposed intervention
Government	• Existence of ongoing field interventions aimed at promoting commercial agriculture. • Provision for a number of activities expected to contribute to promoting commercial agriculture in FASDEP and METASIP. • Provision of fiscal incentives.	• Existing and planned activities not included in a comprehensive policy for commercial agriculture. Cooperative Decree not conducive to business-oriented FBOs and still to be approved.	• Develop a comprehensive strategy for the development of commercial agriculture and smallholder linkages. • Review and implement the Cooperative Decree.
FBO	• Existence of various FBOs throughout the country. • Existence of FBO development fund and other mechanisms for the promotion of FBOs.	• Limited business orientation. • Lack of professionalism. Cooperative Decree not conducive to their development.	• Create a mechanism to strengthen the capacity of FBOs and enhance their professionalism in commercial agricultural schemes.
Intermediary agency	• Good knowledge of local culture and commodity chains. • Good relationship with smallholders and the private sector.	• Difficult access to financial resources.	• Create adequate mechanisms to facilitate the access of agribusinesses to financial resources.
Research and extension agency	• Existence of strategy and decentralized mechanisms.	• Low level of budget disbursement. • Lack of a direct linkage with commercial agricultural schemes in the districts. • Slow technology uptake and innovation.	• Improve the disbursement level of the budget for agricultural research. • Orient RELCs to support commercial agricultural schemes in the districts. • Utilize the participatory process in testing new technology.
Smallholder	• Strong will to enter into business with entrepreneurs.	• Difficult access to agricultural inputs, extension services, financial services and irrigated infrastructures. • Weak capacity to negotiate with agribusinesses. • Limited farming and management skills.	• Promote innovative mechanisms to ensure the access of producers to inputs and services. • Create a mechanism to strengthen the capacity of FBOs and enhance their professionalism in commercial agricultural schemes.
Agribusiness actor	• Interest of private operators in investing in agriculture. • Knowledge of the business environment in Ghana. • Knowledge of the Ghanaian cultural features that affect agribusinesses. • Knowledge of the commodity chains.	• Fiscal policy not sufficiently conducive, according to agribusinesses. • Limited access to financial resources.	• Identify and implement complementary measures to make the fiscal environment attractive for agribusinesses. • Create adequate mechanisms to facilitate the access of agribusinesses to financial resources.

Source: Authors' compilation.

Chapter 3 - Key findings, challenges and constraints

Ghana is at a conventional stage in the development of contract farming, although some agriculture sectors are better performing than others (rubber, oil palm, mango). Tree crop farmers do require state intervention in terms of: (i) financial support (medium- and long-term credit); (ii) infrastructure development (i.e. roads, power supply for transformation plants); (iii) improved land tenure system; and (iv) attracting investors for the financing of specific crop production; and (v) prevention of free riding by newcomers. Provision of extension services and quality inputs is not a major issue, as extension services and inputs are provided primarily by companies with the assistance of NGOs (TechnoServe) and programmes (i.e. TIPCEE). Some of the sectors (e.g. rubber, oil palm) currently operate under a regime of monopsony or oligopoly, which is particularly common in the early stage of contract farming development. The grain sector, which is currently less developed than the other sectors, would require a greater degree of state intervention in infrastructure development (e.g. rice/vegetable irrigation schemes, electrification, processing and storage facilities), research on adapting varieties, input and fertilizer policy, extension services and credit provision if it is to expand contract farming.

Incentives to develop business linkages

The key incentives for companies and smallholders to develop business linkages are identified and ranked in Table 13. For smallholders, the ranking is less hierarchical than for companies as the first three incentives are equally important and often correspond to the constraints they face.

Access to land

Access to land is a major issue to developing business linkages and commercial agriculture in Ghana. Concession of both government and communal land for commercial agriculture is a controversial issue. Inclusive outgrower schemes with or without nucleus plantations may provide a better alternative to large-scale land acquisition for all parties involved, including government, investing companies and smallholders. When the expectations of each party involved are met, it becomes a win-win situation, as the Thailand case study would indicate. The government should play a facilitating role in land acquisition but should not be a direct owner.

Securing farmers' land rights is crucial to smallholders' empowerment. As the value of land in Ghana is increasing and land can be purchased or leased by real estate developers in peri-urban areas, there is an emerging trend of selling or leasing communal lands entrusted to chiefs and family elderly heads, without consulting them or sharing the proceeds with them.[82] The GoG can use its good offices to assist in the securing of lease agreements between investing companies and traditional authorities, while protecting smallholders' rights. (World Bank, 2010).

Improving the security of tenure may help local people to avoid being dispossessed of their land. Government and the World Bank can play a role in improving the security of tenure and supporting local farmers' groups. Strong involvement and interaction with local communities must provide the basis for a large commercial farm strategy: land grabbing should be avoided and compensation for land should be transparent. The literature suggests that collective registration of communal land could serve as a means of protecting local rights (Cotula et al., 2009).

82 Alhassan, O. 2006. See also Twerefou, D.K., Osei-Assibey, E. and Agyire-Tettey, F. 2011. Available at http://www.academicjournals.org/JDAE.

Table 13: Key incentives for companies and smallholders to develop business linkages

Company	Smallholder
Access to land	Access to markets
Expansion of produce supply	Access to financial services
Financial opportunity: exposure reduction	Stable (and in some cases higher) prices
Reputational risk and Corporate Social Responsibility	Technical assistance/extension
Reduction of production risks	High quality inputs
Import substitution	Fast and reliable payment

Source: Field findings.

Land-use mapping and best use of land

Invariably any land acquisition, be it for a large-scale plantation or for an inclusive outgrower scheme, would have an impact on local farming systems, and local livelihoods and income. All of the reports and studies place great emphasis on maintaining a diversity of production in the farming system and on developing other income earning strategies. Clarity is needed about the costs and benefits as well as socio-economic impacts of the various uses of land for other than agriculture Also, government should ensure that new plantations operating under nucleus estate or outgrower schemes are carefully assessed against socio-economic and environmental impacts (e.g. increased food insecurity in communities and biodiversity loss). The World Bank and the new Land Administration Project (LAP II) could help to set up effective systems such as an inventory of land rights and uses, land-use maps and a database of easily accessible information on agricultural investments, with attention paid to existing land uses (Cotula et al., 2009). An inventory of rights and uses would need to look beyond the formal legal situation and describe the de facto uses and claims to the land, including those that are at odds with state ownership and control.

The ongoing LAP, involving the World Bank and other ongoing projects (e.g. Millennium Challenge Corporation (MCC)) are linked to the land tenure issue. Despite these projects, the land registration procedure and land titling are still difficult for smallholders. These issues are being addressed in the second phase of LAP, which began the end of June 2011. LAP II includes both the strengthening of the land administration system and the improvement of the land registration system. It also includes land-use planning, codification of traditional rights and systematic land titling. GCAP could be complementary to and develop synergies with LAP though the provision of technical assistance or the channelling of funds to a private-sector initiative for improving land registration.

Access to credit

Access to credit is a major issue for the development of the agriculture sector. Currently, the access to financial services by farmers is limited, and in particular medium- and long-term financing. Only 16 percent of smallholder farmers had access to credit during the 2008 cropping season (SEND, 2008). This poor result is attributable to high interest rates, with commercial interest rates ranging between 29.5 percent and 33 percent, and cumbersome application procedures. Smallholder farmers rely on informal arrangements to obtain credit from family members, friends and informal loan providers or through outgrower schemes. The nine case studies discussed in this paper show that companies act as guarantor and facilitator in accessing credit on behalf of the farmers. Companies also share the same constraints as farmers in accessing medium- and long-term financing for agriculture. There is no assistance for the establishment of a business or for obtaining working capital.

Creating linkages with the financial institutions (FIs) emerged as an important issue. Farmers

have extreme difficulty in accessing credit not only because they are perceived as no-collateral, high risk persons by FIs, but also because they are for the most part illiterate and find the loan application process cumbersome. The private sector and FBOs have played a key role in helping to link farmers and financial institutions. GCAP could assist the GoG to make policy reforms to influence the FIs to broaden their scope of activities to the agriculture sector.

In an attempt to address the lack of access to finance, the Ghanaian-German Development Cooperation and KfW created the Outgrowers and Value Chain Fund (OVCF) which was launched in July 2011 by the GoG. OVCF was financed through an agreement with the Ghanaian-German Development Cooperation and KfW amounting to EUR 11 million, comprising a concessionary loan of EUR 10 million and a grant of EUR 1 million. The OVCF provides medium- and long-term financing (over 3 years) to upgrade the competitiveness of small commercial farmers and their agribusiness partners (processors) within their respective market. Medium- and long-term loans for productive investments are being granted to small-scale farmers and small-scale enterprises operating under existing outgrower scheme contracts. Large-scale agribusinesses, which are usually the nucleus companies in the case of contract farming, are acting as technical operators, providing technical assistance, and facilitate input provision but are excluded from the OVCF. The policy is to target well-structured value chains in the first few years (rubber, oil, cocoa) and devote between 10 percent and 20 percent of funds to less structured value chains such as those for maize and pineapple. Start-up business operations cannot be beneficiaries of the OVCF. Investment proposals must meet the following criteria: have poverty reduction as an objective; be environmentally friendly; include participation of women; and ensure the willingness of farmers to adopt good agricultural practices and to collaborate with the companies that act as technical operators.[83] Full operational details of the fund have been determined. Although such an initiative is indeed needed, there is a risk that the refinancing mechanism could end up subsidizing the financial service agencies and large investment companies. The government should play a monitoring role to ensure that the funds are not channelled to the sectors that have benefited the most from concessional credit, while stimulating the financial sector to serve the agriculture sector. Similarly, as oil palm and rubber production require large tracts of land to be economically viable, alternative uses of the land should be considered to avoid the displacement of farmers and consequent loss of livelihoods.

Access to improved/adapted seed varieties (rice, maize, sorghum)

The case studies discussed in this paper have demonstrated that farmers are willing to adopt new varieties and have actually done so. The private sector was the critical factor that ensured knowledge transfer about seed varieties to farmers. Some farmers carry out agricultural research and use their land plots as demonstration sites. What farmers lacked was access to seed varieties and even more so information on new or adapted varieties. Particularly in the grain sector, GCAP could envisage an awareness raising campaign about new varieties, the benefits to productivity and soil fertility from the use of new varieties, and the financial returns when switching to higher-yield inputs, which would justify the additional investment cost. Private-sector support to farmers could entail the dissemination of seed varieties and promotion of farmer uptake of technology, the orientation of RELCs to support commercial agricultural schemes in the districts, and the promotion of the use of the participatory process in the testing of new technology.

Contract enforcement

Lastly, a major constraint to developing business linkages is weak contract enforcement and a jurisdictional system that is inefficient in managing the disputes arising from contract arrangements. Despite sound conditions for the enforcement of contracts (a new

83 Manager of KfW in Accra, Ghana, personal communication, July 2011.

commercial court, as well as 'fast-track' high courts; the growth in the use of alternative dispute resolution mechanisms, including both arbitration and mediation), contract enforcement and monitoring of compliance with contracts are still problems. Key issues in rule of law enforcement are the quality of local-level institutions and the state's capacity to enforce contracts. Weak farmers' associations' and local cooperatives should be strengthened and systems of local accountability and national enforcement should be implemented (Throup, 2011). The role of the state is crucial in addressing such issues as the regulatory framework and rule of law enforcement, both of which are key to the establishment and sustainability of contract farming schemes.

Factors which promote successful agribusiness linkages

The strength and sustainability of the business models discussed in this paper are attributable to the success factors listed below:

- genuine interest of companies in working with smallholders;
- understanding of the contract conditions by the actors;
- important role of farmers' organizations;
- transparent price setting mechanism and price agreement;
- knowledge transfer;
- commitment of company management staff and farmers;
- assured market outlet;
- prompt and reliable payment to farmers; and
- no side-selling.

The literature review and the nine case studies presented in this paper suggest that a company's genuine interest in working with local farmers and communities is key to the success of establishing smallholder linkages. It is also helpful to have international partners in the initial stage of development to ensure independent scrutiny and a fair negotiation process in establishing smallholder linkages. The investor's willingness to work with smallholders has to be translated into: (i) a transparent process of engagement with smallholder farmers; and (ii) a process of 'learning by doing', which requires time and resources that should be designated undoubtedly in advance.

Many partnerships failed in the past due to a lack of transparency and accountability in the process of setting up an agreement. In the absence of formal contracts and given the socio-cultural context of smallholders in Ghana, clear contract obligations and mutual commitment to ensuring fair play in price setting, a reliable and fast payment system, and a reliable and prompt product delivery service are crucial to the sustainability of contractual arrangements.

This holds true for all nine case studies presented in this paper. Mayers and Vermeulen (2002), proposed ten principles for more equitable deals in which terms are negotiated between both parties, namely the company and smallholders/company/farm community. These principles include: (i) mutual respect; (ii) a fair negotiation process; (iii) use of the learning approach; (iv) realistic prospects of mutual profits; (v) long-term commitment; (vi) equitably shared risks; (vii) sound business practices; (viii) sound livelihoods; (iv) contribution to broader development strategies; and (x) independent scrutiny. The government should be regulator and should monitor functions in order to: (i) ensure equitable deals, thus protecting the weakest party of the deal; and (ii) ensure that the right legislative and policy frameworks are in place to avoid negative socio-environmental impacts on local economies (e.g. land expropriation, loss of livelihoods and depletion of natural resources).

Stanton (2000) has identified the small scale of operations as the underlying factor for most of the challenges facing rural producers and suggests the formation of cooperatives as one way to overcome these challenges. However, at the same time, farmers should be encouraged to develop their own forms of group organization, based on an analysis of their own situation and the resources at their disposal, and to refrain from rushing

the process of group formation. As the case studies showed, the development and professionalization of FBOs are mutually beneficial to farmers and companies. By providing members with agricultural inputs, credit financing, transportation, storage facilities, and advisory and training services, effective FBOs enhance the output of their members and as a consequence their income. Other benefits to members of FBOs are reduced collection costs and easier production planning and delivery schedules. Through FBOs, companies can influence the practices of individual members to achieve quality requirements and could reduce their own transaction costs by dealing more efficiently with one partner (FBO) rather than individual farmers. Business-oriented FBOs could play a role in training local producers and organizing them into cooperatives or groups that facilitate the interface with larger businesses. However, it is important to highlight that the demands one places on farmers' groups should not exceed the groups' management skills.

Farmers are often the weakest party to the contractual arrangement and the weakest link in value chains. Enhancing farmers' access to market outlets and market information was reported to be an essential ingredient for strengthening the farmers' position. Similarly, by enhancing farmers' knowledge and management skills, farmers could improve their productivity and make informed decisions with regards to their farm investments. These actions contributed to the establishment of mutual trust and long-lasting relationships between the farmers and the companies (e.g. Blue Skies, GREL, TOPP, GOPDC). TIPCEE and some NGOs helped to increase farmers' access to market information and improve farmers' skills in several sectors, e.g. grains, horticulture and oil palm. It is critical that there be continuity in the support to farmers and in the capacity building of group members if smallholder commercial agriculture is to be promoted.

It was observed that some of the reasons underlying the reluctance of farmers to enter into contract farming with a company or the reneging of contracts by farmers are the lack of contractual transparency, unattractive output prices and limited understanding of the cost structure. Farmers often feel resentful because output prices are too low while the company's final price to the consumer has a high mark-up. However, farmers sometimes fail to understand that price includes transportation costs and taxes, and takes into consideration the exchange rate fluctuation. Maintaining the transparency of the pricing process can overcome a farmer's reluctance and distrust of contractual arrangements and partially avoid side-selling. A transparent pricing mechanism was highly appreciated by farmers and ensured mutual commitment by the two business actors and strengthened the linkage between them, as was reported in most of the case studies presented in this paper.[84] The price should be fixed so as to provide farmers with a 'fair' share of rents, while enabling commercial companies to make a profit. It was reported that a guaranteed and fixed price structure was broadly negotiated between the parties and based on the prevailing spot market prices or on a percentage of the world price, and in some cases (coffee, rubber, oil palm) it was even indexed to stock market prices.

Evidence suggests that farmers' associations play a key role in ensuring transparency in price setting and their support should be sought. Of all the companies included in the case studies, GREL's income formula was the best application of the transparency concept.

The innovative, flexible credit scheme discussed in the GREL case study (rubber) represents an example of good practice with regards to price transparency and flexibility, and a way forward in setting up credit facilities for outgrower schemes. As income is linked to the international rubber price, a fall or rise in the price automatically changes the loan repayment schedule. The GREL's income formula protects farmers' income against falling prices (as happened in 2009) and allows farmers to repay

84 Conclusions have been drawn from interviews with individual farmers, members of farmers' associations in Ghana, IFAD project staff and the managing directors of TOPP, Wienco and GREL.

their loans more quickly when prices rise (as happened in 2010/2011). In the case of long-term loans, the linking of income to price is more beneficial than fixed loan repayments, as it substantially limits the risk for farmers. The repayment loan has to be flexible and in line with a farmer's cash flow. Rigorous financial analysis of the production models is crucial for setting up the output price and the interest rate, and possibly for matching grant structures.

A review of the effectiveness of agricultural policy for smallholders

The government, with the support of various DPs, is implementing a number of interventions under the current METASIP; various activities are planned and geared towards the promotion of smallholder linkages. The proposed decree on cooperatives, which would regulate the functioning of FBOs, is not conducive to the development of business-oriented FBOs and needs to be revised before it is approved. Although the government delivered various acts that provide fiscal incentives for agribusinesses, the agribusinesses still find the fiscal policy unattractive.

The Agricultural Services Sub-sector Investment Program (AgSSIP) was the main programme implemented by MOFA between 2002 and 2006, with the financial support of the World Bank. The aim of the AgSSIP was to support and reinforce the development of improved demand-driven agricultural services for rapid agricultural growth and poverty reduction. It targeted smallholders through its sub-programmes on technology generation and diffusion, devolution of extension activities to district assemblies and promotion of FBOs. Under the Agriculture Development Policy Operation Program (AgDPO), 2008–2011, MOFA, with the financial support of the World Bank, implemented interventions to improve agricultural services. In 2010, about 63 interventions financed by 13 DPs were implemented in the agriculture sector.

A study conducted by the SEND Foundation in Ghana (2008),[85] used proxy indicators to measure the extent to which smallholder agricultural development has benefited from increased spending in the agricultural sector since 2003. With regard to irrigation facilities, only 19.7 percent of smallholders had access to on-farm irrigation schemes, of which 60 percent were non-mechanized. The subsidy policy on fertilizers enabled the increased use of fertilizers (69 percent). Despite the increased access to fertilizer and tractors, ensuring the sustainability of the delivery mechanisms and more affordable prices remains a challenge. Smallholders' access to extension services is reported to be low still: only 36 percent of smallholder farmers had access to or used improved seed varieties.

Table 14 presents a summary of the strengths and weaknesses of the policy environment for commercial agriculture and the interventions proposed to overcome the weaknesses.

85 SEND Foundation Ghana. 2008. Investing in Smallholder Agriculture for Optimal Results: The Ultimate Policy Choice for Ghana.

Table 14: Strengths and weaknesses of current policies for the development of commercial agriculture

Strength	Weakness	Proposed intervention
• Overarching policy documents consider commercial agriculture and the development of the private sector as major drivers for development.	• METASIP activities aimed at promoting commercial agriculture are dispersed among six programmes. This could generate a lack of coherence and a lack of synergy in the implementation of the various programmes and, therefore, hamper the effectiveness of the development of commercial agriculture.	• Develop a comprehensive strategy for the promotion of commercial agriculture. This could be supported by the commercial agriculture project (GCAP) under preparation, with the financial support of the World Bank.
• The policy for the development of the food and agriculture sector recognizes the importance of commercial agriculture and the need to promote smallholder linkages.	• The Cooperative Decree is not conducive to business-oriented FBOs.	• Enact a revised Cooperative Decree that would be conducive to the FBOs oriented towards business.
• Several government and DPs interventions are being implemented that contribute to the development of commercial agriculture.	• The interventions of government and DPs that are intended to contribute to the development of commercial agriculture are dispersed and difficult to coordinate: it is difficult to ensure synergy among them.	• Develop a comprehensive strategy that will help align and coordinate government and DPs interventions in commercial agriculture.
• The current Medium Term Agricultural Sector Investment Plan includes a number of activities[1] that will contribute to the promotion of commercial agriculture.	• Budget expenditure on the government interventions is less than the funds allocated. • Economic and social analyses to underpin the selection of proposed public investment projects are lacking.	• Ensure effective disbursement and expenditure of budget allocation.
• Mechanisms are being established to increase the access of smallholders to various agricultural goods and services.	• Mechanisms to provide access of smallholders to improved seeds, financial services and irrigation facilities are still weak.	• Develop innovative mechanisms to improve the sustainable access of smallholders to agricultural goods and services.
• Acts do provide fiscal incentives for the establishment of agribusinesses.	• High taxation, high wages and trade policies are still among the major concerns expressed by entrepreneurs.	• Identify and implement complementary measures to make the fiscal environment attractive for agribusinesses.

1 Facilitation of outgrowers schemes, promotion of investment and finance, development of infrastructures, improvement in farmers' market access and market performance; promotion of FBOs; and development and dissemination of technology.

Source: Authors' compilation.

Chapter 4 - Conclusions

This paper reviews the impacts of investments in agriculture, with a focus on inclusive business models practiced in Ghana. Despite the potential benefits that these investments would accrue, the literature suggests that investments, particularly when involving land acquisition, should: (i) be carefully designed according to the principles for responsible investments, taking into careful consideration the degree of inclusiveness of the business model proposed; (ii) ensure that the right legislative and policy frameworks are in place to avoid negative socio-environmental impacts on local economies (e.g. land expropriation, loss of livelihoods, depletion of natural resources); and (iii) ensure compliance with international best practices should national frameworks not provide adequate safeguards. Improvement in the capacity to scrutinize investment proposals and to negotiate is crucial if developing country governments are to ensure that private-sector involvement in agriculture and agriculture-related activities will contribute to the growth not only of the agriculture sector, but also of the entire economy and people's livelihoods.

The literature on collaborative business models indicates that, depending on how they are designed and implemented, such models can entail benefits for smallholders and can be used as a means of promoting inclusive commercial agriculture. The wide range of possible business models and the likely combination of their various elements demonstrate that there is no single business model that fits all purposes or no universal approach that guarantees success. Arrangements based on collaborative business models are multifaceted and their performance and likely benefits are highly dependent on the: (i) specificity of the commodity; (ii) type and size of the companies involved; (iii) the country context; and (iv) the level of support provided by facilitating bodies and government.

The experience in some representative countries has been focused on contract farming schemes, which are the most common arrangements in Ghana. Internationally, contract farming has been used to promote commercial agriculture and link smallholders to markets. The results indicate that contract farming yields positive returns for smallholder farmers in terms of increased income and acquired knowledge of agricultural techniques. The success of contract farming depends on a range of factors. Evidence indicates that a critical success factor is the strong commitment of the parties engaged in such schemes, namely government, private companies and smallholders. A strong commitment shared by the partners enables the sustainability of contract farming schemes. Evidence also indicates that for contract farming to succeed, the private sector must provide financial services, quality inputs, technical assistance, access to a viable market and competitive prices. In contract farming, key aspects are the determination in advance of a guaranteed price mechanism for produce, an equitable sharing of production and market risks, and an accurate calculation of the benefits.

Government policy can play a central role in promoting more inclusive business models by providing an enabling environment (supportive policies) and resources, and by facilitating the establishment of the schemes. The fulfilment of GoG's commitment to promote agribusinesses and link smallholders to markets would require a sound implementation of the activities promoted under METASIP, within a comprehensive strategy for commercial agriculture. Examples of policies that would set conditionalities or targets for all schemes include detailed regulation of available arrangements and detailed investor guidelines, which would be accompanied by a database on all available facilities, infrastructure, land and soil types, and irrigation systems. In Thailand and India, there was a general requirement that all agricultural investments allocate a percentage of total investment to contract farming. Compliance must be strong and monitoring is critical.

Ghana presents a conventional stage of development of collaborative business models. The most prevailing typology is contract farming that ranges from informal arrangements to schemes with a nucleus estate and outgrowers (see Chapter 2). There are some examples of management and lease contracts (TOPP, GODPC), and a successful example of a farmer-led business, KKL, which also involves a joint venture with international players for processing and distribution. Joint ventures between companies and FBOs tend to be rare in Ghana and KKL was the only such joint venture mentioned in the reviewed literature. However, where properly structured, equity participation by farmers' groups is particularly promising because real ownership of the business is entrusted to farmers.

Ownership and the board representation that ownership entails enhance the farmers' voice in decision-making. Evidence suggests that in recent decades the experience in agriculture sectors worldwide with joint ventures by companies and cooperatives has been growing. Examples of joint ventures in such countries as Mali (biofuels), and Kenya and Rwanda (both tea) were presented in Chapter 1. In the joint venture model, the benefit-sharing mechanism is complex and for benefit-sharing to be successful, robust capacity building within the cooperatives is needed. This holds particularly true for the Ghana context in that cooperatives and farmers' associations would need substantial support.

The most viable inclusive business model was the nucleus estate with outgrowers. This has also been corroborated by the international experience and the results of a recent study on large-scale agricultural investment projects carried out over 50 years by the World Bank. The World Bank also found that new investments are the most risky, while investments made in existing businesses yield higher returns.[86]

Contract farming has been used successfully in the production of tree crops, while it has produced mixed results in the horticulture sector (tomato, pineapple) and the foodgrains industry. Tree crop production (rubber, oil palm) does require state intervention in terms of financial support (medium- and long-term credit), infrastructure (roads and power supply) and regulatory access to land. Extension services and access to quality inputs are not major issues, as companies can provide them based on their nucleus estate experience and best practices.

The grain sector, which is currently less developed in terms of contract farming arrangements, would require a much greater degree of state intervention in the areas of research for adapted varieties, extension services, infrastructure development (e.g. rice/vegetable irrigation schemes) and access to inputs and credit.

Despite the debate as to whether contract farming is potentially exploitative of or beneficial to farmers, contract farming is likely to continue as a means of involving small-scale farmers in markets. The current debate on FDI in agriculture and land grabbing is drawing new attention to contract farming, particularly outgrower schemes, as a means of avoiding large-scale land acquisitions and livelihood loss. It has not been proved that such contractual arrangements reduce land grabbing but they might provide governments with an alternative to expropriation of land being used/owned by farmers. As shown in the GREL, TOPP and GGB case studies (rubber, oil palm and sorghum case studies), such arrangements have allowed large tracks of land to remain in the hands of farmers. However, as seen from the case studies, the landholding per farmer ranges from about 2 ha to 4 ha, suggesting that the poorest farmers are not the primary direct target of such schemes. Few women farmers are involved, as the production of cash crops tends to be male-dominated. It is, therefore, important that plans to promote and expand cash crop plantations consider the likely impacts on livelihoods and farming systems that might result in women's exclusion.

86 Expert meeting on international investment in the agricultural sector of developing countries. 22–23 November 2011, Trade and Markets Division. Rome, FAO. The World Bank presented the results of a study of large-scale agricultural investment projects funded by CDC from 1949 to 2000 with the aim to draw lessons from the past. Only one-third of CDC's investments generated moderately attractive internal rates of return (>12 percent).

The strengthening of farmer-based organizations is a critical issue in Ghana. A first step in this direction would be to revise the Cooperative Decree that is still pending approval. The implementation of the FBO development fund and other support mechanisms should be better oriented towards supporting the involvement of FBOs in specific commercial agricultural schemes in the various regions. Support from government and/or DP interventions would be instrumental in promoting the development of inclusive schemes. The GoG and GCAP can help to train local producers and to organize them to facilitate the interface with larger businesses. Promoting cooperation among farmers should go hand in hand with encouraging farmers to develop their own forms of group organization, based on an analysis of their own situation and the resources at their disposal, and to refrain from rushing the process of group formation. The demands one places on farmers' groups should not exceed their current group management skills and this is frequently overlooked.

Besides FBOs, another critical factor for business linkage success is a transparent price mechanism, which ensures mutual commitment and trust between companies and farmers. Smallholders have to be involved in price setting, understand fully the terms of the contract and their obligations, and honour the contracts. Similarly, companies have to keep up good communication with the farmers and closely monitor the contract arrangements, ensuring mutual adherence to the agreements, resolving production issues and strengthening their business relationships. In most cases, companies help farmers to overcome their financial constraints by providing advance credit or in-kind credit, or act as facilitators with the commercials banks. A close relationship between farmers and companies gives companies a comparative advantage over the banks in monitoring and enforcing credit agreements. Usually, companies recover their credit upon delivery of harvest. Only if smallholder farmers have access to market knowledge, credit, basic infrastructure, quality inputs and services, and are well organized can they effectively participate in changing markets and establish links with new market chains (supermarkets, agribusiness companies, processors, exporters).

The innovative, flexible credit scheme and income formula discussed in the GREL case study (rubber) represent an example of good practice in price transparency and flexibility and a way forward in setting up credit facilities for outgrower schemes. As a farmer's income is linked to the international price of rubber, a fall or rise in the price automatically changes the loan repayment schedule and subsequently a farmer's income. The formula protects a farmer's income against falling prices (as happened in 2009) and allows him/her to repay his/her loan more quickly when prices rise (as happened in 2010/2011). In the case of long-term loans, loan repayment linked to price movement is more beneficial than fixed loan repayment, as it substantially limits the risk for farmers. Loan repayment has to be flexible and in line with a farmer's cash flow. Rigorous financial analysis of the production models is crucial for setting up the output price, determining the interest rate and possibly matching grant structures.

The development and sustainability of farming arrangements based on the collaborative business models presented in this review depend on an integrated and comprehensive set of policies, services and actions (farm-to-market approach) rather than on separate activities such as the provision of credit, seeds or extension services. Thus, public- and private-sector partnerships (companies and organizations) are essential to such an integrated framework.

Economically non-viable projects would result in commercial farming failures. A sound analysis of the underlying farm economics that drive the business and financial analysis would help the development of sustainable and viable schemes. Assured viable market and private initiatives are clearly basic prerequisites for collaborative business models to be successful. The willingness of investors to work with smallholders has to translate into transparent

engagement with smallholder farmers and into "learning by doing" both of which require time and resources that should be programmed undoubtedly in advance.

The decision as to the most suitable inclusive business model to follow will vary from investor to investor and from community to community: there is no blue print for the most suitable model. The choice will be the result of negotiations between communities and companies (some communities may be interested in an equity stake, others may have different preferences) and considerations concerning commercial viability, which may vary from crop to crop.

Annex 1 - Ghana Rubber Estates Limited case study

Contract farming: Nucleus estate with smallholder outgrowers

Introduction

This case study presents the rubber outgrowing operations of GREL in Ghana. It investigates: (i) the motivation and primary incentives for initiating and maintaining a contracted outgrower relationship between both the company and farmers; (ii) the key factors attributable to the continued success of its outgrower activities; and (iii) the outstanding challenges that lie ahead of it.

Description of GREL

GREL is a rubber production company that owns the largest industrial rubber plantation in Ghana, controlling 98 percent of production. GREL headquarters are in Takoradi, in Ghana's Western Region. The company holds a 36-year concession on 15 000 ha, of which more than 13 000 ha is planted. The Rubber Outgrowers' Plantation Project (ROPP) was started in 1995 to increase GREL's supply of raw material, with support from the Government of Ghana (GoG) and development partners such as the French Development Agency (AFD – Agence Française de Développement), Germany's Reconstruction Credit Institute (KfW – *Kredit für Wiederaufbau*) and the World Bank. The world market for natural rubber is currently growing at 4 percent per annum and 85 percent of production is cultivated by smallholders. Rubber growing is a perennial activity and provides a constant source of income throughout the year, with harvests an average of twice a month. The outgrower scheme currently includes 5 450 farmers with a total plantation area of about 21 500 ha. Currently, the company is in the fourth phase of ROPP:

ROPP IV			
2010–2014			
EUR 17 million (AFD non-sovereign loan)			
Expected outcomes: 10 500 ha - 2 750 farmers			
ROPP Previous phases:			
Phase I	1995–1999	1 200 ha	400 farmers
Phase II	2001–2005	2 855 ha	500 farmers
Phase III	2006–2011	7 000 ha	1 800 farmers
Total		11 055 ha	2 700 farmers

Incentives for outgrowing

The following are GREL's core reasons for promoting the rubber outgrower scheme:

Expansion of its rubber production capacity

Given GREL's limited ability to expand its land resources directly, as in Ghana land acquisition is very difficult, the outsourcing of production provides an alternative way of increasing its rubber supply. An outgrower scheme was the best available option to increase and maintain the volume and regularity of raw material supplies for GREL's processing factory.

Financial opportunity

GREL does not invest its own capital in developing the outgrowers' plantations but is still able to benefit from reduced production costs per kilogram for larger volumes. However, the company has increased its investment costs in capacity building and management of its staff to work with outgrowers. Outgrowers bear their full investment costs, and also supervise farm labour. The role of donors and the government in providing long-term capital for rubber planting has been instrumental in this scheme.

Legitimacy within the plantation area

The outgrower scheme helps to build relationships with the local communities. The scheme is also attractive for communities because GREL operates to provide social infrastructure, such as schools and village clinics.

Structure of the outgrowing operation

Organization

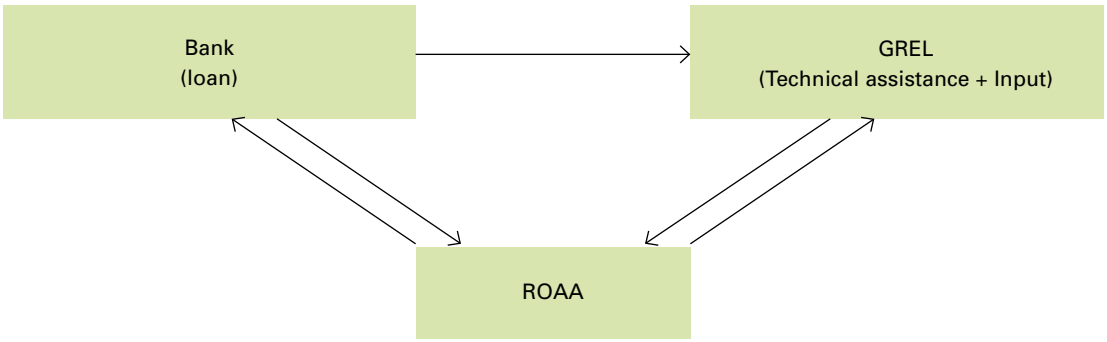
The outgrower scheme has a tripartite structure: (i) financial operators – ADB and the National Investment Bank of Ghana (NIB); (ii) GREL, providing technical assistance and planting material; and (iii) the Rubber Outgrowers' and Agents' Association (ROAA) (Figures 1–2). GREL and each individual farmer enter into a tripartite agreement with the banks to finance the plantation. GREL funds 50 percent of the technical assistance from its own resources and charges the balance to farmers, deducting it from the payments it makes for their rubber.

The funding mobilized by the ADB to finance farmers' activities is a highly concessional credit line provided by AFD jointly with the development partners previously listed. The first three phases were funded with a sovereign loan to the GoG which acted as guarantor, absorbed the foreign exchange fluctuations and cofinanced the extension services. In the fourth phase, the loan is a non-sovereign loan directly to ABD without the government's guarantee, as ROAA has taken over from the GoG. The EUR 17 million granted by AFD to ADB will cover the investment cost of planting, including the maintenance costs during the crop immature period, with the exception of the families' contributions in the form of labour requirements. ADB cannot exceed a 4 percent spread on the interest rate. Farmers engaged in the fourth phase receive a long-term loan at a 6.45 percent annual interest rate with a seven year grace period.

GREL management

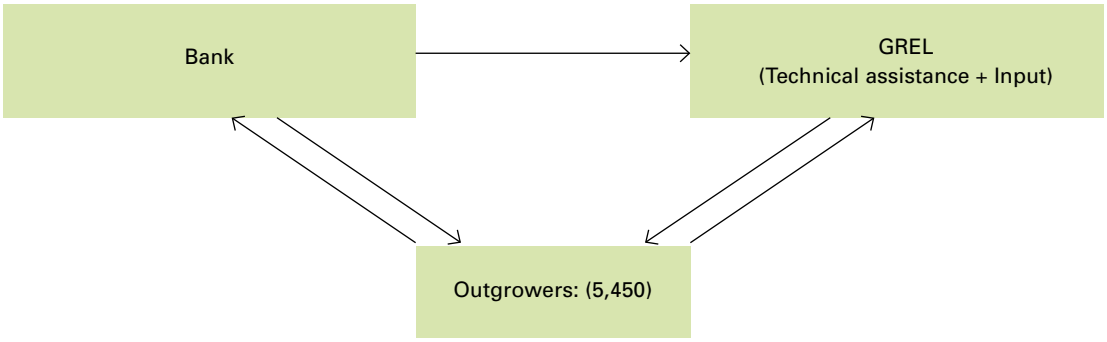
The plantation management comprises 18 officials, of which four are directly involved in the management of the outgrower scheme. The company uses its own extension agents to supervise and monitor the outgrowers' farms.

Figure 5: GREL tripartite structure of ROPP with the ROAA



Source: Authors' compilation.

Figure 6
GREL tripartite structure of ROPP with individual farmers (individual loan)



Source: Authors' compilation.

Method of selecting outgrowers

GREL selects outgrowers through a multiple-step procedure. First, rubber farmers prepare applications, proving that they have tenure or use rights over at least four ha of land. Some of the farmers who apply are already rubber farmers but their plantations are old and unproductive. During the second step, GREL inspects the suitability of the land for rubber production, verifies the land titles or deeds and carries out a social check of applicants,[14] with assistance from the ROAA. Farmers have to provide proof that they have an alternative source of income (on-farm or off-farm) to cover the period between making the on-farm investment and the first harvest (in the eighth year), to avoid jeopardizing the investment or the farmer's livelihood. Farmers are encouraged to intercrop the young rubber trees with food crops in the first two to three years, and GREL provides technical assistance in cropping pattern options, the application of inputs, and integrated soil management techniques. It was reported that women are usually involved in the intercropping (cassava, peppers) under a sharecropping agreement (for two-thirds of the harvest).

14 Through the farmers' organization, GREL verifies that the name on the application is that of the landowner, and checks whether the applicant has any pending issues in the community or with others (interview with Mr David Nuno, operation manager of the outgrower scheme, FAO Investment Centre mission findings from July 2011.

Financial investment

The on-farm investment required from the farmer is USD 2 400/ha, normally obtained through a loan, without the farmer contributing equity. Loans are structured as follows: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- a concessionary interest rate of 6.45 percent;
- flexible repayment periods: loan repayments cannot exceed 25 percent of the farmer's annual income from rubber and are deducted directly from the price he/she receives for the rubber (see the income formula, in the section "Contracting and pricing strategy" below);
- a seven year grace period (capital and interest);
- cash advances, if needed, for maintaining the plantation before it matures (at year seven).

Land property is one of the main constraints/issues in Ghana. The farmer willing to join the scheme has to show a property right or a traditional property right on the land he wishes to cultivate under rubber. The traditional right is a title/right given by the local chief and often includes a tenancy or sharecropping agreement on the land. The farmer has to indicate in the outgrower contract with the company, the successor/next kin in the plantation in case of death.

Outgrowers' organization

ROAA was established in 1995 and has 5 450 farmer members and 19 executive council members, two of whom are women. It assists in: (i) the selection of rubber farmers; (ii) loan agreements; (iii) annual price negotiations with GREL; and (iv) the prevention of side-selling. Members pay an annual fee equivalent to 1.5 percent of their income, thus ensuring the association's sustainability; at present, ROAA's executive management is not paid. Association dues cover seminars and venue costs, representation and price negotiation services, district meetings and executive members' costs for attending meetings (transport, accommodation). ROAA manages a small nursery of rubber trees and a small shop, and deals with members' conflicts and theft problems. It seems to be gender-friendly, as 25 percent of its members are women, even though there are comparatively few women rubber farmers – as a cash crop, rubber production tends to be male-dominated.

Procurement and distribution of inputs

GREL supplies all of its outgrowers with high-quality seedlings. Farmers pay in full for the planting materials, using part of their loan package. Recently, the farmers' association has started to manage a small rubber tree nursery and supplies farmers with seedlings. Chemical inputs are supplied by GREL, with the costs being deducted from either the loan amount or the rubber payments given to farmers. GREL provides training in input use and natural resources management. It supervises the application of inputs during and after the training period, to maximize the impact on production and minimize the impact on the environment.

Coaching, training and monitoring of outgrowers

GREL trains the farmers and tappers in advanced and innovative technology several times a year and holds regular problem-solving meetings with them and their association. Production techniques/technologies are constantly evolving and are rapidly transferred to the outgrower farmers to improve their production levels. GREL also monitors the farmers' production. ADB representatives train the farmers in bookkeeping and how to read bank statements, enabling them to make informed decisions regarding on-farm investments.

Contracting and pricing strategy

The contract between GREL and the outgrower is in place for the duration of the financing loan, normally 15 years. The financing agreement is a major innovation and an example of good practice. The loan repayment period is flexible and the farmers commit to repaying 25 percent of their income from rubber (see income formula below). Farmers' representatives engage in annual price negotiations with GREL. The price is indexed on the Singapore Commodity Exchange (SICOM) and set at 64 percent of the prevailing monthly average price. A second payment is foreseen at the end of the year, based on the real rubber content of the produce (the base figure is 58.5 percent). From farmers' weekly payments for the rubber they deliver, GREL deducts fees of: (i) 2.5 percent for extension services, representing about 50 percent of the actual cost, with the remaining 50 percent being financed by GREL; (ii) 25 percent for loan repayment, and transport if GREL collects the production; (iii) 1.5 percent for ROAA's annual membership fee; and (iv) 4 percent as savings for capital accumulation (fidelity bonus) on behalf of the farmers, which is refunded to them at the end of the year. The formula for calculating the farmers' gross and net income can be synthesized as follows:

Pricing formula

$P = 64\% Pm_{-1}SICOM$

$Ig = [64\%Pm_{-1}*Q (58.5\%rc)]$

$In = Ig - (Ig*2.5\% Ext) - (Ig*1.5\% Ass) - (Ig*4\% Sav) - (Ig*25\% Loan)$

where P = price, I = income, g = gross; Pm = monthly price; Q = quantity; rc = rubber content; n = net; Ext = extension services; Ass = association fees; Sav = savings; and Loan = loan repayment deduction.

Rubber tree tapping

Source: Field mission in Takoradi, July 2011.

This formula is particularly interesting as it represents a good practice for price transparency and flexibility. As the farmers' income is linked to the international rubber price, a fall or rise in the rubber price automatically changes the loan repayment schedule. The formula protects farmers' income against falling prices (e.g. as in 2009) and allows them to repay their loans more quickly when prices rise (e.g. as in 2010/2011). For long-term loans, this repayment schedule is more beneficial than a fixed loan repayment, as it substantially limits the risk for farmers. The farmers' association is considering offering extension services, to capture the 2.5 percent of farmers' income deducted for extension. This would not have been possible without such a transparent process. Open dialogue and transparency in price setting enable farmers to understand the price structure and to recognize that the price depends on what the market is willing to pay.

GREL raw rubber procurement operations

Normally, outgrowers deliver twice a month, at their own cost, the produce to the processing plant. The company, if required, offers a transportation service for the produce (farm to processing plant) at a fee proportional to the distance.

Incentives for farmers

Through the outgrower scheme, existing rubber farmers have increased both their production and their productivity, achieving a significant yield increase from 0.8 tonnes/ha to 2 tonnes/ha. This is the result of the adoption of improved agricultural and management practices and access to improved planting material and efficient technical assistance. Income levels have increased considerably, which has prompted other households and community members to participate in the scheme.
Another important benefit of this contractual arrangement is farmers' increased creditworthiness with local banks. Each outgrower works with a credit system and has a bank account into which

he/she receives the weekly payments for produce delivered, with credit repayments deducted automatically. GREL offers payment through the switch card system, which would allow farmers to be paid within a few hours of produce delivery.

The following are among the numerous reasons that outgrowers cite for working with GREL:

- it respects the contractual terms and pays promptly;
- it provides good-quality rubber tree seedlings;
- it provides training and technical advice on sustainable agricultural practices and financial matters (record-keeping, farm budgeting and cost analysis);
- it organizes bulk purchase of fertilizers, which it resells to outgrowers at the bulk rates it paid for them;
- it offers an adequate financial package;
- it links farmers to bank loans with reduced interest rates and allows them to accede to other financial services.

During the plantation's period of maturity (after 7 years), an outgrower's income is significantly high (Table 15) and is guaranteed even if international rubber prices fall. At the end of the trees' production period (15 to 20 years), rubber wood has proved to be a good substitute for the wood from primary forests, providing smallholders with an additional source of income when they have to replant their plantations.

Fundamentals for success of the outgrowing operations

According to GREL management and farmers, the main reason the outgrowing operations are so successful is GREL's close relationships with the farmers. As described throughout this case study, GREL builds its relationships with individual farmers by providing services such as extension and advisory support; financial/credit support from the credit sector; transparent price settings; strong farmer representation; and provision of high-quality seedlings. In return for these services, outgrowers do not side-sell and most provide the quality and quantity of produce that GREL requires. Equally, GREL's monopsony position has helped in preventing side-selling. The business model has shown significant income increase by enhancing farmers' access to financing and adequate technical support.

Table 15: Income for individual outgrowers during plantation maturity

	Actual income	Actual income	Projected income
	2009	2010	2011
Production (kg wet)	16 260	18 500	18 841
Area (ha)	4.76	4.76	4.76
Average price (USD/kg)	0.52	1	1.3
Gross income (USD)	8 419	17 605	25 121
Operational expenses (USD)	1 600	1 840	2 040
Loan repayment (USD)	2 104	1 809	
Income (USD)	4 715	13 956	23 081
Taxation			1 256
Net income (USD)	4 715	13 956	21 825
Monthly income (USD)	393	1 163	1 819

Source: Mission findings, 2011.

Challenges

- Stealing and exporting of raw rubber to the Ivory Coast;
- land administration – land acquisition/disputes, socio-cultural problems;
- lack of feeder roads;
- conflict of land use – agriculture versus surface mining;
- provision of a low interest rate on loans granted to farmers;
- new entrants in the rubber sector, which would imply the end of the monopsony regime for GREL.

Linkages:

Extension and technical advice, high-quality seedlings, market and financial linkages.

References:

Company PowerPoint presentation

Interviews:

Interviews with the Managing Director and two GREL Programme Managers in Takoradi, GREL headquarters (May 2011);

Interviews with Senior Project Officers of AFD in Accra (May 2011);

Group discussions with ROAA and individual farmers at one of the outgrower's plantations in the Western Region near Takoradi (July 2011).

Web sites:

GREL: http://www.grelgh.com/

AFD: http://www.afd.fr/jahia/Jahia/lang/en/home/pays-d-intervention-afd/afrique-sub-saharienne/pays-afrique/ghana/projets-ghana/plantations-hevea-phase-4

Annex 2 - Guiness Ghana Breweries Limited (sorghum) case study

Contract farming: Nucleus farmers with sorghum outgrowers

Introduction

This case study provides an overview of the key motivations underlying the scheme operations and looks at the company's and farmers' primary incentives for initiating and maintaining contracted outgrower relationships. The case also presents the key attributes that result in the continued success of the outgrower activities and the outstanding challenges that lie ahead for the company.

Description of Guinness Ghana Breweries Limited

GGBL produces a wide range of both alcoholic and non-alcoholic beverages. It operates three breweries: Kaasi and Ahensan in Kumasi (Ashanti Region) and Achimota in Accra (Greater Accra).

In northern Ghana, sorghum is an important staple cultivated by smallholder farmers and mostly consumed directly as food or processed into local beer. In 2001, the non-profit business organization TechnoServe-Ghana (TNS-GH) promoted the development of a sorghum supply chain and initiated the Guinness Sorghum Project with the support of stakeholders (Table 16) interested in the development of northern Ghana. The main objective of the project is to increase the productivity and incomes of sorghum farmers mainly through: (i) improving high-yielding sorghum varieties; (ii) establishing seed multiplication farms and sorghum collection centres; and (iii) developing and training sorghum producers (EUCORD, 2008). The project's initiating and implementing partner is TNS-GH, which selected the value chain and nucleus farmers before approaching GGBL as the final buyer. GGBL provides the market for harvested sorghum that meets quality specifications. Other stakeholders involved in the scheme are: (i) Savannah Agricultural Research Institute (SARI), which provides agronomical support; (ii) service providers, including credit providers, input suppliers, transporters, tractor owners and operators, warehouse operators and cleaning centres; and (iii) primary producers, who are outgrowers. Funds were made available by the Common Fund for Commodities (CFC), through the Venture Capital Trust Fund (VCTF) of the GoG,[14] and channelled into the credit system by Sinapi Aba Trust, which bears the entire risk of financial loss (see Table 16).

Incentives for outgrowing

The main reasons for GGBL to enter a contract farming arrangement were not based on strong commercial viability but on:

14 VCTF was established by Act 680, 2004 as a GoG initiative to provide finance to small and medium enterprises (SMEs). Under the act, VCTF is to: i) provide financial resources for investment in the SME sector; and ii) develop and promote a viable venture capital industry in Ghana.

- fulfilling its corporate responsibility[15] by providing farmers with livelihoods and markets;
- partially substituting imported barley with sorghum (produced locally) as an input for beverage production;
- creating opportunities for the marketing of local grains.

Table 16: Stakeholders and their roles in the GGBL sorghum outgrower scheme

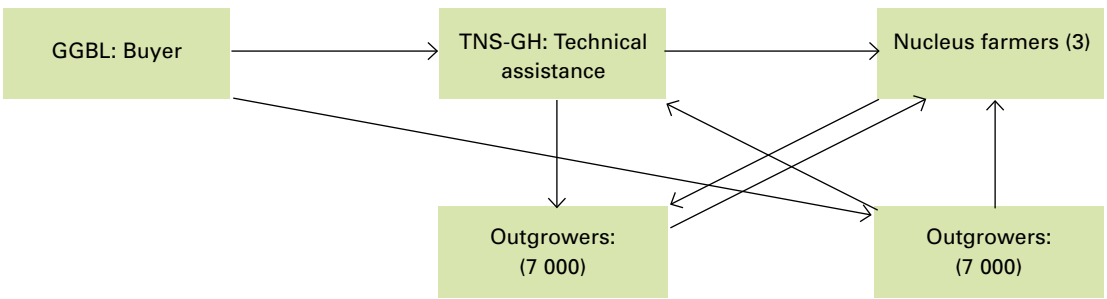
Stakeholder	Role
TNS-GH	• Project implementation; coordination of entire project
GGBL	• (Private-sector partner): provision of a market
SARI	• Varietal testing and technical backstopping • Agronomical support • Production guidelines
Nucleus farmers	• Organization of production • Provision of market and credit linkages • Mobilization of sorghum outgrowers • Cleaning, packaging and delivery to GGBL • Supervision of sorghum production and supply • Intermediation between primary producers and other stakeholders
Outgrowers	• Primary production • Production and supply of sorghum, under contract with nucleus farmers • Sowing and labour • Crop monitoring (including pests/diseases) • Repayments (with grain) and sales of surplus
Sinapi Aba Trust	• Provision of credit for inputs and related production activities • Payments for inputs on behalf of farmers
Dizengoff Ghana Ltd Agrochemicals	• Input supply • Provision of technical advice on agrochemicals
Tractor operators	• Land preparation • Distribution of inputs
Transport owners	• Transport of sorghum • Transport of inputs

Source: Based on EUCORD, 2008.

Structure of the outgrowing operation

The outgrower scheme has a multipartite structure comprising GGBL, TNS-Ghana, nucleus farmers, outgrowers and SARI. This structure is complex and has many intermediary layers, which has led to inefficiency, lack of trust and miscommunication among the parties involved.

Figure 7: Multipartite structure of the GGBL sorghum outgrower scheme



Source: Authors' compilation.

15 Companies that integrate smallholders into their supply chains more equitably (in terms of distribution of benefits) can increase their customer base and ensure the loyalty of existing consumers, as well as gain new customers and manage their reputational risks. Penrose-Buckley, C. 2007. Background Public Policy Brief on Producer Organizations. Oxfam Policy Brief, Oxfam, UK.

The average landholding of a smallholder participant is 2 ha. Seeds are provided on interest-free credit, while interest of 3 percent is applied to fertilizers and recovered at harvest. The price was set by TNS-GH with nucleus farmers and no involvement from the sorghum farmers (the outgrowers),[16] who were not even informed about how the price had been determined or about the contractual arrangements. Sorghum farmers agreed to produce and supply sorghum to nucleus farmers and were informally registered in the scheme without written contracts. The price of sorghum was set at GHS 700 per tonne – far higher than the prevailing market price for imported barley (GHS 450 per tonne), which it is supposed to substitute. GGBL is, therefore, bearing higher production costs and so does not guarantee a market for all the sorghum produced. Because the price was set too high and was not based on solid economic viability, the scheme is not yet economically viable for GGBL. In contrast, the cash income of outgrowers has increased significantly, as shown in Table 17.

The scheme has experienced various problems and failures, including incorrect extension advice provided to farmers (e.g. on the planting period), pest problems and unsuitable varieties. The scheme was driven by an NGO and was not based on GGBL's genuine commercial interest, and this has hampered its success and long-term sustainability.

Table 17: Key features of the GGBL sorghum outgrower scheme

Indicator	2005/2006	2006/2007	2007/2008
Sorghum output (tonnes)	112	904	1 272
No. of communities	44	56	204
No. of farmers	> 900	3,210	5 670
Farmers cumulative cash income (GHS '000)	35.84	372.9	524.7
Farmers cumulative cash income (USD equivalent)	21 590	22 464	316 084

Source: EUCORD, 2008.

Outgrowers' organization

The scheme is implemented through nucleus (lead) farmers, who work with an average of 100 to 300 outgrowers and act as intermediaries between primary producers and other stakeholders (GGBL, input and credit suppliers). The outgrowers' farms are managed in blocks, with each outgrower cultivating an average of 2 ha and being responsible for sorghum production, cleaning and drying. Farmers' associations and the nucleus farmers jointly supervise the sorghum production and supply and engage in quality assurance.

Credit management

Private dealers supply the farmers with inputs according to advice from the TNS-GH Project Manager. Sorghum farmers supply the produce to GGBL and receive payments from Sinapi Aba Trust, net of loan liabilities. GGBL pays Sinapi Aba Trust directly on receipt of the sorghum from outgrowers. The credit provider pays input dealers when inputs are supplied to outgrowers. Credit recovery is reported to be good (95 percent recovery rate).

16 With nucleus farmers and representatives of the Ministry of Food and Agriculture, TNS-Ghana developed a crop budget to determine a price of GHS 0.29 per kg.

Method of selecting outgrowers

The TNS-GH project management team was responsible for selecting the lead farmers following three criteria[17]:

- the individual or organization must have the ability to organize outgrowers to produce and supply sorghum to the brewery;
- the nucleus farmer must possess or have access to land preparation equipment;
- the individual or organization must have high integrity and be a trusted member of the community.

Procurement and distribution of inputs

Input providers (credit, seeds, fertilizers) are:

- Credit – VCTF and Sinapi Aba Trust;
- Agrochemicals – Dizengoff Ghana Ltd;
- Agronomical support – SARI.

Coaching, training and monitoring of outgrowers

The farmers are organized, trained and provided with inputs by TNS-GH, which links them to the contracted nucleus farmers in charge of day-to-day management of groups of outgrowers and the collection of produce after harvest. SARI provides TNS-GH with the right variety of sorghum for GGBL to include in its beverage production cycle. Farmers are trained on improved agricultural practices such as land selection and preparation, planting distances and input application. During the Guinness Sorghum Project's initial phase, farmers found technical advice on the planting period and the choice of variety to be somewhat inadequate. After some unsatisfactory results, variety selection has been improved, and integrated soil management practices have been identified and adapted (EUCORD, 2008).

Contracting and pricing strategy

No written contract was negotiated or prepared with the farmers by GGBL, although outgrowers produced and supplied sorghum under informal contract with nucleus farmers. The price was set by TNS-GH and GGBL with no involvement of the farmers.

Procurement operation

Procurement operation were supervised and undertaken by TNS-GH.

Incentives for farmers

Yields have increased significantly, from 0.8 tonnes/ha to 1.7 tonnes/ha; however, the sustainability of this increase is still open to question, given the high subsidy levels for seed, fertilizer and credit.

17 Verbatim from European Cooperative for Rural Development (EUCORD). 2008. West African Sorghum Value Chain Development Project (Ghana and Sierra Leone). Mid-Term Evaluation Report. CFC/FIGG/34.

Farmers enjoy the security of a ready market and attractive prices, which provide their main motivation for participating in the project. Additional benefits for farmers include: (i) income increases of an estimated 40 percent (Table 3); (ii) the introduction of high-yielding varieties; (iii) training and technical backstopping; and (iv) provision of credit facilities.

Challenges

For GGBL, the major constraints are:

- the quality of the grain produced;
- the impossibility of absorbing all the sorghum produced by the farmers, because the price was set too high and is not competitive with the price of imported barley;
- a sorghum value chain that is insufficiently developed;
- concerns about food safety: traceability and agronomic practices;
- farmers' limited knowledge of warehousing and the post-harvest treatment of grains.

For farmers, the major constraints are:

- their inadequate participation in price setting;
- pest problems, which were not properly addressed by the extension service or nucleus farmers;
- the lack of a guaranteed market for all of their produce, forcing them to look for alternative markets;
- the lack of written contracts with formal buyer ;
- increasing production costs, for labour and tractor services, and erratic rainfall patterns, which sometimes lead to low outputs.

To date, the scheme has not been financially viable, mostly due to: (i) smallholder farmers' indirect relationships/involvement with the final buyer, which has hampered the building of trust between them; (ii) poor communication about the quality/quantity required by the buyer; (iii) the lack of a guaranteed market for all the sorghum produced; (iv) a poorly structured value chain that was unable to supervise the quality of the produce; and (v) the lack of a strong role for farmers' organizations.

Linkages: Market, quality and quantity of the produce, input suppliers and transportation services.

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Comfort Kudadjie-Freeman, Paul Richards and Paul C. Struik. 2008. Unlocking the Potential of Contract Farming: Lessons from Ghana. Gatekeeper Series. IIED.

European Cooperative for Rural Development (EUCORD). 2008. West African Sorghum Value Chain Development Project (Ghana and Sierra Leone). CFC/FIGG/34 Mid-Term Evaluation Report.

Interviews:

Interview with TNS-GH Managing Director in Accra (May 2011);

Interview with the Head of Procurement of GGB in Accra (May 2011).

Web sites:

http://www.diageo.com/en-row/csr/community/Pages/default.aspx http://www.technoserve.org/work-impact/locations/ghana.html#moreabout

http://www.sinapiaba.com/

Annex 3 - Afife Rice Irrigation Project case study

Tenant farming: Public irrigation scheme with smallholder tenants on public land

Introduction

The Afife Rice Irrigation Project is part of a larger programme of the Ghana Irrigation Development Authority (GIDA), which manages around 50 public irrigation schemes in the country on government land acquired in the past from local communities. These schemes were developed as a community development programme for assisting poor farmers, financed by GoG and the Canadian International Development Agency (CIDA).

Smallholder tenants' organization

The Afife Rice Irrigation Project, organized into five cooperatives, is located in the Volta Region and covers an irrigated area of 880 ha (potential of 960 ha) served by two main dams. Cooperative formation was initiated by GIDA, while the Department of Cooperatives provided the farmers with training. The umbrella Afife Rice-Vegetable Irrigation Cooperative Farmers and Marketing Society (ARVICOFAMS) was formed in 1996. The society's steering committee is made up of two representatives from each cooperative, together with GIDA management. The overall number of farmers engaged are 1 024 (229 women), harvesting twice a year with an average yield per ha (per season) of four tonnes at a current price of GHS 720 per tonne.

Tenant agreement

The farmers have a five year renewable tenant agreement with the GIDA authority. They own on average one ha, ranging between a minimum of 0.4 ha and a maximum of 1.8 ha. The tenant farming scheme is divided into 12 sections of about 80 ha each, on which work around 70–80 farmers. The sections are further divided into blocks of 20 ha.

The farmers are part of a cooperative which deals with the GIDA scheme management. The cooperative has three levels of leadership: block-section-core, plus a committee which deals with transversal matters such as: disciplinary, financial and marketing matters, and maintenance, machinery and land allocation. The farmers' cooperative is responsible for the operations and maintenance of the irrigation scheme under a joint management system with GIDA.

The farmers pay an irrigation service charge of GHS 100 per ha per season, which is barely sufficient to maintain the irrigation scheme. Land fees were never paid even if it is a possibility that they will be introduced in future, as in other irrigation schemes farmers are requested to pay.

The GIDA authority pays the salary of its staff (currently five in the scheme) and provides extension and some inputs at a subsidized price (at a range of 40–50 percent under the national subsidy

programme): NPK, Urea, and Sulphur Ammoniac which are paid on the spot by farmers. GIDA does not provide any support in terms of marketing or seed supply (Figure 8). Farmers easily sell the output given that the produce is a highly appreciated perfumed/basmati variety of rice. They sell their produce individually and there is no formal contract farming. The minimum market price is set in advance by the cooperative's committee each season, at the same time that the price for services and labour is set in order to avoid speculation among farmers, e.g. renting of tractors. All major land work is mechanized.

The irrigation system has no major problems in terms of production or marketing of produce; however, due to the cap on the landholding, established at 2 ha per farmer, this scheme depresses the entrepreneurial willingness of the best performing farmers and does not really promote commercialization of smallholders. Furthermore, this scheme is heavily subsided and it is not certain that farmers would still be financially viable with such a limited land size without the subsidies. Figure 8 below presents the scheme structure:

Structure of the tenant farming irrigation scheme

Figure 8: Afife Rice Irrigation Project structure

Source: Authors' compilation.

Challenges

- Identifying the market before planning;
- land use not transparent and conflict in land use;
- registration and map out land;
- policy institutional arrangement for peri-urban development;
- water efficiency and water management;
- soil analysis;
- environmental issues.

Linkages: Extension, inputs on credit, organizational and O&M support.
Interviews:
Interview with the Director of the scheme in Afife (May 2011);
Interview with GIDA's staff in Accra (July 2011).

Annex 4 - Blue Skies Agro-processing Company Ltd (fruit) case study

Contract farming: Outgrower scheme with no plantation, operates with individual large farmers and smallholders

Introduction

This case study describes the outgrowing operations of Blue Skies Agro-processing Company Ltd as well as looks at the company's and farmers' primary incentives for initiating and maintaining contracted outgrower relationships. It also presents the key attributes that result in the continued success of the company's outgrower activities and the outstanding challenges that lie ahead for it.

Description of Blue Skies Agro-processing Company Ltd

Blue Skies Agro-processing Company Ltd is a private company established in 1998 by a private investor and is located about 25 km from Accra. The company processes fresh fruits (pineapple, mangoes, coconut, papaya, passion fruit and pawpaw) that supplies mainly the United Kingdom and some European supermarkets (the Netherlands, Switzerland and Italy). The company has expanded rapidly its processing capacity, currently reaching up to 18 tonnes/day (15 tonnes/week of papaya, 10 tonnes/week of low sugar pineapple, 200 tonnes/week of pineapple). The present workforce has 1,600 staff members and it operates on a 24-hour shift, seven days a week.

Most produce (pineapple, coconut, papaya) is procured in Ghana all year round, while mango procurement only reaches 75 percent and the remaining 25 percent is filled with seasonal supply gaps are filled through imports from Brazil, Burkina Faso, South Africa (in December), Ivory Coast, Senegal (in September–October) and Gambia.

Blue Skies Agro-processing Company Ltd procures 70 percent of its supply base from individual farmers (contracted and non-contracted outgrowers) and 30 percent from local export companies (individual large-scale farmers). The latter have signed contract arrangements with Blue Skies Agro-processing Company Ltd to ensure a steady supply of produce. As part of the protocol, the contract includes a sanction scheme; however, the company reports that breaching is not common.

Incentives for outgrowing

Blue Skies Agro-processing Company Ltd developed in 2000 an outgrower scheme with some farmers' groups to increase the quality of its regular supply. The objective was to develop a product that met the quality standards of European Retailer Partnership Good Agricultural Practices 2 (EurepGAP). According to the company's senior agronomist, Blue Skies Agro-processing Company

Ltd was the first company in the world to adopt these standards.[14] It actively promotes certification and is engaged with GLOBALG.A.P. certified exporters. At present, 50 farmers have been fair-trade certified, and some are also environmental certified farmers.

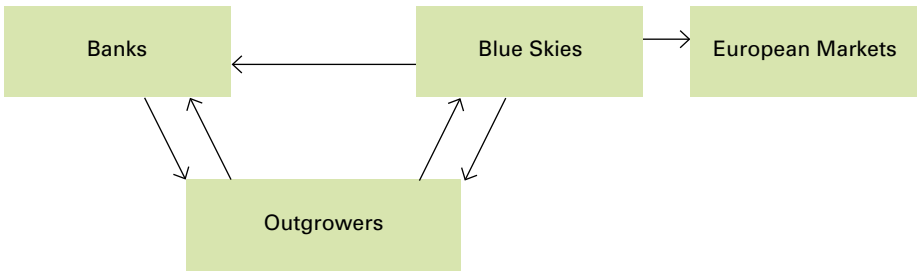
The total number of outgrower farmers engaged was 140 as of May 2011, a number that enables the processing company to keep a constant supply of produce throughout the year. The largest proportion of farmers (80) grows pineapple, the low sugar type (smooth cayenne); other farmers grow other types of pineapple (MD2, organic low sugar and high sugar), mangoes, papaya and passion fruit. The outgrower scheme for pineapple cover about 386 ha, with an average land size of 12 acres (4.6 ha) per farmer.

Structure of the outgrowing operation

Organization

Blue Skies Agro-processing Company Ltd has sometimes served as credit provider through Standard Charters, Barclays and Ecobank. Up until two years ago, the company provided interest free-loans to "loyal" farmers. Unfortunately, with the credit crunch due to the international financial crisis and the exchange depreciation, the company stopped this service. Presently, only banks provide financial services; however, Blues Skies Agro-processing Company Ltd on some occasions borrows the capital on behalf of outgrowers and on-lends it to them at a subsidized interest rate. Recently, the company has taken up a loan at Standard Chartered in the outgrower's name at a 32 percent interest rate and on-lent at 20 percent to them, absorbing 12 percent of the interest rate. Figure 9 below presents the scheme structure:

Figure 9: Blue Skies Agro-processing Company Ltd outgrower scheme structure



Source: Authors' compilation.

Motivations for the company and farmers

The company's key motivations to enter/develop an outgrower scheme are:

- ensure steady supply of production: the company does not have its own plantation;
- commitment to meeting certifications: EurepGAP option 2, Fair trade, GLOBALG.A.P. and Business Social Compliance Initiative (ethic standards).

14 Some requirements include: availability of appropriate toilets on farm premises; construction of appropriate farmhouses; presence of good water supply, e.g. borehole Polytank with water or pipe-borne water; availability of first-aid kits; and fruit quality inspection system.

The farmers' key motivations to enter/develop an outgrower scheme are:

- market access;
- technical advice.

Method of selecting outgrowers

Blue Skies Agro-processing Company Ltd selected the farmers on the basis of their potential to operate as commercial enterprises, ability to meet expected yields and quality standards requirements and to utilize chemicals, acreage and a washing facility.. It has established a close relationship with its outgrowers, promoting loyalty, fairness and trust. The outgrowers receive financial and technical services, and training free of charge from the processing company.

Pineapple farmers are organized in two cooperatives that represent the farmers in the yearly price negotiations. The processing company has a good reputation for offering a higher price and paying its farmers promptly and, as a result, farmers are encouraged to save and invest in their farms. Side-selling was more common in the past; presently, about 80–85 percent of farmers are loyal.

Outgrowers' association

There are two cooperatives engaged in the outgrower scheme with Blue Skies Agro-processing Company Ltd: Fotobi Cooperative and Bisease Amanfro Cooperative, which have 33 and 30 members, respectively. The cooperatives receive technical advice from the company that in turn they provide to farmers. They also provide assistance in contract negotiation and certification issues. The marketing team of the cooperatives negotiates with the company the price and amount to be purchased. The cooperatives have their bank account at the Akuapam Bank and farmers pay their dues directly into their bank accounts. In addition to the company's quality assurance, within the cooperatives there are quality assurance teams to ensure that quality and certification requirements are met.

Coaching, training and monitoring of outgrowers

Technical services. The technical team (TT) educates farmers in good farming practices and follows them closely, providing interactive technical advice on the appropriate use of inputs, namely the right fertilizers and quantity applied, as well as providing seed on credit. The TT is also responsible for quality assurance. For instance, it monitors closely during the rainy season to avoid fruits getting watery and it ensures that farmers use a different fertilizer containing calcium. They check on the sugar content and also facilitate input provision through Millennium Development Authority (MIDA). In addition to the TT, there is an 11 staff member monitoring team (MT) which performs pre-harvest inspection for processing release. The rejection rates, with handling being the major cause, range between 5 and 10 percent. Five percent is the acceptable rate and defines a farmer who applies good practices. Above 10 percent, it becomes dangerous and critical that the company monitor more closely. The MT reports back to farmers on the cause of rejections so that farmers can improve and understand what is wrong with their products.

Training. Every quarter, the processing company organizes training (new courses, refresher courses) for all farmers. Typical topics covered are: bookkeeping (requirements of GLOBAL G.A.P.), new developments and technology, soil fertility, hygiene, accounting and finance (credit schemes, loan repayment). The training provided by the company contributes to strengthening the linkages between the farmers and the agribusiness company.

Contracting and pricing strategy

The outgrower signs a seasonal contract, typically covering a six month period. The contract specifies the fruit size and weight range, and quality. It also spells out the quality assurance checks and the rejection of fruits if not complaint. The price is set by Blues Skies Agro-processing Company Ltd, although it is negotiated with the outgrowers, particularly when a price reduction is deemed necessary.

Current contracts have been signed at 0.32 GHS per kg, while the fair trade price was GBX 13 per kg reflecting the world price. The farmers opted for the sterling payment to avoid currency fluctuation and depreciation.

Fundamentals for success of the outgrowing operations

High commitment to work by management and staff of Blue Skies Agro-processing Company Ltd has been the major contributing factor to the success story. Loyalty, fairness and trust established with farmers are critical. Moreover, the employees of the company enjoy social security benefits. Other factors for success are:

- the general manager and his senior staff (agronomists) have excellent managerial skills;
- prompt payment to farmers and fair prices are the motivating factors that have ensured regular supplies to the company and a steady market for the outgrowers;
- skills are transferred and market/service are provided. The training provided by the company contributes to strengthening the linkages between the two business actors;
- loan facilities are provided to farmers;
- ready market for fruits is assured;
- quality is closely monitored: rejection is on the basis of sugar content;
- education on EurepGAP option 2 standards and certification of farmers is provided;
- the company provides crates and collects produce: this reduces the burden on farmers to transport produce to the company premises.

Challenges

Major constraints for the company are:

- high domestic tax regime (e.g. 32 percent on profit);
- high inflation that erodes benefits of exchange rate gains from exports;
- exchange rate volatility;
- electricity blackouts that come with huge costs for the company (an average bill of GHS 70,000 per month was reported by senior staff).

Major constraints for the outgrowers are:

- rejection of fruits is one of the main problems faced by farmers, if sugar content is below or above required level;
- lack of production skills and loan facilities was a constraint pertaining to all farmers' groups;
- heavy burden of certification costs;
- shortage of inputs availability at the right time (January-March period);
- delays in subsidies.

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Dannson, A., Ezedinma, C., Wambua, T.R., Bashasha, B., Kirsten, J. and Satorius, K. 2004. Strengthening farm-agribusiness linkages in Africa. Agriculture Management, Financial Services (AGSF). AGSF Occasional Paper 6. Rome, FAO.

Interviews:

Interview at Blue Skies Agro-processing Company Ltd, Mr Ernest Abloh and Mark Azaglo, Senior Agronomists (May 2011);

Group discussions with farmers' representatives and large-scale individual farmers (July 2011).

Annex 5 - Twifo Oil Palm Plantations Limited case study

Contract farming: Nucleus estate with smallholder outgrowers and tenant agreements with smallholders

Introduction

This case study provides an overview of the sector and key motivation underlying both the outgrower and the smallholder sschemes (tenant agreement). It then looks at the primary incentives of the farmers and Twifo Oil Palm Plantations Limited (TOPP) for initiating and maintaining contracted outgrower relationships. The case study also presents the key attributes that result in the continued success of the company's outgrower activities and the outstanding challenges that lie ahead for it.

Sector background

Ghana palm oil production is important and accounts for 1 percent of the world production. In the last years, the area under cultivation increased from 175 000 to 352 000 ha, although yields have not increased to achievable levels.[14] At 6.4 tonnes/ha, yields are much lower than those of leading countries such as Indonesia and Malaysia, which have recorded 16–20 tonnes/ha (FAOSTAT).

The production side of the industry has three main actors: large plantations with associated transformation plants (currently, there are four in the country), independent smallholders and outgrowers linked to nucleus estate plantations. The outgrower schemes have been supported by foreign development agencies, notably the French Development Agency (AFD – Agence Française de Développement) and Germany's Reconstruction Credit Institute (KfW – Kredit für Wiederaufbau). The processing side of the industry has multiple actors that foster competition for raw materials and cause side-selling in the outgrower schemes. According to ECORYS (2011),[15] the main processors are:

- four large-scale mills: process around 19 percent of the fruits;
- eight medium-scale mills: process around 12 percent of the fruits;
- small-scale or village mills: process around 60 percent of the fruits;
- household units: operating in all areas of the country and processing around 9 percent of the fruits.

Description of TOPP

TOPP is one of the largest producers of palm oil in Ghana, holding a total of 4 234 ha in the Central Region. The businesses of the company include: growers of oil palm and other agricultural products, and processors of oil palm fruits to produce palm oil and palm kernels. Currently, the company has the processing capacity of 20 tonnes of fresh fruit bunches per hour.

14 Facts and figures. Ministry of Food and Agriculture. Statistics, Research and Information Directorate (SRID), April, 2010.

15 ECORYS Holding BV is a leading European research and consultancy company with approximately 560 staff and 16 permanent offices in 11 countries, providing sound analysis and inspiring ideas. http://www.ecorys.com/.

TOPP was initiated by GoG in 1977 as an agricultural project with loan financing from the EU and the Netherlands Government. The work on the plantation started in 1978 when about 250 farmers were displaced from TOPP concessions. The EU funded a project to engage the displaced farmers and the government-acquired land[16] was allocated to smallholders under tenant contract arrangements. This was the beginning of the Smallholder Tenant Scheme Project, which is now in phase 3. The farmers received a grant from the EU to initiate the oil palm investment and received technical assistance from TOPP. The agreement is based on a 30–70 split, whereby the company deducts 30 percent from the farmers' income. The price mechanism is imposed by the company and corresponds to 10–13 percent of the world market price (Rotterdam). The smallholders formed an association called Smallholder Farmer Association, which acts as their mouthpiece and is responsible for discussing matters on the farmer's welfare with the company's management team.

Incentives for outgrowing

In 2007, TOPP decided to develop an outgrower scheme in addition to the smallholder tenant scheme. The company cites multiple reasons for promoting an oil palm outgrower scheme.

Expansion of its oil palm production capacity

Since access to new land is a critical constraint in Ghana, a good way of increasing its oil palm supply is to purchase from others. In order to ensure the right quality and the steady supply the promotion of outgrowers is one of the options.

Considerable financial opportunity

With such arrangement the company does not have to invest its own money in the outgrower scheme plantation development and reduces the cost of production/kg over larger volumes. The financial investment is all borne by the outgrowers (EUR 1 530 per ha with 3 ha minimum size).

Legitimacy in the plantation zone

Often a foreign company holding large has controversy with local communities. Outgrower schemes help to build legitimacy in the plantation zone.

Organization

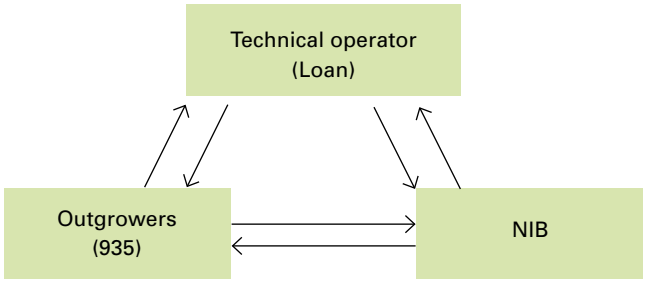
The first outgrower model proposed was established by Benso Oil Plantation Company, which acquired land from a governmental body, and AFD funded the development of a plantation with 400 farmers, providing farmers with loans.

The current outgrower scheme (Buabin Oil Palm Outgrower Project) differs from the Smallholder Tenant Scheme Project previously mentioned. This scheme includes 935 outgrowers (July 2011), who are landowners and take a loan to develop oil palm production. The project also assists the farmers in land titling. A tripartite agreement was signed between AFD, TOPP and the National Investment Bank (NIB), which acts as the financial operator (Figure 10). This project is in its fifth year of implementation.

Total outgrower area is 3 000 ha, including about 1 000 farmers with land size averaging 3 ha. The production for small-scale farmers reaches 10 tonnes/ha/year, while TOPP's own plantation yields 16/tonnes/ha/year. The difference in yields is due to fertilizer use and better husbandry practices.

16 The land belonged to a governmental body called the Central Region Development Corporation.

Figure 10: TOPP Buabin oil palm outgrower structure



Source: Authors' compilation.

Management

Two TOPP officials, the Project Manager and the Operation Manager, work on the Buabin outgrower scheme. The TOPP plantation management oversees the whole operation. The company provides technical advice and extension services and transportation services to its outgrowers. All farm inputs, including agrochemicals, are supplied on credit by TOPP. The company encourages farmers to introduce best practice intercropping with food farming and to engage in other off-farms activities, particularly during the crop immature period.

Method of selecting outgrowers

TOPP does the selection of outgrowers following certain criteria:

- not be involved in rubber production;
- be Ghanaian resident;
- demonstrate access to land (either land ownership or land-use rights);
- farm land suitable for oil palm;
- nominate successor/next of kin;
- accept to clear the land at one's own expense.

Financial investment

The investment requirement for each farmer is EUR 1 500 (USD 2 000) per ha, which is granted normally through a loan. The average farm size (minimum) is 3 ha.

The 20 year loan structure is as follows:

- concessional interest rate at 11.5 percent;
- flexible repayment period: the loan repayment cannot exceed 25 percent of the farmer's annual income, and it is deducted directly for the selling price;
- six year grace period;
- expenses arising from the acquisition of land title by the outgrower;
- agricultural inputs and services; and
- cash advance if needed by the farmer for the maintenance of the plantation during the immaturity period (five year).

Land property is one of the main constraints/issues in Ghana. The farmer willing to join the outgrower scheme has to show a property right or a traditional property right on the land he/she wishes to cultivate under oil palm trees. The traditional right is a title/right given by the local chief and often includes a tenancy or sharecropping agreement on the land. The farmer has to indicate, in the outgrower contract with the company, the successor in case of death. If there is a dispute, the plantation will be managed by TOPP and the income would be used to repay the loan granted to the outgrower.

Credit management

ADB has agreed to administer the credit facilities to outgrower farmers for the purpose of developing the oil palm plantation. Typically, the financing is a 20 year loan, including a 7 year grace period at a 11.5 percent interest rate. If the economic conditions of the country change, the interest rate may be revised jointly by NIB, TOPP and the outgrower or his/her representative. The oil palm plantation is charged as collateral security for repayment of the loan. The farmers are expected to contribute to the investment with 30 percent of their labour. Each farmer holds his/her own bank account. The farmers sell the produce to TOPP and TOPP in turn credits their current accounts. The bank would recover the loan and any expenses incurred by the outgrower directly from the farmers' bank accounts. Under this outgrower scheme, the farmers are land owners, the debt is in their names, and the land is registered to protect their rights. The disbursement of the loan may be modified from time to time by NIB in consultation with TOPP and the outgrower.

Outgrowers' organization

The outgrower farmers are spread across four districts and organized in an association called Oil Palm Outgrowers Association (OPOA). The association includes one national executive and several executive councils within 12 zones community-based. It includes 954 members, of which 21 percent were women (2011). The association ensures the quality of production, participating in the usual company inspections. It provides a number of services to its members as follows:

- mediating;
- looking at the provision of the contracts;
- representing farmers;
- making farmers aware of how to be more productive and follow the guidelines.

The association faces several constraints: financial resource limitations, mobility to reach farmers and labour shortages.

Procurement and distribution of inputs

TOPP supplies all of its outgrowers with high-quality seedlings. Farmers pay in full as the planting material is included in their loan schedule. The chemical inputs needed are supplied by the company and deducted either from the loan or the payment to farmers.

Coaching, training and monitoring of outgrowers

TOPP organizes major training programmes every year and closely monitors its outgrowers in conjunction with their association.

Contracting and pricing strategy

The contract between TOPP and the outgrower is in place for the duration of the financing loan, normally repaid within 20 years. The price of the produce is indexed on Rotterdam price PALMROTT and farmers receive 10–13 percent of the world price. Method of payment differs depending on whether it is OPOA or an individual farmer. The association delivers the produce and receives the payment at the end of the month, while the farmers are paid upon delivery.

Incentives for farmers

Outgrowers cite numerous reasons for working with TOPP, which are:

- good-quality seedlings;
- trainings and technical advice to improve yield;
- extension services;
- opportunity to expand the scale;
- link to bank loans with reduced interest rates.

Fundamentals for success of the outgrowing operations

According to TOPP management and farmers, the outgrowering operations are so successful because of the company's good relationships with the farmers. TOPP builds its relationships with individual farmers by providing valuable services such as extension, technical assistance, transparent price settings, high-quality seedlings, open dialogue and prompt availability of the staff. Farmers highly appreciated the regularity of interaction, close monitoring and transfer of technology, which lead to improvement in their skills. The company also involves the associations in the farm production inspections and provides on-the-job training and mobility. In return for these, outgrowers do not side-sell and most provide the quality and quantity of produce that TOPP requires.

Challenges

Major constraints for the company are:

- side-selling of the produce;
- land administration – land acquisition/disputes, socio-cultural problems;
- conflict of land use – agriculture versus surface mining;
- interest rate on loans granted to farmers.

Major constraints for the farmers are several. One of the primary challenges smallholders face is price fluctuations. As a commodity crop, oil palm is subject to substantial price fluctuations, which result in a disincentive for smallholders to enter the sector or invest in the improvement of their land.

It was reported that farmers have not been happy with the price fluctuations but they admitted that every price reduction was jointly negotiated in a transparent manner. Outgrowers are supposed to contribute to on-farm investment with labour (about 30 percent). They face labour shortages in the area and the refund to activities undertaken by outgrowers is lower than what is actually paid.

Another major constraint relates to land issues as very few farmers have registered the land. Farmers reported that TOPP assisted them in land titling. Lastly, farmers reported the banking process to be slow and access to credit was still a major constraint.

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Interviews:
In-depth interview with the Managing Director (May 2011);
The Project Manager of the Buabin Oil Palm Outgrower Project and the Smallholder Project Manager and Operation Manager (July 2011);
Group discussion with outgrower farmers, smallholder farmers and representatives of oil palm associations (July 2011).

Annex 6 - Kuapa Kokoo Limited (cocoa) case study

Farmer-owned business/Joint venture

Description of Kuapa Kokoo

Kuapa Kokoo (KK) was established in 1993 as a licensed cocoa producing and international distribution company, 100-percent locally owned by its farmer members through the KKFU. KK is the largest farmers' cooperative in Ghana to date, representing 45 000 cocoa growers. The cooperative also holds the largest equity share (45 percent) in the London-based company Divine Chocolate and 33 percent of its sister company in the United States. KK was driven by an executive board member of CocoBod (Ghana Cocoa Board), a state-owned organization, who believed that a cooperative model would help cocoa farmers to do their own trading. Twin Trading, a British non-profit organization, assisted in launching the cooperative, which provides technical assistance. Farmers come from 1 300 village-based societies[14] in the five major cocoa producing regions of Ghana. The typical farm is 1–20 acres and is manually cultivated. Cocoa farmers either farm their land or access land through sharecropping agreement. The KK farmers control what they produce and sell.

Organization

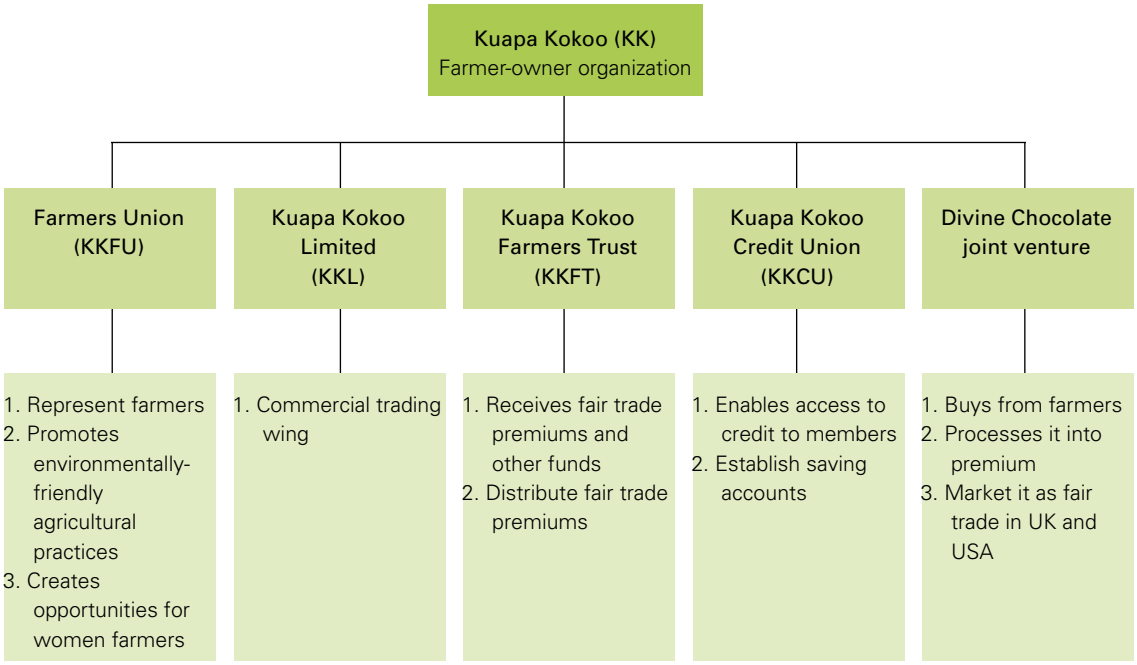
KK has five business structures to undertake its operations (Figure 11). KKFU represents the cocoa farmers, enhances the participation of women and promotes environmentally sustainable farming practices. The commercial trading structure is Kuapa Kokoo Limited (KKL). The Kuapa Kokoo Farmers Trust (KKFT) manages the trade premiums and other funds, around USD 250 000 a year, for farmers and communities and distributes profits/dividends for social projects, income generating activities; bonus payments; training/education; redemption of mortgaged farms; and mobile medical clinic. The Kuapa Kokoo Credit Union (KKCU) provides assistance to its members in credit access and savings accounts. Lastly, the marketing and distribution structure Divine Chocolate, which is partly owned by the farmers, is responsible for the processing and marketing of the fair trade products.

Management

KK includes various companies and structures to undertake trading activities which operate efficiently to provide the farmers with improved services, better price and a share in its profits. The company is managed by professionals who are non-farmers employed by the board of directors of the company to work on its behalf. A managing director oversees the management of the various departments. The main objectives of KK are to: provide a medium for social, economic and political empowerment; encourage environmentally sustainable production; and offer equal opportunities to women. The organization is based on four pillars: training and education; operations; microfinance; and fair trade premium projects.

14 Village-based societies are grassroots societies where members of the cooperative are found.

Figure 11: KK structure



Source: Authors' compilation based on Shuman et al., 2009.

KK is committed to providing training to its members and to promote sustainable agricultural practices. Operations include seed funds/guarantees and interaction with CocoBod, quality control, efficiency, and traceability and records. Microfinance activities relate to providing credit access and establishing savings accounts. The KKCU also assisted in redeeming cocoa farms of members which have been mortgaged to moneylenders.

The cooperative strategy is "pick up and pay", which means farmers are paid upon delivery of their cocoa to KKL. The primary revenues come from the membership dues and direct cocoa sales.

Method of selecting outgrowers

Farmers come from 1 300 grassroots societies called village-based societies. Womens' participation is encouraged, although 70 percent of membership is men. In the National Executive Council, 12 women are represented out of 20 members.

Financial investment

In 1998, KK took a loan of USD 671 000 from the UK Department for International Development (DFID), which it repaid in full a few years later. The Farmers Trust receives the economic benefits and profits generated by KK. The farmers approve their use of finance and decide on the amount to pay out in bonuses.

Incentives for farmers

Incentives for the farmers are as follows:

- community development projects;
- income generating activities;
- periodic training and technical advice;
- payment of annual bonuses;
- participation in decision-making;
- access to credit and savings facilities;
- cash advances.

Fundamentals for success

One of the reasons for KK's success is the strong interrelationship created among the cooperative and the company's structures. The democratic approach taken in decision-making and the formulating of business strategies are other factors which contribute to success.

Challenges

Major constraints for the company are:

- high competition for suppliers – competition for sales is tough as there are 20 licensed buying companies;
- low export of fair trade cocoa (18 percent of total KK produce). The premium price has remained constant at USD 150 per tonne even though production costs have increased. The fair trade certification process is expensive;
- high cost of inspection, and membership fee of fair trade (the annual fee is EUR 15 000);
- managing debt. The KKCU is facing a credit crunch as farmers have dropped their loan demand due to the high current interest rate of 27–28 percent;
- cash benefits; farmers prefer cash payouts to social investments;
- shift from conventional to organic farming (KK to be certified);
- domestic processing. Currently, processing is done in the UK;
- registration of farmers (Current Inspection Report).

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Rural Finance
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www.verdelpcs.nl/tongu/

World Business Council for Sustainable Development (WBCSD)
http://www.wbcsd.org/web/mdgsummit2010.htm

Financing

Acumen Fund – invests in businesses to end global poverty
www.acumenfund.org

Department for International Development (DFID)
http://www.markets4poor.org/?language=english

European Bank for Reconstruction and Development (EBRD)
www.ebrd.com

Inter-American Development Bank – Initiative "Opportunities for the Majority" supports inclusive business ventures
www.iadb.org

International Finance Corporation – finances inclusive business ventures with the "Sustainability Business Innovator" program
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Report No. 7 – September 2013

I3404E/1/07.13