

Strengthening farm- agribusiness linkages in Africa

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Alexandra Rottger

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Foreword

The "farm-agribusiness linkage" initiative concentrates on how to develop and reinforce equitable and efficient linkages between farmers and the agribusiness sector. Agribusiness can be defined as all market- and private business oriented entities involved in the production, storage, distribution, and processing of agro-based products, in the supply of production inputs, extension, administration and research. Strengthening farm-agribusiness linkages refers to improving farmers' ability to add value by switching from subsistence crops to marketable crops, by entering into processing activities, or by establishing raw material supply contracts with local or international processors.

Increased integration of world markets has far reaching implications for agricultural development efforts in developing countries. There are serious concerns about the ability of small farms and other agribusiness companies to survive in the medium term. Marginalisation and exclusion from high value markets on both, national and international level are and may become reality.

Stronger linkages between producers and processors and between producers and buyers of fresh crops can be promoted by agricultural support organizations like FAO. Strong, trusting relationships are the basis for producing significant benefits for both parties, leading to 'win-win' situations through risk reduction for both processors and farmers, or cost savings by better production planning and cash flow management. A better understanding by farmers of quality requirements of processors and increased incomes from secured sales of materials required for processing are direct results of improved linkages. Long term benefits of efficient linkages can materialise through making agriculture and food processing more efficient, effective, responsive and sustainable sectors. Raw material import substitution and savings in foreign exchange, improved competitiveness in regional and international markets and improved employment and sustainable rural development could be achieved.

Strengthening farm-agribusiness linkages in Africa builds on work by FAO in South East Asia and Latin America. For the African continent five country studies were prepared in 2002 covering Kenya, South Africa, Uganda, Ghana and Nigeria.

Preface

Over the past decade, Africa and other developing regions have been in the midst of tremendous changes. Market liberalization and governmental decentralisation policies have interfaced with globalisation and urbanisation trends to dramatically transform social, political, economic and cultural lives.

In this context of rapid change, agriculture can no longer remain behind—serving only to meet subsistence food needs. Agriculture has to become a dynamic and integral part of the market economy. If African agriculture is by-passed by the economic transformation going on world wide, then large numbers of Africans and perhaps all of Africa will remain poor and food insecure.

The fundamental purpose behind this FAO initiative to promote and support agribusiness development with a particular focus on strengthening farm-agribusiness linkages is to help transform the agricultural sector in order to accelerate productivity growth, increase income and employment generation, improve food security, and increase competitiveness in regional and international trade.

FAOs interest and commitment in promoting and supporting agribusiness development and linkages originates from a few rather simple observations. It has become clear that worldwide the most rapid growth in agriculture has for quite some time been occurring in post-production activities. This is in large part being driven by the growing number of middle income consumers, even in lower income countries and their demands for better quality, value-added products.

Second, agri-food systems world-wide are increasingly being dominated by vertically linked, if not vertically integrated, organizations. High concentration and vertical co-ordination of agri-food systems is already a reality in high-income countries. The same patterns are emerging rapidly in parts of the developing world, particularly in South America and Southeast Asia.

Third, the near absence of agro-industry and agribusiness resulting in low value added in agricultural transformation has been one of the main causes for stagnation in rural incomes. Conversely, when looked across countries and regions, substantial agribusiness sectors, generating high value addition to the outflow of goods, correlate with higher levels of agricultural GDP and rural incomes.

Pertaining to Africa specifically, agribusiness development can provide part of the answer to the collapse in support services, which occurred in most African countries following structural adjustment. In many instances, agribusiness firms provide marketing, finance, input supply and advisory services to producers or serve as intermediaries for improving producer access to services. In brief, agribusiness development is inevitable. The real issues are not whether, rather they are how to accelerate, how to ensure that maximum benefits are realised, and how to address equity and ensure fairness in the changes that will be taking place.

The Agricultural Support Systems Division of FAO launched its work on agribusiness development and linkages in 2000, following earlier closely related work on support to commercial farming in both Asia and Central Europe. A technical project was created to provide support for agribusiness development with a focus on small and medium enterprises, covering four key areas of technical support:

- improvement of managerial capacity;
- introduction of appropriate technologies;
- strengthening farm-agribusiness linkages;
- policies for post-production systems development.

This consultation touches on all of these main areas but the main focus is the third area, strengthening of farm-agribusiness linkages. This consultation focusing on Africa emerges from a broader cross-regional study on farm-agribusiness linkages launched in 2000. The first stage was a series of country studies and a regional consultation in Asia. During 2001 and 2002, case studies and a regional workshop on agribusiness linkages were carried out in Latin America. This was followed by a workshop on strategies for improving negotiation and compliance capabilities, held in November 2002 in Peru. The work in Africa began with preparation of five case studies. Further information about these is provided in other AGSF working documents.

In conducting this multi-year, cross-regional appraisal, FAO has been seeking to appraise trends, opportunities, conducive circumstances, and capacity building needs, by building up from specific real world cases and the expert views of people who are actively involved in agribusiness development and linkages in one manner or another. In regional consultations or workshops, FAO tries to initiate discussion and debate, involving diverse stakeholders to the extent possible, in order to create awareness of the issues, options, constraints and potentials; and build consensus on strategies and actions.

Doyle Baker
Chief, Agricultural Management, Marketing and Finance Service
FAO, Rome

Conclusions and recommendations

Vision for agribusiness in Africa

Agribusiness development in Africa is a catalyst for economic growth and poverty reduction. It is a business solution to rural poverty if redistribution mechanisms work. The agribusiness initiative is both a strategy to accelerate development and a business solution to rural poverty.

The vision is "a future with farmers accessing information for decision making and participating in markets and hence becoming profitable business entities". While farmers remain price takers, partnerships in processing and marketing are needed. Farmers need to be helped to link with agribusiness as well as be the target for farm-business development interventions. There is an even greater need for partnerships between the private and public sector.

It is recognised that the very poor cannot be involved in agribusiness interventions. Reduction of severe poverty calls for better re-distribution of wealth or income through an effective transfer of tax revenues to education, public health services etc, in the context of rapid economic growth.

NGOs, donors and governments should play their role in support services such as education, and support in organising and strengthening farmers' organizations.

Agribusiness policies and institutional framework

It is well known that government's role is to create an enabling environment for business development which includes providing macro-economic stability, truly investment-friendly policies and infrastructure development. Strengthening agricultural research is a public good, which should be supported by government.

A focused strategy for agricultural development and implementation of the strategy is needed in conjunction with full governmental commitment. Effective investment promotion centres can stimulate agricultural development; services to be provided include one stop licensing, market research and feasibility studies, national reference library for sector studies, etc.

Government policy can be influenced through stronger lobby groups in the agricultural and agribusiness sector such as farmers', manufacturing and trade associations. It is vital to bring together professionals for self-regulation and standardisation of practices. Stakeholders can be brought together through industry fori, stakeholder meetings on a commodity basis put together by NGOs, chamber of commerce etc, plus commodity exchanges, trader associations and trade fairs.

There is a need for strengthening institutional arrangements for agribusiness co-ordination. Many current associations in Africa are not effective as there are no clear stakeholders, or they have come together for the sake of tapping into sources of government or donor funding.

Agribusiness support programmes

There needs to be a refocus on exploring informal, often local or regional market opportunities. The informal sector has been neglected despite vast potential in the traditional staple/livestock sector. Export promotion should focus more on niche markets such as organic/fair trade/ethical products as well as on traditional crops. Opportunities have capitalised in high value crops such as flowers, vegetables, and spices. Any value adding opportunities deserve support.

There is a need for harmonisation of regional (intra-African) trade regulations and enforcement of such trade agreements. Support programmes need to have a holistic, and a food chain approach and need to be long-term activities to make an impact. There is a need to assess existing support programmes and draw lessons after implementation. Best-practice guidelines should be developed.

In general, NGO involvement in agribusiness advisory services has been successful. There have been several cases of intervention of NGOs in linking farmers with processors. This involvement has a large component of providing advisory and extension services to farmers in the absence/inadequacy of public advisory services. However NGOs should not create unfair competition by offering subsidised (and hence unsustainable) incentives such as subsidised farm-gate prices, credit, inputs etc.

Market information services need to be expanded from the more common price information service to more general market information such as trend analysis, identification of key players, provision of trade information, etc. Market information services need to be tailored to specific target groups.

Lessons and strategies for successful linkages

Successful linkages provide benefits to all members along the value chain. Excellent business management skills are a prerequisite for creating, maintaining and expanding farm-agribusiness linkages. Some products call for closer co-operation between farmers and processors e.g. highly perishable, in need of instant processing, as well as labour intensive products to ensure good linkages.

Transaction costs are high when dealing with smallholder farming systems. However, there are several ways to internalise costs by establishing appropriate systems including logistics, accounting and management. High transaction costs can also be reduced through strengthening farmers' organizations. Contracts and formal agreements assist successful farm-agribusiness linkages. However, building trust and mutual accountability is far more important, especially in situations where contract enforcement is

weak or not cost effective. The focus must be on developing a clear understanding of delivery schedules, prices and quantities. Frequent contact between stakeholders, regular payments, input provision, etc, are more important than formalised contracts per se.

Farmers' organizations should act as intermediaries between smallholders and agribusiness. If functioning and well managed, they are of assistance in collective input procurement, saving schemes, dissemination of extension messages in good agronomic practices etc. Farmer organizations offer services such as farm-produce collection centres as well as sorting, grading and bulking services. Strengthening such organization is an essential for sustainable farm-agribusiness links.

NGOs have proven successful in providing business advisory services including capacity building in farm management and extension services. Lately NGO's/donors have begun actively linking private sector players, notably farmers and agribusiness companies. However, NGOs should place their focus on facilitation, and not get involved in operating businesses.

Report on technical sessions

Setting the stage

This session covered introductory presentations covering previous country studies and workshops held in Asia and Latin America, and summarising results of the five African country studies carried out in 2002.

Strengthening farm-agribusiness linkages in Asia, case studies and consultation Doyle Baker, FAO, Rome

A Regional Expert Consultation on Farm Agribusiness Linkages was held in September 2000 at the FAO Regional Office in Bangkok, Thailand. It was attended by representatives from eight selected countries in the region (Cambodia, India, Indonesia, Malaysia, Nepal, the Philippines, the Republic of Korea and Thailand); resource persons from the Philippines as well as Thailand; representatives from other FAO projects and programmes

The Expert Consultation had the following objectives:

- to share country experiences on the development of agribusiness in selected countries of the region;
- to discuss some of the methods and practices that link farmers with agribusiness, and identify some of the strengths and weaknesses of the present arrangements;
- to identify opportunities at the farm level for promoting strong, viable and sustainable agribusiness linkages;
- To develop and provide recommendations on strategies and approaches for strengthening the linkages between the farm and agribusiness firms including the institutional and policy support required.

Background on Asia

The general situation in Asia has been a declining trend in the share of agriculture in national GDP. At the same time, the value addition based on agriculture has increased dramatically in many countries. Various types of agribusiness are flourishing, but the situation is not the same across the region, and in most countries there exist serious constraints in developing linkages between farmers and the emerging modern agribusiness sector.

Cambodia

In Cambodia, informal agribusiness has been practised for generations. Starting one decade ago after the change in government, there was interest in developing agribusiness in order

to provide new alternatives for people to seek for additional income. However, due to the lack of policy guidelines, farmer contractors are not well protected from disadvantages resulting from the contractual arrangements.

Republic of Korea

In the Republic of Korea, rapid industrialisation and urbanisation in the past decades have changed the life of consumers and diversified agriculture as a result. Increased demand for processed foods has opened wider entrepreneurial and job opportunities for the participants in the sector. The development of the food industry has been remarkable, but so far farm-agribusiness linkages have been rather weak. One of the important reasons is the fact that major food industry in the Republic of Korea has been dependent on imported raw materials.

In recent years, many farmers and agricultural co-operatives have entered the food industry, but are not always successful. The limitations and constraints to the utilisation of potential opportunities include lack of management skills, limited skilled labour in the rural areas, irregularities and instabilities associated with raw material supply in terms of quality, quantity and price, and so on.

India

For decades, the development of agriculture in India was dominated by dealing with scarcities, drought, food insecurity, poverty and above all agriculture being a “gamble on the monsoons.” Now that these have been overcome, the State is set for a second take-off in agriculture, driven by agribusiness. A massive effort has been mounted by the Government to encourage NGO investment in food processing and agribusiness as part of improving the income levels of the rural poor.

The continuing weaknesses, however, lie in the large number of farmers engaged in subsistence farming, inadequate research-extension linkages, low use of all inputs resulting in low productivity levels in global terms, poor incentives, and inadequate direct linkages between producers and processors. Among the other weaknesses are inadequate to very low credit availability, high rate of taxation of agribusiness, high poverty rates, etc.

Philippines

In the Philippines, the productivity growth rate of the country’s traditional agricultural commodities have either deteriorated or remained the same during the past decade. The lowest income earners in the rural areas belong to households, which are engaged in traditional crops production. Low productivity, rapid urbanisation, and environmental degradation are jointly contributing to poverty. The rural poor have limited access to land and critical support services.

Contract growing, which started in the 1960s, remains as the most popular mode of linking agribusiness companies with farmers. Contract farming schemes are practised in the poultry, hogs, and mangoes, organically grown lettuce and asparagus sector. Non-government organizations (NGOs) and banking institutions assist in the development of business partnerships, linkages and tie-ups between growers and buyers.

Malaysia

In Malaysia, the development of high value-added resource-based products is still limited. About 70 percent of the total raw materials in the food processing business are imported.

Exports consist of mainly primary and intermediate products. Inter- and intra-sectoral linkages with support and downstream industries are also weak.

The country report from Malaysia described a farm-agribusiness linkage arrangement in a chilli production contract between small farmers and the multinational Nestle. The chilli production contract illustrates the important role of a Farmers' Organization in performing as an efficient linkage between many small farmers and the agribusiness organization. The key factors that contributed to the model's success were the capacity of the FO to provide integrated services encompassing market negotiation, organization of farmers, planning and organising production, providing agricultural inputs far mechanisation services, credit financing, packinghouse facilities, storage, transportation, farm advisory and training services.

Thailand

The main theme in the Thailand report was that that agribusiness projects cannot work without a high-level of expertise. Agribusiness development in Thailand has been closely linked to a move from traditional to the more sophisticated food technology. The importance of a high level of quality packaging technology was particularly important developing and sustaining agribusiness markets. It was pointed out that the country has 36 food science departments; these have contributed to the upgrading of products for the agribusiness markets. Likewise, the active support of government has contributed to the success of agribusiness.

Findings

The overall picture emerging from the studies and consultation was that immense opportunities exist for agribusiness in Asia, based on a relationship/partnership between farmers and processors. However, there are substantial constraints faced in developing sustainable and fair partnerships.

From the farmers' perspective, the main constraints are:

- the lack of or inadequate access to production or post-harvest technology;
- the lack of or limited market information/intelligence on prices and alternative buyers;
- limited negotiating or bargaining skills;
- delayed payments received by the farmers from the agribusiness companies; and
- companies' inability to provide extension advice.

From the perspective of the agribusiness companies, the main constraints are:

- non-conformity to quality standards;
- inability to supply the volume requirements;
- delayed deliveries;
- farmers tendency to pole-vault or renege on their responsibilities to supply the products.

To address the constraints, farmers need to be provided with the following:

- adequate and appropriate training on management;

- technical assistance in production and post-harvest operations;
- effective and efficient market information or intelligence;
- provisions by agribusiness companies of advances in terms of inputs.

Agribusiness companies, meanwhile, need to do the following:

- re-examine their pricing incentives in order to motivate farmers to produce higher quality products;
- enter into long-term contracts with farmers or farmers' organizations subject to periodic adjustments;
- improve their capability to provide technical assistance, advisory services, and training programs to farmers and farmers' organizations.

The consultation also concluded that Governments can and should play a proactive role. Ways in which governments might facilitate agribusiness development and linkages might include:

- development of clear policies and guidelines regarding agribusiness to encourage companies to invest and at the same time provide protection to the producers;
- information dissemination on proper production and post-production technologies;
- training to strengthen leadership and management in farmers' organizations and co-operatives;
- provision of market infrastructure and information system;
- fiscal incentives for research and development, as well as training;
- foreign investment regulation;
- accreditation of agribusiness companies, farmers' organizations, and other service providers.

Priorities identified

Goals for agribusiness development:

High Priority	Medium Priority
Income security, farmers and others through backward-forward linkages	Building and developing industrial crops sector
Opportunities in post-production value addition	Improving competitiveness in regional markets and international trade
Catalysing private sector investment in agriculture	Raw materials import substitution
Increasing market demand for farm products	Agro-industrialisation

Strategic appraisal issues:

High priority	Medium priority
Capabilities assessment	Legal aspects: formal and informal contracts
Analysis of current/alternative linkages and institutional arrangements	Role of middlemen/benefits of eliminating [middlemen]
Technological option possibilities	Value added of grades and standards
Efficient organizational patterns	Size and importance of market demand in rural areas
What, where and whom working—lessons	Employment and income generation-potential

Entry points:

High Priority	Medium Priority
Community resources mobilisation/asset building	Strengthening farm organizations and NGOs
Management capacity building	Support institutions-credit
Acceleration of information flow	Research/technology development
	strengthening local government authorities
	Contract terms/conditions

Institutional support/promotion mechanisms:

High Priority	Medium Priority
Agribusiness linking programmes	High value (zone) programming
Agribusiness promotion unit	Agro enterprise centres
Farmers' business schools	Industry associations; chamber of commerce
Success case replication	

Agribusiness linkages in Latin America, case studies and workshop

Doyle Baker, FAO, Rome

Twelve case studies were carried out in seven countries:

Argentina:	Co-operative – seed production and agro-industrial production
Chile:	Co-operative – supply services for avocado and citrus for export Co-operative – asparagus and berries for frozen foods agro-industry
Ecuador:	Co-operative and individuals – cassava processors Community organizations – cheese processing
Colombia:	Private business – processing and sale of blackberry and other fruits Private business – Uchuva export
Costa Rica:	Producers association – milk processing
Guatemala:	Co-operative – export of fresh vegetables Co-operative – lemon dehydration
El Salvador:	Producers association – production and processing of indigo Co-operative – growing and processing of chilli

All the products in all the cases had some type of post-harvest processing. Of the 12 cases, eight were related to fruit and vegetables processing or packaging, and two to processing of dairy foods. Six of the cases, intermediate products were produced for further industrial processing and six produced final products.

Different types of organizations were covered by the cases. Seven of the cases were based on co-operatives, two on somewhat less formal producer associations, two involved privately own processes and marketing businesses, and one was a community-based business.

The most interesting feature of the review in Latin America was the range of linkages identified and findings on the types of support services involved in each one of them. In brief, producer associations and co-operatives established linkages as follows:

- private businesses – commercial development, marketing and quality control;
- non-profit organizations – supporting development, business administration, information management;
- government - meeting technical requirements;
- international Cupertino – promoting production and family welfare.
- Emerging linkages enable commercial ventures to move forward and adapt in highly competitive environments. Some of the key benefits were:
- promote business management, including careful planning of production activities in order to meet specific quality standards, and commitments on deadlines and quantities;
- development of factor markets and services, including collective bargaining to improve prices, access to credit and high quality inputs.

Key patterns and trends observed were:

- relationships between producers and associations have a more solid contractual basis than even a few years ago;

- quality and quantity requirements are stricter for products intended for export and for outlets such as supermarkets and department stores;
- the scope of linkages and related services have increased in diversity and complexity as organizations have had to fill the voids left by withdrawal of governments;
- linkages between associations and individual commercial agents are under increasing pressure as larger, more integrated marketing firms increasingly are able to handle transport, packing, labelling, quality control, provision of finance, etc.

Key success factors in the Latin America cases were:

- technical upgrading of artisan as well as industrial technologies;
- high levels of education and training;
- solid and expanding domestic markets in which remunerative price permit the development of innovations and new skills;
- explicit public and private co-operation policies.

Principle constraints affecting development of agribusiness linkages were:

- lack of direct linkages between the co-operatives and the sources of technological and organizational innovation;
- poverty which prevent wealth accumulation and investment;
- absence of dynamic interactions between the public and private sectors;
- prevalence of informal activities with private agents (undermining associations);
- vulnerability and crises due to unstable international markets.

Main conclusions

It is indeed feasible for co-operatives and producer associations to promote the development of linkages between agriculture and business. A major policy related issue is the lack of incentives or sanctions which aide associations and co-operatives in dealing with unfair practices of firms or even some of their members. This is a major shortcoming of informal arrangements.

Participating producers need to be given support for the development of entrepreneurial, management and negotiation skills. Four main areas of capacity building were identified:

- production planning based on market requirements;
- collective bargaining for production inputs and advisory services;
- design and use of risk management mechanisms;
- appraisal of costs, benefits and priorities for contract negotiations.

Synthesis results of farm-agribusiness linkages country studies in Africa

Alexandra Rottger, FAO, Rome

Background

Strengthening farm-agribusiness linkages is vital for agribusiness development. Successful linkages lead to adding value in the agricultural sector, they can help to create employment and increase income levels. Contract farming, asset sharing or informal arrangements between farmers and agribusiness can raise each player's profitability, competitiveness and market position. Small farmers cannot remain only producers of foodstuffs but have to take on the additional role of entrepreneurs in order to improve their livelihoods and move beyond subsistence farming. Agribusiness companies on the other hand are in need of reliable domestic raw material supplies to improve their international competitiveness.

The challenge is to find ways to link small growers in developing countries to higher value domestic and international markets. Linkages cannot only be promoted by the private sector but also need attention by governments and agricultural support organizations. The FAO initiative looks at possibilities to improve policies relating to agribusiness development, as well as to develop specific support programs and projects.

In 2001 and 2002 country case studies were undertaken in Ghana, Nigeria, Kenya, Uganda and South Africa. The main purpose was to get an insight into current agribusiness linking arrangements by identifying and analysing interactions between farmers and agro-processors. Special emphasis was given to long-term, formal and informal, but managed co-operation. Different methods and practices were highlighted and key factors explored that have led to successful partnerships. The country studies also contained a brief sector overview.

Agribusiness sector reviews

In all countries studied with the exception of South Africa, there is insufficient data on the agribusiness sector available.

Agribusiness in Ghana is still rudimentary and artisanal with little growth or development over the last three decades. It is difficult to analyse the performance of the agribusiness sector in Ghana due to the lack of comprehensive data on agribusiness enterprises and their activities in Ghana. The sector is not classified into sub-sectors and the last industrial survey was conducted in 1995 but covered only medium and large-scale industries. The extracted data on agro-industries showed a total of 250 companies with about 48,914 employees. In terms of employee numbers, the timber sub-sector dominates (46%) followed by the textile sub-sectors with 22%.

There is a lack of data on the agribusiness sector in Uganda. It appears that the sector is in its infant stage of development. Agriculture is dominated by smallholder farmers with limited interaction with both product and input markets. Some growth has

been experienced in the horticulture and fish export sector but similar to Ghana there is no official statistics available. The traditional cash export sector is losing in international competitiveness.

Kenya has had a successful agricultural sector development since the early 50's. In the early 90s, the agro-processing sector contributed about 10% to GDP and 31% to total employment. During this period, however, the government introduced far-reaching structural reforms, including removal of price controls, removal of all import licensing, and removal of foreign exchange controls. These measures slowed growth substantially to 1.2 percent in 1997.

Much of the new agribusiness investment over the past decade by foreign companies has been made by firms, which had already been established for a long time. Investments have been geared toward diversifying product lines away from commodities facing adverse market trends. Kenya has witnessed the diversification of foreign owned tea, coffee and sisal companies into horticultural production and trade.

Nigerian agribusiness enterprises include the whole gamut of operations in the agricultural production, processing, distribution, and consumption spectrum. Agribusiness enterprises in Nigeria are classified into four major groups, farming input supply companies, producing farm firms, food processing agribusiness firms, and food marketing and distribution agribusiness organizations. These four groups can be found in the formal and informal sector of the economy.

Agribusiness firms are scattered all over the country but are concentrated in three main industrial clusters in Nigeria; Kano Kaduna Jos in the north; Lagos-Otta-Ibadan in the south west and Port Harcourt-Aba-Nnewi-Onitsha in the southeast. In general, the Lagos-Otta-Ibadan axis accounts for 44% of the registered firms and roughly 52% of the employment. Based on the average number of employees per firm, the largest firms are also located in the Lagos area. While most of the sector is made up of small-scale enterprises (about 60% of the firms have between 20 and 49 employees), these only account for 12% of employment. With a few exceptions, firms with more than 500 employees provide the bulk of sectoral employment and account for 53% of total employment.

The South African agro-food complex, which consists of primary production plus the input and agro-processing sectors, accounts for around 14% of the GDP. In 2000 the agro food complex exported about R16 billion worth of primary and processed food products, or nearly 10% of South Africa's total exports. Almost all the productive and social activities of rural towns and service centres are dependent on primary agriculture and related activities. This includes increasingly popular and economically significant agro-tourism and game farming activities. Taking all of this into account it is true that more than half of the provinces and about 40% of the country's total population are primarily dependent on agriculture and its related industries.

Sales in the South African manufacturing sector grew by some 2.5% per annum in real terms in the period 1996-2001, a rate close to the overall real rate of growth of the economy. By contrast, sales of the food and beverages industries grew by about half that rate, making it one of the worst performers in this sector. Recent sales growth in this sub-sector has been third highest among the components of the manufacturing sector.

Production in the food and beverages group accounted for about 18.5% of total manufacturing output for the country in 1996, while employment was 15.9% of total manufacturing sector employment and the wage bill 13.5% of total manufacturing sector wages.

Selected success cases

Successful farm-agribusiness linkage arrangements were selected in the horticultural, dairy, rice and traditional cash crop sector. Case studies in Kenya include Homegrown, a leading vegetable exporter, Brookside Dairy, a milk processor, Kapapet Tea Factory, a processor and the Mwea Rice Irrigation Scheme. All cases have strong involvement with smallholder farmers. The case studies selected in Ghana comprised two fruit exporters a cashew processor and a rice production, processing and marketing scheme. Uganda took a more sectoral approach but in general linkages found were weak and informal in nature. The coffee, horticultural and dairy sectors were chosen.

Managed, long-term relationships between farmers and processors are also not easily encountered in Nigeria, but a fruit juice maker processing, a sorghum out-grower scheme for Guinness and a rice processing scheme were selected and analysed as case study material. South Africa focused on managed co-operation between large-scale processors and farmers from disadvantaged communities in the sugar, timber and tea sector. The table below gives some key information on the cases chosen.

Table 1: **Selected case studies**

Country and Case	Type of Business	Initial Support	Objective	Size of Operation
Kenya				
Homegrown	Vegetable Exporter	private sector	Fresh vegetable exports to EU	900 small scale, 30 medium scale farmers, exports ca 50 000t pa
Brookside Dairy	Milk Processor	private sector	Processing for domestic market	200 000 l per day with ca 15 000 farmers
Kapapet Tea Factory	Tea Processing	Government	Shareholding arrangement with farmers	5 266 farmers on 4 000 acres
Mwea Rice Irrigation	Rice production and processing	Government	Improve irrigated rice production	3 400 farmers organised in shareholding co-operative
Ghana				
Farmapine	Fresh Pineapple Export	Technoserve, IDA loan	Sea freight pineapple export	166 farmers, exports 7 000t pa
Blue Skies	Fresh Fruit Preparation	private sector	Airfreight export of ready-to-eat fruit	17 farmers, export 7 500 t pa

Country and Case	Type of Business	Initial Support	Objective	Size of Operation
Sampa Jimini Co-operative	Exporter Cashew Processors	Technoserve	salads Technology transfer to processor plus marketing assistance	airfreight 55 members in processing society, 15 t pa of raw nuts
Afifie Farmers and Marketing Society	Irrigation	Government	Production & organised processing of irrigated rice	800 farmers on 880 ha
South Africa				
Transvaal Sugar	sugar processor	private sector	linking small holders to large-scale production	1 000 small scale vs. 140 medium on 27 000 ha and 4 estates on 8 000 ha; total annual production 300 000 t
Sappi Project Grow	wood pulp manu-facturing	private sector	linking small holders to large-scale production	1 000 small growers on 4 000ha; 500 000ha estate
Sapekoe Mini-farming project	tea processing	private sector	promotion of small scale farming for ex-employees	330 small farmers on 192 ha 1 800t) vs. estate of 500ha
Uganda				
Bamahalu florist	floriculture	private sector	informal links with small scale farmers	200-300 farmers
Dairy sector	traditional production and processing, limited links	Uganda Dairy Board	promotion of formal dairy sector	20% of agricultural. GDP, 900 m I (2001)
Kawacom coffee	organic coffee production and export	NGO / private sector	forward integration of farmers into processing Organic coffee trade	Export of ca. 1 000t
Nigeria				
Fuman Agric	fruit juice maker	private sector	domestic market supply	ca. 10,000t of raw material per year, Project stopped in 1998, size not known
Guinness Sorghum Outgrower Scheme	beer brewing	private sector	secure local raw material after import ban	Project stopped in 1998, size not known
Abakiliki Rice Mill Owner Association	rice processing	private sector	processing, quality control, monitoring of standards and measures	not known

Most case studies chosen within the five countries had initial support of the private sector. However, there is more and more evidence of NGO assistance in setting up links between farmers and agribusiness companies.

Linking arrangements between farmers and agro-processors

Service provision

Most agribusiness companies studied provide a wide range of extension services to farmers. These services include the provision of agricultural inputs such as seeds, fertilizer, agro-chemicals, veterinary drugs, artificial insemination, animal feed etc. as well as field preparation services, supply of irrigation water, produce transport etc. free-of-charge or on credit.

The case studies revealed that the private sector is able to take over public extension services to primary producers, provided the agro-business is a profitable enterprise.

Box 1: Some services offered to farmers by processors

Homegrown Company Ltd is success story of production and export of packaged horticulture produce from Kenya. The company has focused in the last two decades on the processing and export of fresh vegetables to the UK market. In order to ensure the desired quality and supply of fresh produce, it was important for Homegrown to enter into partnership with local farmers to complement its own production. Through this partnership the company is able to source about 25% of total requirements and in some cases such as French Beans, 100 percent of the total requirement from contracted farmers. By entering into a supply contract, farmers not only enjoy the benefits of an assured market for their farm produce; while at the same time benefiting from the fact that their farming activity risk is minimized by the certainty with which their production decisions are made. Farmers are supplied with the latest farming technology, such as the latest crop varieties and crop husbandry techniques which has ensured that farmers are able to optimize their production in terms of quality and quantity. Homegrown also supplies fertilizers, and agro-chemicals on credit to those farmers who need material credit, so that they can be able to produce the expected quantities and qualities without exerting themselves. This is also in recognition of the fact that the credit market in Kenya is highly biased against agricultural production.

Brookside Dairy Ltd has a policy of supporting dairy farmers as a strategic contribution to the development of a vibrant dairy industry in Kenya. The following services are therefore offered to farmers:

- Extension services including regular farmers field days for educational as well as exposure to any new developments in the dairy industry.
- AI: This is an important input services that farmers need so that farmers can be able to increase their milk output. The liberalization of AI services in 1992 has resulted in the increased use of low quality breeding bulls in addition to a large number of AI service providers, offering services whose quality cannot be guaranteed.
- Animal Health Drugs. The provision of quality drugs for animal health drugs is an important role, which is instrumental in milk production. The marketing of these drugs is liberalised, opening farmers to several outlets as well as varieties of drugs whose potency could be suspect.
- Animal Feeds. These are sourced from reliable companies at wholesale prices and resold to dairy farmers through the collection centres.

All services are provided to farmers on credit, to be deducted from their milk proceeds. The prices charged by Brookside Dairy Ltd are generally wholesale prices plus a little margin to cover transportation and other overhead costs.

Contractual agreements

Contractual agreements vary from informal -not based on any written document- to formal contracts, which determine prices, quantities, quality standards and services to be provided by the processor. Formal contracts are more common in Kenya and South Africa than in Uganda, Nigeria and Ghana. However, there is no evidence that formal contractual agreements are necessary for sound linkages between farmers and buyers. Especially weak contract enforcement and an inefficient jurisdiction system make contractual agreements obsolete. Mutual trust is more important which can be developed through longer –term “fair play” on both sides, reliable and fast payments, reliable and prompt product deliveries. However, a sound understanding of quality requirement, applied methods of quality control, payment terms and expected delivery schedules.

Box 2: Example of supplier's contract in sugar sector in South Africa

The contractual arrangement between out-growers and the Transvaal Sugar Company (TSB) is controlled by a cane delivery agreement. All growers must adhere to the conditions and obligations that are specified in a comprehensive specification contract that binds the respective parties over long periods of time. The price paid to out-growers is determined by the specifications of the South African Sugar Association who determine the grower-miller split from the proceeds of sugar sales. The contracts also include transfers of areas, rights and amendments to the contract as well as the terms of the contract as a result of a *force majeure*. The conditions of termination, default, jurisdiction and arbitration respectively are outlined. Finally, the procedure of notification, cession and miscellaneous issues are outlined in the contracts.

Price determination

Prices are normally determined by the processor and not by the farmer. In some cases, prices vary from day to day, according to prevailing market prices, in other cases, like the Mwea rice irrigation scheme and Brookside Dairy Ltd. in Kenya, the processor fixes the price on a seasonal basis which then fluctuate according to market conditions. Blue Skies, a fresh fruit preparations exporter, attracts reliable buyers with prompt payment and above market prices for raw material suppliers.

Traditionally parastatals have fixed prices on a seasonal basis for cash crops especially for export crops in order to buffer farmers from price fluctuations. In this line, the Kapapet tea co-operative operating in Kenya, as well as the Afifie rice and vegetable growing scheme in Ghana both fix prices on an annual basis and may give bonuses to farmers when markets perform better than expected.

Purchasing arrangements

Methods and practices of raw material exchange can range between simple ad hoc spot market transactions with or without the inclusion of intermediaries or informal supply arrangements to highly managed co-operation such as farming under contract, asset sharing arrangements between farmers and processors or fully vertical integration of producing and processing activities. The graph shows the different types of arrangements in relation to the strength of the link.

Box 3: Raw material supplies of Transvaal Sugar Company, South Africa

Transvaal Sugar Limited (TSB) has the capacity to produce 350 000 metric tons of sugar annually from its two factories and sugar production in 2000/01 was about 300 000t. The sugarcane supply-processing operation consists of the factory processing operation and a range of growers. The growers include the company estates and a range of contracted large-medium and small-scale suppliers/growers.

TSB has about 18% estates, 58% private growers on contract and 18% of small scale contractors. The differences between the types of growers can largely be categorised on the basis of the differential farm size and the level of capital investment. In the case of the company estates, the milling company farm large tracts of land. This operation is categorised by a modern capital-intensive mono-cropped sugarcane production system with high levels of management input and control.

The second category, contracted medium-large growers, are also characterised by a modern capital-intensive mono-cropped sugar cane production system with high levels of management inputs. These farmers are contracted by way of a long-term specification contract and supply in excess of 64 % of the total volume of sugarcane delivered to the two TSB mills. Most farms are in excess of 50 hectares and in many cases, sugar cane is one of the farm enterprises together with sub-tropical fruit and vegetables. These farmers are largely autonomous and the growing and delivery of sugarcane is self managed with ad hoc inputs from the agricultural division and the factory cane supply division who co-ordinates the timing of the harvesting and delivery operations.

The third category of grower, namely the contracted small-scale growers, includes in excess of 1000 small-scale farmers belonging to thirty-two different supplier groups. The average farm size of these growers is 6.8 hectares with the smallest farm recorded as around 3.7 hectares and the largest 30 hectares.

Full vertical co-operation applies to situations where farming and processing are undertaken by the same business entity. The level of co-operation is highest with direct linkages between farming and processing. Examples are found in traditional export crops such as oil palm, cocoa, coffee, tea etc. as well as high value horticultural crops when processing entities secure their raw material supplies through a variety of arrangements. For example, all three agribusiness entities in South Africa, the Transvaal Sugar Company, the Sappi Saiccor Mills (Sappi Forest Products) and the Tshivase Estates of Sapekoe Tea, own large scale estates: the Transvaal Sugar Company grows 18% of the total annual sugarcane requirements (over 8 000ha of a total of 43 000 ha) on own estates, Sappi Saiccor Mills receive about 50% of wood for pulp making from their own plantations, while the Tshivase Tea Processor (Sapekoe Company) receives about 75% of the total annual throughput from their own plantations. Homegrown, the vegetable and flower exporter in Kenya also secures from 50% to up to 100% of raw material requirements from its own farms.

Asset sharing arrangements are an important means to link agro-business and farming. Commitments vary according to equity held by each party and shareholder representation on supervisory boards and within the management of the agribusiness.

Box 4: Asset Sharing in Smallholder Tea Production in Kenya

Kenya has had a successful smallholder tea sub-sector with about 344,000 producers in 2001, contributing about 60% of total tea production in Kenya. As a result of liberalization policies in agriculture, previously publicly own tea factories were put in the hands of tea farmers whose companies undertake tea collection and processing. There are 46 tea factories operating under the Kenya Tea Development Agency (KTDA) umbrella, some of which are wholly owned by small-holder tea farmers, in accordance with a 1995 policy change that gave farmers total ownership of the factories. By participating in a vertical ownership the processing factories and KTDA, which manages the tea factory and organises for the marketing of tea, farmers enjoy tremendous benefits associated with vertical integration. Farmers participate in profit sharing, are able to concentrate on farming, confident in the fact that their tea business is in good professional hands. Other benefits include the availability of fertiliser on credit sourced internationally by KTDA.

Contract farming: Successful agri-businesses have to maintain the volume and regularity of raw material supplies in order to operate at a reasonable proportion of their planned capacity. To achieve this, local companies may enter into formal contracts with wholesale traders, farmers' organizations or the farmers themselves. The contracts involve providing assistance to farmers in return for the crop. A similar approach is adopted by large international processing companies, which may either place staff members in the producing area to negotiate with suppliers or employ a local agent to act on their behalf. This approach originated in the 16th century for the supply of spices to European trading companies, and has since been refined and modified to source fruits and vegetables, cocoa, coffee, meat, oilseeds, sugar and cereal crops among many others. Contract farming comes in various forms and includes term purchasing arrangements, out-grower schemes and nucleus estates.¹

Box 5: Example of contract farming in the South African sugar industry

The sugarcane supply-processing operation of the Transvaal Sugar Company consists of the factory processing operation and a range of growers which include the company estates and a range of contracted large-medium and small-scale suppliers/growers. In the case of the company estates, the milling company farm large tracts of land. This operation is categorised by a modern capital-intensive mono-cropped sugarcane production system with high levels of management input and control. The second category of grower, namely, contracted medium-large growers, are also characterised by a modern capital-intensive mono-cropped sugar cane production system with high levels of management inputs. These farmers are contracted to the Transvaal Sugar Company by way of a long-term specification contract and supply in excess of 64 % of the total volume of sugarcane delivered to the two mills. Most of these farmers operate farms that are in excess of fifty hectares and in many cases, sugar cane is one of the farm enterprises together with sub-tropical fruit and vegetables. These farmers are largely autonomous and the growing and delivery of sugarcane is self managed with ad hoc inputs from the agricultural division and the factory cane supply division who co-ordinates the timing of the harvesting and delivery operations. The third category of grower, namely the contracted small-scale growers, includes in excess of 1 000 small-scale farmers belonging to 32 different supplier groups. The average farm size of these growers is 6.8 hectares with the smallest farm recorded as around 3.7 hectares and the largest 30 hectares.

¹ For further reading refer to: *Contract Farming, Partnership for Growth*, by Charles Eaton and Andrew W. Shepherd, FAO Agricultural Services Bulletin 145, Rome 2001 .

Informal linkages and ad hoc arrangements: In many scenarios contracts are not written down but rely on verbal agreements between entrepreneurs and farmers. Informal arrangements are common in markets with less stringent quality requirements for example and when planning skills of producers and processors are limited.

Box 6: Informal purchasing arrangements in Nigeria

Fuman Agric, a fruit juice manufacturer near Ibadan, Nigeria, purchases about 10,000t of fresh fruit per year on an informal basis. Installed capacity is 5 t/hour but the company presently due to raw material constraints produces only at 10 percent of its installed capacity. Fruits are procured locally by the company's purchasing manager and from independent traders with informal links to the company. No formal contracts are made with suppliers. The company determines the price and usually offers the average between the seasonal and off-seasonal price. The company prefers to buy in the glut season when prices are low since fresh fruit market demand is little. The processor may provide transport and in some cases provides some pre-finance to traders. Direct links to the farming community are limited to former cooperative groups that had worked with the former government owned Lafia Canning Factory in the western Nigeria. They provide soft loans, planting materials; equipment and other agricultural inputs while the farmer cooperative groups supply their produce to the company. The company reserves the right to discard poor quality products and the average annual prices are paid to farmers for their produce. At times when open market prices are better than company prices, farmers sell their produce in the open market. The company also goes farther to purchase supplies directly from producers and agents at prevailing market prices from eastern and central Nigeria.

Factors influencing the strength of the link

The type and strength of linkages formed between different players depends in part on their mutual interest in forming and maintaining agreements, but also on other factors including the physical and institutional environment, and the types of products or processes involved. In general, good communications and transport promote stronger linkages between farmers and traders or processors while adequate utility services support the development of agribusinesses near to producers.

Nature of Product: The nature of the product is an important factor determining the collaboration between producers and processors. Highly perishable, labour intensive crops, which do not have an alternative market, ensure very close collaboration between farmers and agribusiness firms. This is clear from the involvement of the agro-processor in production matters such as the provision of seeds, agro-chemicals, credit, extension services, as well as providing assistance in establishing produce collection centres. Where a product is not highly perishable, sensitivity towards important aspects of the product supply and marketing may not be given the necessary importance.

Box 7: Blue Skies, exporter of fresh fruit preparations, Ghana

Blue Skies is an exporter of ready-to-eat fruit preparations near Accra. The company has performed very well since its start in 1998 and exports every week about 35 t of chilled fruit salads by air. The company cuts and slices fruits and exports them within 24 hours of delivery to the processing factory.

Within a short period of time the processor managed to establish close links to the farming community. Through intensive training and continuous extension service provision, all suppliers have become able to meet the strict quality requirements. Good agricultural practice certification for the European retailers (Eurep GAP) has been successful for many Blue Skies suppliers.

Support of farmers' organizations: The existence of farmer's organizations such as producers' co-operatives or associations and agricultural lobby groups are beneficial to commercialization of agriculture and agribusiness development. Farmers as individuals especially in small holding systems are at the weak end of the economic exchange system. They therefore have to evolve strategies to enhance their market power. Farmer's associations can be responsible for configuring its members with market requirements including training, extension, technology acquisition, provision of commodity inputs and co-coordinating harvesting-delivery schedules.

On the other hand agribusiness firms can deal more efficiently with farmers association by acquiring representation in the management structure, as well as, allowing the producers' association to be represented in its own management structure. The agribusiness company, moreover, can further influence the efficiency of the farmers association by ensuring this body maintains records, has no political agenda, and is limited in size and that it contains sufficient professional management.

Role of the initiator of the link: Successful farm-agribusiness development depends on the role played by the initiator. In general, linkages are initiated by either a business entity or more traditionally, by a government agency responsible for the development of a particular commodity. Where profit making for the initiating entity is essential, the initiator plays a greater role in developing farm-agribusiness linkages. Private sector enterprises have proven faster in establishing linkages with the agricultural sector than public institutions. However there is a trade off for profit making entities between developing sustainable relationships and the costs associated with providing farmers with necessary incentives to produce.

Box 8: Less intervention by Kenyan Government in business affairs

Policies need to be clearly indicated, and the respective roles of the major actors well focused. A case study in Kenya¹ indicates that linkages in the horticultural sector have a longer life span of progressive growth, owing to the fact that the role of government in this sub-sector has been more regulatory and indirect, using lobby organizations. Where government involvement was heavy through direct participation as the sponsor of the agribusiness linkage, such as in irrigated rice production, growth has tended to be slow and less dynamic. This is probably due to the very nature of government inclination towards efficiency in production and distribution, as well as the amalgamation of different objectives in a given enterprise. These objectives could be social equity, food self-sufficiency and the generation of income for a given constituency of the population. In the face of liberalization and the changing world economic order, farm-agribusiness linkages with heavy government control are unlikely to fare well. This means that governments have to be sensitive to changing economic climates and reduce their presence to policy and regulatory work.

Creation of asset specificity: Other factors that favour the creation of stronger linkages include greater product specialization by farmers and processors. The creation of mutual asset specificity reduces uncertainty and raises the exit costs of both sets of contracting partners. Asset-specificity is high in tree crops for example due to long production cycle compared to annual crops. Capital intensive processing equipment with a long amortization period creates a high specificity and increase exit costs.

Box 9: Effect of asset specificity in the South African Sugar Industry

Mutual asset specificity can be pursued by way of farmers associations undertaking the purchase of industry specific capital inputs. The Swaziland sugar farmers associations appear to have increased mutual asset specificity by investing in sugar specific plant and equipment that is too lumpy for the individual farmer. The agribusiness can attempt to act as a facilitator of finance, in this regard, to increase the interlocking nature of the arrangement. Finally, the agribusiness can examine other ways of influencing mutual asset specificity by way of configuring the technology of the grower-processor operations in such a way that only the agribusiness possesses the technology to perform a specific element of the growing operation. Contracted growers, for instance, in the processed tomato sector, require specific harvesting technology that can be owned and operated by the agribusiness.

NGO facilitation: Institutional facilitation by international NGOs has assisted mutual beneficial links. With under-funded government extension services and limited knowledge, experience and financial strength of many agribusiness companies, NGOs can play a fundamental role in establishing and maintaining farm agribusiness linkages. This involvement has a large component of providing advisory and extension services to farmers in the absence or inadequacy of public advisory services. However NGOs should be aware of not to create unfair competition by offering subsidized, and hence long-term unsustainable incentives, such as subsidized farm-gate price, credit, inputs etc.

Box 10: The Farmer-Ownership Model for pineapple exports supported by Technoserve, Ghana

Under a World Bank Loan, pineapple farmers were organised into legal entities such as co-operatives. A limited liability company was formed by the farmers' co-operatives to carry out all post harvest aspects including exports. The co-operatives got financial support to acquire 80% of the shares in the company. Two established pineapple exporters acquired 10% of shares each. A Board of Directors was formed as well as a management team. One years' working capital was provided to the farmers and the company in the form of a loan from the donor.

Contractual agreements have been made between the company and the co-operatives in regard to pineapple production, input supply, and pineapple sales. The company through the co-operatives provides farming inputs on credit, as well as extension services. Profit sharing is done in form of dividend payments to the farmers' co-operatives.

Benefits and constraints to farmers and processors

Farmers' benefits include having assured produce markets, minimising production risks, transfer of knowledge on the latest farming technology, supply with crucial agricultural inputs, often on credit. As for farmers, processors benefit from assured raw material supplies without commitment of land and labour resources. Also they exercise control over the production system in order to comply with set standards of relevance to accessing markets. Managed co-ordination facilitates production and marketing planning.

Despite the obvious benefits a number of constraints in farm-agribusiness linkages have been mentioned in the cases studied. Constraints can be classified as internal and external.

Internal constraints on farmers and agribusiness

Lack of business management skills: Poor production planning and marketing skills, especially by small-scale processors, results in a failure to take account of inputs needed to process scheduled amounts of raw materials. Production rates are then insufficient for the amount of crop ordered from the farmer, and processors fail to collect the crop when agreed. Processors also fail to plan for equipment or power failures by ensuring an adequate level of spare parts or backup power generation. This causes production to halt and this has similar knock-on effects on raw material requirements and output marketing. Financial planning skills by agribusiness entities are especially important during the harvest season. Large amounts of working capital are needed to buy seasonal raw materials in adequate quantities, and poor planning may result in delayed or non-payment for crops. This lack of financial awareness, together with low levels of profitability in many small enterprises, also means that processors are unwilling or unable to afford extension advice to farmers, or support them through provision of agricultural inputs or credit. For a large majority of smaller companies, these constraints effectively prevent them from entering into formal contractual arrangements with farmers.

Raw material procurement: Difficulties in establishing and maintaining reliable and sustainable supply relationships between farmers and processors can lead to poor business planning and management. Off-season supplies are particularly difficult to maintain in rain fed

farming systems. Gluts of raw farm produce during harvest time are common and with lacking storage and pre-processing facilities, continuous processing activities are difficult set up.

Socio-economic discrepancies between farmers and agribusiness create difficulties in establishing long-term, business relationships. Many processors see farmers as simply a source of raw materials and have no interest or no financial resources in supporting or developing them. Others have little respect for farmers and regard them as inferior partners in an agreement. This creates tension and leads to breakdown of agreements, with farmers feeling exploited and renege on their commitments. Additionally, the lack of trust between farmers and the lack of organizations to work together to meet a processor's requirements, result in insufficient volumes of crops for processors.

Quality constraints: Farmers often have little understanding of processors' requirements for specific crop varieties, high quality standards, specified production volumes or timeliness of delivery. Their lack of commercial skills and knowledge of the way in which commercial enterprises operate is a significant constraint on development of effective linkages. Lack of knowledge and skills also cause farmers to harvest crops when they are immature, cause damage to crops from poor post-harvest handling, and not sort crops into different quality grades. Each of these restricts farmers' ability to meet buyers' requirements and again reduces their income.

Financial constraints: Lack of resources for farmers ultimately arises from insufficient income from their crops, although there are multiple reasons for this. For example, delayed payments from buyers and lack of access to credit create indebtedness, and high interest charges for informal loans by rural money-lenders or middlemen continue the cycle of poverty. Farmers are unable to afford inputs that would reduce damage and maintain the quality of their crops, or afford post-harvest technologies which would enable them to store crops until prices increase out of season. The need for income as soon as possible during the harvest season and high levels of theft from fields or food stores in many countries, prompts farmers to harvest crops before full maturity and to avoid storage for later sale. Each reduces farmers' potential income and prevents them meeting their side of an agreement with processors.

External constraints on farmers and agribusiness

Among numerous external constraints that face both farmers and agribusiness, the following have significant effects on the creation of strong linkages.

Adverse macroeconomic conditions: Inconsistent and not transparent business rules and regulations in general hinder business development. In countries with high taxes, a poor tax administration and high levels of corruption, any economic development is stifled. Poor monetary policies are reflected in high interest rates and devaluing exchange rates. Credits from financial institutions are difficult to obtain and loans are unaffordable in high inflation/ high interest rate environments. Devaluation leads to rising costs of imported inputs. Shrinking government expenditures on agriculture are rather the norm than the exception in most agricultural based countries.

Market constraints: Limited purchasing power of consumers in developing countries results in low demand for processed goods. This in return limits the profitability of agribusiness. Additionally, small numbers of processing companies are insufficient to support local

manufacturers or supply agents of processing equipment, packaging and ingredients, each of which acts as a brake on development of agribusiness. Trade liberalization policies have increased competition with imported raw materials and processed goods.

Lack of institutional support: Coherent public agricultural, business and industrial development strategies are lacking or there are problems with implementation. Budgetary pressures have led to under-funded education sector. Also educational institutions often have insufficient understanding of the needs of farmers and agribusiness, and lack both the resources and commercial awareness to implement practical programmes of support. Additionally, their organizational structures may be geared to offering staff promotion based on publications in scientific journals rather than successful assistance to target beneficiaries. Government policies to support applied research and development may not be co-ordinated with agricultural and industrial development policies, or may even conflict with them.

Extension services often have inadequately resources. Extension agents may be technically trained, but lack marketing or business skills or skills required for improving farmers' business opportunities and their organizations. In countries where extension services and rural banking are inadequate, traders are the only effective source of agricultural inputs or short term loans, and farmers are unwilling to enter into contracts with processors, or may be prevented by traders from doing so.

Limited availability of inputs: High costs of raw materials in both, farming and processing, lead to a low profitability in the agricultural and business sector. Inputs necessary for adding value to primary products are often imported while local intermediary goods suppliers cannot compete on price and quality of imports.

Restricted market information: Public services are under-funded so that little or no published information on markets, prices, trends, key market players. Commercial market research services are rare and costly.

Recommendations made from individual case studies

Strengthening farm agribusiness linkages has many dimensions and a wide range of interventions can be applied on different levels. The following recommendations were made:

Government level:

- enforcement of appropriate policies to improve general business climate;
- encourage private sector participation;
- build capacities in agriculture and agribusiness;
- provision of enabling conditions for investment;
- facilitation of farm-agribusiness linkages.

Agro-processing level:

- training and skills development: improvement of management, organizational, marketing and general entrepreneurship skills; assistance in product diversification;
- reduction of transaction costs in raw material supply-direct buying from farmers by identification/collaboration, contract negotiation, etc;
- improvement of market access to higher value products through better market information for processors and farmers and improving quality management skills;
- financial support to agriculture and agribusiness.

Farming level

- training and skills development: improvement of capacities in entrepreneurship and farm management;
- encouragement of farmers' organizations: to take over extension role i.e. training, technology acquisition, input supplies, co-ordination of harvesting and delivery schedules.

Donors/international organizations

Specific projects focusing on agribusiness development including:

- formulation and implementation of adequate macroeconomics and sector policies;
- institutional support: focusing on development of entrepreneurship in farming and processing sector, improving national and international market access;
- farm enterprise /processors' level: training/education in general business management, quality control, management, technical advice for processing skills, access to finance, market research and development, product development etc.;
- continuation of institutional facilitation of farm-business linkages by NGOs like Technoserve, Ghana.

Conclusions

Poor political and economic governance are major causes of a lack of agribusiness development in Africa. General political uncertainty combined with poor infrastructure and a lack of institutional support makes the pursuit of economic growth difficult.

The vast majority of African smallholders lacks education, has severely limited access to communications or physical infrastructure, may suffer from poor health and nutrition and lacks remunerative markets and access to yield-enhancing inputs. International competition from often distorted world markets is high and threatens to marginalise the majority of African smallholders.

Processors in low-margin sectors with limited skills and assets face constraints to ensure on and off-seasonal raw material suppliers. Spot market transactions on an ad-hoc basis are the norm and the provision of extension services therefore out of reach. With

uncertain raw material supplies of adequate quality and quantities, and with high cost of coordination, processors find production planning a crucial constraint that also leads to marketing problems. Low market demand for value-added products increases marketing constraints. Lack of product quality, reliability and commercial orientation are the most commonly criticised features of farmers. Recommended good agricultural practices are often not applied.

However, a number of positive developments in agribusiness can be found across the region. The horticultural and dairy sectors in Kenya and Uganda have recorded upward trends while incorporating smallholders. Horticultural exports from Ghana also have increased over the past decade. The South African farming and processing sectors are undertaking actions to include previously disadvantaged farmers. Negative international price trends of traditional exports have been reverted in some cases by pursuing high quality niche markets.

Constraints and opportunities for agribusiness development in Nigeria

Chuma Ezedinma, IITA, Ibadan, Nigeria

The Nigerian agricultural system is characterised by heterogeneous and complex production patterns with a wide variation in climate, population, density, and access to infrastructure. Rapid urbanisation is changing the nature and character for food and agricultural products, putting additional pressure on the demand for post harvest-processing and development. Agricultural development in Nigeria has been supply driven with a complete absence in both public and private sector extension services to meet demand of small and large scale agribusiness in off farm marketing and non farm activities. Globalisation and liberalization has posed a challenge to the effective adoption of productivity enhancing technologies and increased agricultural competitiveness both for food and export crops

Constraints to agribusiness development in Nigeria

Sectoral policies

There is an absence of national and regional policies on agribusiness development. Infrastructure such as electricity, water, road and rail transportation exists but is in an extremely poor state of maintenance. The financial sector is well developed but does not lend to agriculture, nor does it reach rural areas. Unpredictable government actions have created uncertainty, mistrust and high levels of corruption leading to a negative business environment.

Tax regime

The risk and uncertainty in the Nigerian business environment is heightened by the tax regime. This problem arises from the wide variety of constantly changing taxes and levies imposed by the state and local governments. Many local levies overlap with federal taxes or with other state and local levies. Other overlapping taxes include local premises tax, ground rent, federal and state education taxes; sign board tax and mobile advertising tax. In addition to these there is withholding tax and pay-as-you-earn tax. The multiplicity of taxes and the poor design and administration of some taxes contributes to the risk and uncertainty of business in Nigeria. The tax system forces managers to devote a large amount of resources to dealing with the administration and its inefficiency reduces firms' stock of working capital. The tax regime is a particular concern to foreign-owned firms and those that employ significant numbers of expatriates. This almost certainly helps to discourage foreign investment and technology transfers.

Regulatory environment

This is also problematic and is an important cause of concern for agribusiness managers. Most regulations and laws change frequently or are inconsistently applied, causing firms to expend considerable time and effort to comply with them or negotiate ways around them. There is a multitude of regulations imposed by all levels of government agencies. The Standards Organization of Nigeria (SON) and the National Food and Drugs Administration Commission (NAFDAC) are also frequent sources of burdensome regulations. It is reported (Marchet *et al.* 2001) that neither organization appears to have the capabilities needed to adequately perform its regulatory roles. Therefore, instead of

protecting industry and consumers, they serve more as a way to harass businesses. In fact, most business managers believe that these agencies are not competent and function more as a source of graft than as proper regulatory bodies. The same can also be said of the federal and state environmental agencies.

Crime and security

These are significant issues facing every person and enterprise in Nigeria. Lack of security also discourages foreign investors. The government's inability to provide security imposes many costs upon the agribusiness sector. Some are measurable; such as the amount of money firms spend hiring security guards. Others may be difficult to quantify.

Farm-level constraints

At the farm level, the Nigerian agricultural system is characterised by subsistence smallholder production in scattered irregular plots. Geographically, farmers are dispersed and unorganised so that the cost of bulking and consolidating their produce for commercial supplies is enormous. To circumvent the problem of bulking logistics, the formation of farmers into groups has been recommended (Kormawa et al, 2002). The weaknesses of working with groups are shifting allegiance, insincerity, loose organization and weak financial base. Shifting allegiance occurs especially when prices of commodities fluctuate. This is common for commodities that have alternative uses and/or alternative markets. Examples include sorghum and maize. Farmers may also shift their allegiance to middlemen in such instances. Groups and individuals in the groups may be insincere and may not adhere to agreements. Sometimes groups may be loose organizations with no apparent leadership or coherence. Most farmer groups have a weak financial base and are unable to take up production opportunities. As a result (as we shall see in the next section), agro-industries use a series of alternative strategies to source raw materials. These methods include contract farming; own production, direct purchase from the producers or market, and use of bulking agents.

Market information service

Market-oriented production requires the use of a real-time market information service. Daily information on market prices can be found in newspapers for traditional export crops such as cocoa but is completely lacking for other crops of industrial importance such as rice, sorghum, cassava, maize, and horticultural crops. Existing market information services are of no assistance to farmers and agribusiness firms as information is collected monthly by public agencies, basically for research purposes. Hence, both farmers and agribusiness firms are forced to operate in a non-transparent and speculative business environment. Many agribusiness firms and farmers are unable to ascertain beforehand where to buy or sell commodities in order to maximise profits and reduce the risks associated with marketing. This has created a class of market agents who have capitalised on this non-transparent market situation and lack of information to rip off both farmers and agribusiness firms in Nigeria. In general, the agribusiness sector in Nigeria is not price competitive and lacks service linkages to finance technology and export sectors due primarily to the absence of a national market information service.

Excellent business management skills are a prerequisite for creating, maintaining and expanding farm-agribusiness linkages. Some products call for a closer managed co-operation between farmers and processors: highly perishable in need of instant processing as well as labour intensive products ensure good linkages.

Transaction costs are high when dealing with smallholder farmers. However there are several ways to internalise high costs by having appropriate logistics, accounting and management systems in place.

Building trust and mutual accountability is far more important than focusing on contract enforcement. The focus should be on developing a clear understanding of delivery schedules, prices and quantities. Frequent contact between stakeholders, regular payments, and input provisions are important in establishing trust and shared interests.

Farmer organizations should act as intermediaries between smallholders and agribusiness. If functioning and well managed, farmer organizations can be of assistance in collective input procurement, saving schemes, dissemination of extension messages on good agronomic practices etc. Organizations can offer services such as farm-produce collection centres as well as sorting, grading, bulking services. Strengthening such organizations is essential for sustainable links. However, NGO's should focus on facilitation, but should not get involved in running the business.

Strengthening farm-agribusiness linkages

Linking small-scale farmers to agribusiness in South Africa, the economics of contract Farming **Dr. Kurt Sartorius, University of Pretoria, South Africa.**

The process of industrialisation has created opportunities for smallholders in developing countries to produce horticultural commodities under contract according to certain specifics, but has the danger that small farmers will be marginalised and excluded from high value markets. The challenge is to find ways to link small growers in developing countries to these high value markets. It is argued that the major route for continued survival of small-scale farms, would, only be through a reliance on external rather than internal economies of scale through networking/clustering and other forms of alliances. This could be amongst small firms or through establishing links between small firms/growers and larger enterprises who have already overcome the major barriers to market entry. These links are usually formalised through some form of contract similar to contract farming schemes implemented in the developing world.

The objective of the study is to contribute towards the design of small farm-agribusiness partnership models in South Africa. The related central research problem is, whether or not small-scale farmers can be successfully linked by contracting arrangements to agribusiness. Three questions are evaluated in relation to the central problem. The first is, whether or not, the transaction characteristics of a grower-processor supply chain influence the governance structure that is required to co-ordinate these activities. The second question is, whether or not, contracted small-scale growers generate incremental transaction cost to the integrator compared to contracted medium-large growers. The third is whether or not small-scale growers can compete with larger growers on the basis of the cost efficiency of production.

Three case studies are carried out in the sugar and timber sector. In the sugar sector, the Mhume Sugar Company of Swaziland and the Transvall Sugar Limited are analysed. The major categories of sugar growers include small scale growers, contracted medium to large scale growers and company estates. In the timber sector, Sappi Saicor is one of the world's leading producers of wood pulp. Timber is supplied to the mill by three categories of growers, company estates; medium to large scale contracted farmers and managed small-scale farmers incorporated in Sappi's Project Grow.

The results of the case studies, combined with the potential of the South African agribusiness sector, suggest that large numbers of small-scale farmers could be linked to agribusiness partners by way of contracting arrangements. The proposals suggest, however, that a "fresh approach" to the design of these arrangements is required. This approach combined the lessons of history, conceptual developments in economic theory and the results of the case studies. The results, generally, show that the transaction characteristics of the grower-processing operations influenced the level of managed co-ordination required, that smallholder transaction cost exceeded that of larger suppliers and that

smallholder production efficiency matched that of larger growers. The design of proposals indicate a number of potential solutions including the formation of a farmers association, the possibility of state assistance or the need to develop costing systems to identify, and charge back, incremental transaction cost to small-scale growers.

The report summarises the cost to agribusiness of assisting smallholders overcome the barriers of entry to high value cash crop sectors. The results of the case studies can be used by agribusiness with respect to acquiring a better understanding of the process and sacrifices involved. Smallholder contracting projects often involve many years of agribusiness inputs before supply commences. In many instances, moreover, the company is drawn into protracted equity issues involving a local community. The study, in particular, identifies some of the pitfalls and hidden costs that agribusiness can incur when embarking on small-scale contracting projects. The timber case study, in particular, is indicative of the difficulties of managing large numbers of micro farmers that appear to be unable to be consolidated as an economic entity. The withdrawal of the financed management structure of the agribusiness, in this instance, would result in the collapse of the project and the question needs to be asked, whether or not, the micro farmers have really overcome the barriers of entry, on a permanent basis, to this industry. Contracting projects, ideally, should result in the establishment of permanent growers that operate as viable business entities. Whilst support in the start-up phase is a necessary pre-requisite to overcome the barriers of entry, the contracted farmers need to be weaned out of the company structure on a long-term basis.

Working with Smallholders: A spice processor and exporter in Zambia, Malawi and Mozambique

Mark Terken and Sander Donker

Cheetah Limited

Cheetah Limited is a paprika-outgrowing firm that has established itself in Malawi and Zambia in 1995 and expanded to Mozambique in 2000. The company exports high quality paprika to world markets. Cheetah works exclusively with smallholders and has been responsible for the introduction of paprika to farmers. Finance was partly obtained from the Netherlands Development Finance Company and from private sources.

Services include extension services, seed materials, technical skills, market information and market channels to the farming community. Extension officers provide extension services all year round including: pre-season promotion messages, seed distribution, nursery development, seedling transplanting, field- and crop-management, harvest & post-harvest handling as well as crop collection. Other messages include soil conservation techniques, composting and the use of manure. A participatory group training approach is taken which encourages attendance, dialogue and co-operation. It also encourages the identification of group leaders.

From day one Cheetah has been working with the contract farming principle. It provides farmers with an assured market and allows better production planning and monitoring. From a processing point of view there are a number of shortcomings including side selling of the crop and off-season buying commitments. Raw material is purchased at Cheetah collection points, through private traders and through direct deliveries at the factory.

Cheetah collection points

Delivery to the Cheetah depots accounts usually for about 50% of the total crop. Prices at the warehouse are higher than at depot level. Proximity to farmers is important to secure the crop and to avoid post harvest losses. Rural transport is problematic hence any assistance is appreciated by farmers and helps to promote the crop. Collection centres also gather valid field information on production and the competition. They serve also as information distribution points. Quality control however is more difficult at remote stations and quality and quantity discrepancies occur more often at depots than at central warehouses. Cash payments in the field are risky as theft is common. Transport is not always efficient as trucks are on average only 60% full.

Third party buying through independent traders

Traders are buying at low prices from the remote farmer to sell it at Cheetah offices. This has an adverse effect on the promotion of the crop. Traders often produce more quality problems than farmers as they like adding water and mixing grades. Also traders spread a lot of rumours about Cheetah to enable them to buy the crop from farmers.

Since a few years now NGO projects have been focussing more on improving market access for farmers including the provision of market information, but also in

product sales and exports. This can have a serious kickback effect on the existing private sector marketing system. Unfair competition has been introduced by NGOs, which have access to donor funding to support transport and communication infrastructure. As a result returns paid to farmers do not include "real" operational costs. A better co-operation between private companies and NGOs is imminent.

The role of NGOs should focus on government extension services and R&D activities. Extensive and long term NGO technical assistance is needed to develop sustainable production of the predominant smallholder farming system. The private sector cannot afford this especially in a competitive environment. NGO projects should not engage in output marketing since it leads to unfair competition. Working with the private sector, NGOs need to take their task serious and focus on their tasks at a strategic level. Economical, social and environmental development is core concerns, but the impact in rural areas is often very limited. Through the help of the NGOs the private sector will increase the know-how of the farmer on a technical as well as on a marketing level. This will result in improved farmer prices as the private sector has better and cheaper access to its commodities and thus increased rural income.

Doing business in Africa is challenging. Cheetah has encountered serious problems but is still operating and investing. The linkage to producer groups is the way forward for Cheetah. Linkages not only to producer groups but also to donor programmes and NGOs for the financial and operational support for our extension network. It must be noted that cohesion in most paprika clubs is a problem hampering development but there are many external factors contributing to this. For Malawi with an ailing credit system there is urgent need for firm action against defaulters and the introduction of national identification cards. Continued infrastructure investments such as communication, roads, water and electricity is very important. Improving the productivity per unit area will be the focus for the coming years as well as introducing new crops for an out grower scheme. Fighting unfair competition and side selling is a continuing battle.

Farm agribusiness linkages in the dairy sector, experiences from Brookside Dairy Ltd, Kenya **Sebastian Kariuki²**

Brookside Dairies Ltd was established in 1993, just around the beginning of the post-liberalization era, with an initial processing capacity of 5 000 litre of milk per day. The main plant is located in Ruiru, 25 km from Nairobi and is surrounded by a number of dairy farms. Its location consideration thus put it at a level where it could compete effectively with the KCC, which has one milk processing plant within Nairobi (Dandora). By 2001 the firm has been able to increase its processing capacity to 200 000 litre per day to become the leading milk processing firm in Kenya, commanding about 40% of urban market for processed milk. Over 15 000 farmers scattered in several areas of the central and rift valley supply the milk.

Relationship with farmers

Through her almost ten years in existence the Brookside Dairy Ltd has developed an elaborate relationship with her farmers for purposes of ensuring that it has a regular supply of raw milk for processing. The firm itself initiated this relationship, though farmers themselves established subsequent refinements to the relationship such as the provision of certain services.

Milk farmers are organised and registered as suppliers through a formal supply contract, which among other things indicates how much milk a farmer will be delivering to the company each day. This is important to the processing company as a planning tool as well as a major factor in determining capacity utilisation. This also helps planning the most optimal utilisation of transport fleet. Farmers are normally grouped into collection Centres, which play a dual purpose of raw milk collection as well as a service facility where farmers collect their materials from.

At the delivery Centre raw milk is entered into a farmer's account after it has been tested for quality. The firm then collects the raw milk from these centres for transportation to the processing plant in Ruiru. These collection centres are now spread from the outskirts of Nairobi to Nyandarua, Nakuru, Rongai, and Uasin Gishu.

Determination of milk prices

Since the dairy industry in supply conditions due to changes in weather conditions was liberalised the forces of supply and demand in the market place essentially dictate the determination of raw milk prices. However the real determinants of the price are in this case the milk processing companies. Their price determination behaviour is normally dictated by the supply conditions as well as the degree of competition for raw milk in the market place since the demand for processed milk is only slightly price elastic. Brookside Dairy Ltd, hence sets the prices paid to farmers for raw milk. These prices are reviewed at

² The overview was provided by Tom Wambua, Farm-Agribusiness Linkages in Kenya, Country Study prepared for FAO, 2002

various times so that they are consistent with changes in domestic supply conditions. Prices are communicated to farmers periodically.

Services offered to farmers

Brookside Dairy Ltd has a policy of supporting dairy farmers as a strategic contribution to the development of a vibrant dairy industry in Kenya. The following services are therefore offered to farmers:

- Extension services including regular farmers field days for further education as well as exposure to any new developments in the dairy industry.
- AI: This is an important input service that farmers need and whose quality should be assured, so that farmers can be able to increase their milk output. The liberalization of AI services in 1992 has resulted in the increased use of low quality breeding bulls in addition to a large number of AI service providers, offering services whose quality cannot be guaranteed.
- Animal Health Drugs: The provision of quality drugs for animal health drugs is an important role, which is instrumental in milk production. The marketing of these drugs is liberalised, opening farmers to several outlets as well as varieties of drugs whose potency could be suspect.
- Animal Feeds: These are sourced from reliable companies at wholesale prices and resold to dairy farmers through the collection centres.

All the above is provided to farmers on credit, to be deducted from their milk proceeds. The prices charged by Brookside Dairy Ltd are generally wholesale prices plus a little margin to cover transportation and other overhead costs.

By virtue of an assured market and price for milk farmers are faced with a low risk enterprise as major farm decision parameters such as price market outlet sources of production inputs and their costs are all certain. Farmers are hence able to engage in dairy production with a clear idea about the expected revenue-expenditure profiles. The provision of material inputs such as animal feeds at the collection centres has other benefits to farmers in terms of pricing, regularity of supply and quality assurance.

Benefits enjoyed by Brookside Dairy Ltd:

This is a private dairy processing and marketing firm, driven into business by the financial viability of milk processing and marketing in Kenya and later into the regional markets occasioned by the establishment of the East African Community and the Common Market for East and Central Africa. As an investor therefore the company took it upon themselves to develop a relationship with farmers who are the source of the main raw material in the industry. Through their extension department farmers' recruitment drive has been aggressive.

Conflict resolution

While the existence of a supply contract would imply that there is provision for legal redress in the event of a conflict or grave misunderstanding between the two parties, the actual reality is that the contract is seen as a memorandum of understanding rather than a supply contract. As such it is not expected that farmers would result to legal redress, should disagreements occur. For example at the initial stages isolated cases of farmers' failure to deliver milk to the processing factory were recorded, especially during periods of shortages when competition for raw milk was high. Such cases were amicably resolved through dialogue and understanding of farmers' circumstances, especially the need to be sensitive on matters of milk pricing.

Constraints faced by Bookside Dairy Ltd

The major constraint faced by the company is one of ensuring that the farmers will comply with the contractual agreement, especially the delivery of milk during the dry season, and what should be done to farmers in cases of failure to comply. The company has opted for dialogue as its option for resolving problems. However, this uncertainty can be critical to operations, when demand for raw milk outstrips supply.

Supporting farmers in linking with processors, experiences of a pineapple exporter

Charles Ofori Addo³, Technoserve, Ghana

In 1999 the World Bank funded a loan from the Ministry of Food and Agriculture under the Agricultural Diversification Project to promote the development of non-traditional exports, to the five farmer co-operative societies involved in pineapple production in Nsawam area, about 30km north of Accra. The development objective of this initiative is a reduction of rural poverty through increased farmers' income. This included the set up of a company called Farmapine, partly owned by farmers' co-operatives, which is in charge of buying, handling and exporting of pineapple.

Set up of Farmapine: the farmer-ownership model

Farmers are organised into legal entities such as co-operatives. A limited liability company is formed by the farmers' co-operatives to carry out all post harvest aspects including exports. The co-operatives get financial support from a donor to acquire 80% of the shares in the company. Two established pineapple exporters acquire 10% of shares each.

A Board of Directors is formed with as well as a management team. One years' working capital is provided to the farmers and the company in the form of a loan from the donor. Contractual agreements are made between the company and the co-operatives in regard to pineapple production, input supply, pineapple sale. The company through the co-operatives provides farming inputs on credit, as well as extension services. Profit sharing is done in form of dividend payments to the farmers' co-operatives.

Farmapine exports by sea high quality fresh pineapple to Europe. The pineapple growing areas in Ghana actually possess excellent conditions (climate, soil, topography) for a year-around production of the crop, without the need for irrigation. Supported by Technoserve, Farmapine Ltd assists the farmers in the following areas:

- procurement and delivery of all required production inputs;
- provision of technical assistance in production and directives on production planning;
- provision of post-harvest inputs (packaging materials) and training in proper grading;
- purchase of all export quality fruits at market price, less credits provided;
- marketing and sale to overseas importers of all export quality fruit;
- provision of all logistic and administrative requirements for export of the crop.

The company employs over 80 permanent staff, who are involved in field extension, transport and logistics, record keeping, sourcing of market information and general administration. In addition there are 50 casual staff for cleaning, grading and packing. The proportion of the produced pineapples, which are suitable for export has increased from 35% to 60%. In addition to the original shareholding farmers' co-operatives, the company has contracts with/has contracted 300 new farmers as out growers on an individual basis. As a result of improved technology and the contracting of

³ The contribution bases on a paper submitted by Robert van Otterdijk, FAO, Regional Headoffice for Africa, Accra Ghana

outgrowers export has risen from 4,000 t to 6,000 t, and is expected to be at a level of 9,000 t in 2003. Ghana's total export volume at the inception of the project was estimated at 25,000 ton per year. The company is seeking an entry into the fair trade market. The company is in process to become EUREPGAP certified.

Pros and Cons of the farmer ownership model

The model has a commercial, bottom-up and community based approach and is likely to be sustainable. According to the calculations farmers earn adequate returns to land and labour from crop production and sale. The farmer co-operatives are shareholders in the export company. Agronomic practises including post harvest aspects have been improved. Farmapine's competitive strength in the Ghanaian pineapple sub-sector has forced other exporters to improve their operations, quality and conditions for the farmers.

Farmapine has no marketing agent in Europe to take care of its interest and there is no control of overseas arrivals, inspections and account settlements. Late payments (6 weeks after arrival) by customers have caused cash-flow problems for the company. The farmers' co-operatives do not have any drop insurance scheme. At present only 167 farmers are involved in the export company as shareholders and the current set-up does not allow expansion. With 80 permanent staff for 167 farmers and 6000 t exports per annum, Farmapine seems to be overstaffed. Management staff of the company does not have shares in the company and no profit sharing arrangements. There is little vision for the future and little anticipation on changes and risks. Also the influence of the farmers' co-operatives in the decision making process is unclear.

Despite the shortfalls of the current set up the future outlook seems positive: A cold-store chain service may be established by Ahold, a Dutch retailer. Relationships with overseas customers will be improved. New opportunities in pineapple processing are explored including the production of dehydrated pineapples for example for the use as food additives/flavouring agents. Self-ripening varieties are being investigated which do not need chemical applications for ripening.

The Farmapine case is a model, which attempts to combine private sector commercialisation and providing service to the farming community. The set-up and implementation need to be sharpened up, however it provides a good framework for improving farm-agribusiness linkages.

Agribusiness-agroforestry linkages

Diane Russell, Steve Franzel and Fridah Mugo

World Agroforestry Centre, Nairobi, Kenya

The World Agroforestry Centre (ICRAF) is committed to expand its work in market analysis and agroforestry enterprise development to raise farm incomes and improve farm management. A new theme launched in 2003 called “Trees and Markets,” targets at “delivering approaches, strategies and methods for agroforestry markets and enterprises, tree domestication and diversification of cultivation systems in response to farmer needs.” A focus is on market analysis and support to tree product enterprises, which aims to “increase the financial, social and natural capital of smallholder farmers through tree-based enterprises with strong market linkages.”

Linkages can be made at any scale from one farmer reaching a market to large-scale contract farming. ICRAF typically concentrates on scales that engage smallholders rather than larger producers or private plantations and has little involvement in Africa in traditional export crop sectors where farm-agribusiness linkages are strong, such as cocoa, coffee and oil palm. Although ICRAF draws on some work on rubber and oil palm in South East Asia and has recently entered in collaboration with CIRAD on coffee-based agroforestry systems in Africa.

A number of case studies related to farm-agribusiness linkages have been carried out in the charcoal, smallholder timber, medicinal trees, peri-urban nurseries, indigenous fruits, temperate and tropical fruits, calliandra seed, and vegetable sector as well as several workshops. A project “Making Money from Trees” has been launched.

Key research questions of the studies and workshops include:

- How can ICRAF and other international R&D institutions foster agribusiness linkages?
- How can private sector actors be involved much more closely in the work in research and extension?
- What is the proper role for ICRAF and other groups in helping farmers to organize for production and link with the private sector?
- Should ICRAF and donors provide short- or longer-term financial support for networks or associations?
- Contract law enforcement is weak to non-existent in most areas of Africa with respect to smallholders. How can this be changed?
- How can ICRAF and partners assist smallholders to deal with quality concerns and changing markets?
- How can agroforestry researchers fully integrate knowledge of agribusiness linkages and more broadly knowledge of market demand for agroforestry products into research at all levels?
- How can ICRAF engage the private sector more actively in research without losing focus on smallholder farmers?
- How can ICRAF learn from the experience of other countries such as Namibia and Sudan in liberalizing the charcoal and firewood sector?

- How can research be focused on the links between key market chains and their subsidiaries and the effects of decline in key markets?
- How can ICRAF engage with partners in the dairy, livestock and coffee industries for this research?

Some results of the case studies are the following:

Charcoal marketing: All of the workshops and studies undertaken point to the same conclusion that it is possible to grow and market charcoal sustainably. The biggest hindrance is the forest/woodland conservation mindset of the policy makers in some countries and some development partners.

Smallholder timber: Trees on the farm act as buffers to the poor in times of hardships, however, the poor lack the necessary knowledge, capital or legal rights to exploit market opportunities. Outsiders with better market networks capture the greater portion of benefits. Sustainable natural resource management and rural development are compatible and mutually beneficial especially with regard to tropical forest conservation. ICRAF can take a rightful place as an information clearing-house for knowledge on the commercial potential of AF systems.

Medicinal trees: Only 17% of the traditional healers take their products to the market. Eighty seven percent operate from home while 3% operate both from home and at the market. The study revealed that the traditional healers are not organized into any associations but they are willing to train others. An assessment of the demand for different medicinal tree species should be undertaken to identify those that could be evaluated for commercialization.

Peri-urban nurseries: Few operators are keeping good records of their businesses but many have made market related decisions to improve their enterprise i.e. open up stalls in urban areas, share big orders with their neighbours; adjust their pricing and stock new tree species. Experiences with rural operators in Central Kenya have shown that the same techniques for peri-urban tree nursery enterprises cannot be used for the rural areas.

Indigenous fruits (Irvingia market study): Many informants gave conflicting information on issues of market preferences and quality. Barriers to entry were low in terms of entering the market in Cameroon but high in terms of women at the large-scale level of trading. It is likely to be difficult to enter the regional market without good linkages with existing groups. There are problems with variability of supply, knowledge, transport and insect damage. Market studies in Nigeria and Equatorial Guinea were carried out.

Indigenous fruits: There are significant barriers to trade in indigenous fruits in Zimbabwe. Local policies often prohibited their sale in the name of protecting a natural resource. The ban had the additional effect of discouraging farmers from planting the trees on their farms. ICRAF and the consortium's strategy for promoting the marketing of indigenous fruits in southern Africa includes:

- Developing a database on stakeholders involved in indigenous fruit research and development including their capacities, activities, and constraints;

- Assess marketing options and commercialization strategies for fruits.

Temperate and tropical fruits: All the tree fruits targeted face strong competition in the global market. Lychee compared to macadamia and figs has high value, which can outweigh the cost of airfreight. There is need for more research on the potential of regional markets for specific tree fruits.

Calliandra seed: Adequate and sustained supply of planting materials is a problem wherever calliandra planting is expanding. Most important lesson learned is that the biggest reason behind the lack of available seed is a lack of information about calliandra, both the potential of the shrub as a livestock feed as well as how to harvest, store, and market seed and seedlings to farmers who want to buy it.

Dambo vegetables: There are problems of access because many farmers are far from markets and lack information about prices. Recommendations from this study include enhancing communication and information flow of produce price/demand and encouraging farmers to work in groups (increasing economies of scale). Lobbying government provides incentives for local chain stores like Shoprite to buy local produce without making outrageous demands.

Workshops

The following results came out of workshops carried out by ICRAF targeting at improving farm-agribusiness linkages. Results of the different workshops:

Market-Oriented Agroforestry in Western Kenya workshop (2002): Profitability means sustainability. When farmers, processors and market actors make a profit they can invest back into the business or branch out into new enterprises. Links between farmers and enterprises have to be developed. There is few if any extension materials are available on markets and enterprise options. Nearly all R&D institutions attending the workshop are interested in market-led production but have little experience and expertise in it.

East and Southern Africa agricultural research integration workshop (2002); section on market chains: One mistake of enterprise projects is to start with producing more of a commodity or product with the idea that markets will be created or improved. Another mistake is to focus exclusively on one commodity that seems to be in high demand with a ready market. Markets are by their nature risky and changeable, particularly in east and southern Africa, therefore diversification is essential for stability of revenue streams. However diversification strategies confront commodity chains that demand large numbers of uniform-quality products easily transported and bulked.

ICRAF projects related to farm-agribusiness linkages

“Making Money from Trees”: The project goals are to increase the financial, social and natural capital of smallholder farmers through tree-based enterprises with strong market linkages and doing this while contributing to increases in natural capital. Purposes of the project are to understand the structure and performance of tree product markets including key policy bottlenecks; to promote demand-based market approaches and to reveal and create opportunities for marketing of new and existing tree products by small-scale farmers and

entrepreneurs. Possible interventions, and some of the lessons learned about them can be divided into:

- *enterprise development*: experiences demonstrate that it is far easier to assist existing enterprises to develop than assisting farmer groups to develop enterprises;
- *linking farmers to agribusinesses*: promoting such links appears much easier than helping farmers themselves to develop their own enterprises; however, initial experiences, show that the linkages may be difficult to sustain, because of the agribusinesses needs for specified quantities, qualities, and timeliness that farmers find difficult to meet;
- *facilitating access to market information*: market information is often a key problem, yet formal systems of published market information are often not of use to smallholder farmers. Marketing information innovations need to build on farmers' existing information systems;
- *extension information*: government and NGO extension systems often play little or no role in promoting entrepreneurship or market access, yet enhancing their role can provide critical contributions;
- *market assessment studies*: such studies, as on fruit development in Uganda, are needed to help assess whether development of new enterprises are economically feasible.

Linking with processors: choices for a small Scale dairy producer, Susan Wangechi Mwangi, Githunguri, Kenya

For a long time dairy farming by small scale producers have been viewed more like a hobby. Today the enterprise must be viewed through a complete chain from production up to marketing within the context of farming as a business. With the current status of coffee and tea sectors dairy is increasingly becoming the enterprise of choice and is very promising for employment creation and poverty reduction. There is an urgent need to consider the value adding and enhance strengthen producer and marketing groups as the current co-operatives set up is more of a liability to the members.

Revitalising Kenya's cotton sector, Dennis Ochwada, Cotton Farmer's Association of Kenya

At present Kenya under-utilises its land resources suitable for cotton growing. This results in a situation where production levels are at one seventh of the country's potential. There are a number of reasons for this such as low seed cotton prices, unstable prices, high input costs including credit, limited availability of high quality seed and poor linkages between research, extension services and farmers. Ginners face high operating costs, a reliance on low quality seed cotton, a lack of financial support, and a regulatory vacuum. Furthermore, there is mistrust between farmers and ginners. To overcome the present situation, private/public partnerships are needed for the provision of support services to farmers. Bulk buying could reduce input costs. The introduction of small-scale ginning technologies could be beneficial to small-scale farmers. On a government level regulations should be enforced to protect Kenya's industry from imported lint and finished cotton products. Financial assistance would be helpful to the sector.

Opportunities in linking to agribusiness: Maragua horticultural farmers' self help group perspective, Beatrice Wanjiru

A farmers' self-help group in the Maragua District of Central Kenya formed and benefited from the introduction of tissue culture bananas by the Kenya Agricultural Research Institute. The new technology resulted in yield increases to the point that the various other farmers' groups united to form a marketing association in order to improve the farmers' incomes.

Experiences of support agencies

Official government support to agribusiness development, visions and realities

Angela Dansson, Policy Planning, Monitoring and Evaluation Department, Ministry of Agriculture, Accra, Ghana

Vision for agribusiness development in Ghana

Current Government's intention for the development of agribusiness is expressed in the President's declaration to make Ghana an agro-industrial nation in the next ten years. This will require strong linkages between agriculture and industry. The Ghana Poverty Reduction Strategy medium term priorities include the modernisation of agriculture through improved access to land; intensification of research and extension services; provision of irrigation facilities; credit to farmers; and support to private sector to add value to agricultural produce.

The medium of long term strategies concerning increasing production and gainful employment has been stated, among others, to include access to farming inputs such as fertilisers, insecticides, high yielding seed varieties and irrigation-based farming technique; development of marketing channels for agricultural produce; encouraging the development of non-traditional exports to expand industrial production and gainful employment; and accelerated growth of small and medium scale manufacturing industries through diffusion of appropriate technologies and vibrant training programmes.

Ghana's current Food and Agricultural Development Policy is centred around five strategic thrusts considered fundamental to the development of the sector and if adequate attention and resources are committed to investing in these areas. The elements are the promotion of selected products through improved access to markets; development and improved access to technology, improved access to agricultural financial services, improved rural infrastructure and enhancement of human resource and institutional capacity. Clearly, these elements summarise the key constraints that limit the performance of agriculture, which if adequately addressed, will promote agribusiness to generate employment, increase incomes, increase food security and will reduce poverty.

The vision for the development of agriculture is well elaborated in this policy where post-production activities are given emphasis. Interventions are proposed in the harvesting and handling, processing and packaging sector, utilisation, marketing, product development, market information, transportation, handling and storage, standardisation and quality control as well as external trade. The Government has also created a new Ministry for private sector development in support of the government's declaration of the golden age of business. It is charged with promoting the development of the private sector in all spheres of the economy. However, with an agricultural based economy, with more than 60% of the population engaged in agricultural related businesses, focus would be on developing agri-businesses. As an infant Ministry, it is in the process of establishing the necessary structures that will enable it perform its role effectively.

Realities of attaining the vision

While the agricultural sector may be able to define an elaborate vision, the ability to bring the vision to fruition is dependent on massive resource requirements and efficient planning and implementation of activities. The Ministry of Food and Agriculture is the main institution for promoting agricultural development through appropriate policy formulation, implementation and co-ordination of the sector's activities. Its role is mainly facilitation and provision of support services such as extension and information. Its mandate and that of the departments and agencies under it are so designed that Ghana's agricultural sector could develop rapidly with the necessary support. The major problem that has militated against the performance of the sector however has been weaknesses in planning and paucity of resources to the sector. Until currently when efforts are being made to harmonise planning and budgeting of the entire public sector to ensure efficient allocation and use of resources, planning and budgeting has always been a mere exercise. Budget releases have never matched plans.

In spite of a long budget planning process, the budgetary provision to the Ministry of Agriculture at the end of the process is always dependent on resources available. When the Ministry of Finance indicates the budget for the Ministry, the Budget Division again uses its discretion to distribute the Ministry's allocation to the various implementing agencies. It is also common to see that even what is declared as allocation to the Ministry is not released because the government cannot afford it. This trend of events has always made planning and budgeting in the Ministry drudgery and an ineffective exercise since it is a requirement that must be met. But in reality the money may never be released for activities to be carried out. An analysis of data between 1995-2001 shows, that the agricultural sector receives only 0.01 % of the National budget. Actual budget as percentage of planned budget has averaged 50% in the years reviewed.

Another problem with planning and budgeting is the untimely release of funds for activities to be carried out. Training schedules are not carried out on time due to delay in release of funds. This promotes misapplication of funds and under performance of the sector.

The weaknesses in the planning and implementation of activities in the agricultural sector by the Ministry of Food and Agriculture are also contributed by the multiplicity of small agricultural projects implemented by donors and NGOs. These development partners often have no staff of their own and end up using the Ministry of Agricultural staff for their activities. This in effect affects implementation of MOFA planned activities since these agencies have better resources and provide better incentives to personnel staff who works for them.

Areas in need of increased government attention

To attain the vision as described in the Food and Agricultural Development Policy, greater efforts must be made in ensuring that plans and programmes are effectively designed and their implementation well co-ordinated from the district to the national level. Government needs to intensify efforts in the areas of: agricultural support services, provision of training

in agribusiness in tertiary and secondary institutions; the establishment agribusiness promotion centres, tax incentives to support agribusiness development, market analysis in commodity where Ghana shows comparative advantage, and improvement of access to credit for agribusiness entrepreneurs. Strengthening of the legal and regulatory environment would also encourage farm-agribusiness linkages.

The Agribusiness Development Centre (ADC) in Uganda, linking farmers to agribusiness, Clive Drew, Chief of Party⁴

The Agribusiness Development Centre (ADC) has been established in 1995 and focuses on non-traditional agricultural export (NTAE). It employs 15 professionals plus short term consultants, and other partners. The ADC is an agribusiness support program, playing a catalytic role in linking producers, traders and exporters. The commodity areas are in the high value segment (flowers & cuttings, fruits and vegetables, vanilla, cocoa, papain, medicinal plants) and in the low value segment (maize, beans, upland rice, cotton demonstrations). The type of services include technical assistance, training, market linkages, deal matchmaking, business advice, financial intermediation, commodity association strengthening, policy/advocacy and cost-shared grants.

Whereas Uganda has made strides in achieving rapid economic growth, agriculture and agribusiness has not been a magnet for investment. The Government of Uganda, in collaboration with its donor partners and the private sector are now implementing the Plan for Modernisation of Agriculture (PMA), where commercialisation (farming as a business) is the main feature of the framework. Uganda has gone through the process of liberalization. Extension services have been decentralised and under the PMA the trend is to privatise service delivery. Up to date Uganda still has a relatively weak private sector. Land degradation in various forms—soil fertility mining, erosion, loss of bio-diversity, land fragmentation, subdivision, land tenure complexities are a constant threat to agriculture. The smallholder has a reputation of being an unreliable supplier of poor quality product. Low yields, low volumes and high transactions costs all result in high unit costs of production and hence low economic returns, non-competitiveness and the belief that “farming doesn’t pay” or “the middlemen are ripping us off”.

Types of linkage interventions by ADC

Technology generation and transfer: Research involves introduction of candidate crops, varietal development and testing, fertiliser and other agronomic trials, integrated pest management and post-harvest handling. Effective partnerships with the research stations, multinational and national input suppliers, co-operating farmers and other donors/NGOs have been established.

Input supply: Introduction of new technologies creates a derived demand for off-farm inputs (improved seed, fertilisers, crop chemicals, farm machinery and equipment, etc). The Agricultural Training And Inputs Network (ATAIN) focuses on linking wholesalers with distributors and distributors with their rural stockists. There is a training component on product knowledge, inventory management, record keeping and safe use of pesticides plus a credit guarantee program. ADC supported the establishment of 3 local seed companies and the Uganda Seed Trade Association (USTA).

⁴ Clive Drew is Chief of Party of the USAID funded Uganda’s Investment in Developing Export Agriculture (IDEA) project, of which the Agribusiness Development Center (ADC) is the operating unit. IDEA/ADC is implemented by an institutional contractor, Chemonics International Inc. The views expressed herein are those of the author.

Marketing: ADC has made some interventions at setting up Rural Agricultural Marketing Systems (RAMS) so smallholders can consolidate their output, meet quality standards, and have sufficient volumes to attract mainstream buyers and benefit from reduced transactions costs. A consortium, the Uganda Grain Traders (UGT) Ltd has been set up. For the perishables (flowers, fruits and vegetables) the establishment of cold store facility at Entebbe, Fresh Handling Limited (FHL) was facilitated. Increasing attention is given to establishing and implementing industry self-regulated Codes of Practice covering worker and out-grower occupational health, safety and welfare, safeguarding consumer health, and environmental conservation, including control or reduction in degradation caused by agro-chemical use.

Commercial farming: ADC increasingly focuses its resources on commercial farmers as a greater supply response is expected leading to improved poverty alleviation. One particular industry ADC deals with is the flowers sector – it comprises 18 farms, export earnings were \$21 million in 2002 (about 37% of our total portfolio) and there are about 4,800 persons employed in the sector. Also some collaboration exists with out-grower schemes that are also a useful mechanism for linking smallholders with mainstream agribusiness.

Agricultural finance: A rather cautious approach is adopted since throughout the world the agricultural loan portfolio is one of the worst performers. As a project ADC does not lend money or provides loan financing. However borrowers with commercial banks are linked so there are relationships developed from the outset along commercial lines. There are few opportunities for micro-finance. Client default rate is not particularly high achieved to intense qualification for farmers and bank staff. Some credit facilities, such as the revolving line of credit for the perishable produce export cover (for freight and handling) have been particularly successful because there are tight controls in place, an assignment of market receipts, and quick turnaround where the credit line can revolve 20 or 30 times in the course of a year. Trade credit for grain also has reasonable turnover, and can be further enhanced by assignment of buyer receipts and use of warehouse receipts as collateral.

Important lessons learned

- **suitable enabling environment:** a conducive business climate including functioning commercial law, banking and tax laws, investment codes, etc. is essential for agribusiness development.
- **integrated commodity systems approach:** refers to the supply chain or the value chain, but that is all semantics. The important feature is that we are market-led and we address the entire chain – from the market all the way back to basic research if necessary. We are in a way a one-stop shop for clients.
- **multi-faceted approach:** there is a need to work on all fronts concurrently. Technology generation and transfer must go hand-in-hand with strengthening the input supply system, marketing has to be addressed, so does commercial farming and agricultural finance. If any of these facets is ignored or gets out of sequence then the whole effort can become derailed.
- **well designed interventions:** must be economically viable to be sustainable, target beneficiaries must be identified, and the right mix of technical and financial resources made available.

- **long-term commitment:** ADC/IDEA has a life span of over 9 years, and there will be follow-on projects in Uganda to carry on with certain interventions and replication of our successes. This long term commitment is a necessary condition, particularly in our case because we are dealing with NTAEs.
- **agribusiness professionals:** advisors must be like farmers or agribusiness and understand all aspects of the business and not have a narrow focus, advice has to be pragmatic not drawn out studies. Apart from technical advice and matchmaking, mediation and counselling clients not to invest.
- **results orientation:** as a key to success, this includes financial viability. A well designed results framework and M&E system are equally important.
- **the right partners:** always pick the winners and don't be afraid about dropping the losers/cutting losses on those that have failed to perform.
- **working with Associations/Consortia:** strong firms are needed who in turn can develop strong associations – not the converse. There has to be an effective way to levy the association membership, and this is only possible if the membership perceives sufficient benefit – such as the ability to consolidate commodity and handle freight, finance, advocacy, promotion and image building and other such aspects that can be done jointly to get synergy.
- **cost sharing and grants:** includes a whole range of activity such as contract research, introduction of new technologies, trial marketing, underwriting guarantees, support to associations, etc. This has been an important element because it is a tangible contribution, and can help share risk and also help jump-start an initiative. However it is not a substitute for commercial financing or a perpetual subsidy.
- **leveraging:** ADC has been effective in leveraging resources. Good results will build confidence. Success begets success.
- **local capacity building:** Local capacity of individual entrepreneurs, commodity associations etc. and our Ugandan counterparts in ADC. The project has a healthy short term training budget which is spent on certificate courses in subjects such as commercial farming and applied tropical floriculture. Makerere University students for 12 week internships with agribusiness firms, and some limited scholarship funding for MSc degrees in agribusiness management is sponsored.
- **repetition:** Interventions do require repetition of demonstrations, training and various hand holding, mediation and after-care. There is no such thing as a quick fix.
- **replication:** replication of integrated commodity systems approach in other commodity areas because it is demand driven by clients.

Linking smallholder production to markets through forward contracts, Muhoro Ndungú, Assistant Country Director, Care Canada

There are large internal and export markets for farm produce however there is a structural disconnect between market and production systems and lack of economies of scale result in inefficiency and unreliability. Commercialisation of smallholder systems can be brought forward when risk management is placed in a central position. Key risk management is attained when there is a direct link between production and market requirements. Economies of scale are a prerequisite for viable investment at all levels of the production to market chain as well as the presence of viable systems for supply of inputs and other agriculture services.

The project was established in January 2000 and aims to integrate small-scale farmers into Kenyan horticulture export market. In addition, it helps to establish profitable business that will address constraints in the horticulture sector namely: land, inputs, farmer knowledge, resources and marketing. The farmers are currently growing brinjals, ravaya, okra, baby corn, chillies, karella for the export market and pumpkin and onions for the local market. Three times a week the farmers harvest the crops. They export 80% of their produce.

The business concept is geared to restructure smallholder production to supply existing markets through commercial production/forward contracts. The key model includes forward contracts, economies of scale at production and marketing, investment and capitalisation at smallholder production level and management structures to guarantee quality, quantity and delivery schedule

The potential market size for key initial sectors lies in the range of US\$70-120 inside five to ten years. In each sector projections indicate that set up of production systems to supply existing markets is feasible within two years with potential target of 30% and 80% of the market inside the first five years. The smallholder market share is estimated at 40 to 60% of the current market. Financing can be provided through donors, venture capital funds, from Micro finance banks; from bank loans, through a self-capitalisation from sub-sector returns or trade credit.

The project has:

- organised farmers into variable horticulture production units of approximately 40 acres that can enter into production contracts with exporters that are economical to service and legally binding;
- facilitated negotiations between farmers, exporters and other stakeholders to supply co-ordinated services;
- facilitated provision of resources by credit providers to viable production units that are professionally managed and that can service credit and long-term investment capital based on sound business plans;
- provided professional management services to farmers to enable them compete effectively in the market.

Working for smallholders in Africa, Jannine Teese, Advance Consult International Business Development

Advance Consulting provides consulting services to companies, mainly from the Netherlands, wishing to expand their business internationally—by establishing production abroad, entering into joint ventures with strategic local partners, improving the quality of products sourced from abroad, or increasing access to export markets. Advance Consulting is currently involved in projects in East Europe, Africa, Asia and Latin America, generally in countries that are considered as ‘emerging markets’ or offer comparative advantage, assisting its clients to maintain or gain a competitive edge. Advance Consulting assists in identification of business opportunities and matching of companies on the basis of mutual interest. The development of these opportunities and commercial relations can be supported by projects that Advance Consulting realises by assisting in their development, implementation and financing.

Recent projects in Africa with high smallholder involvement include for example: organic fair trade bananas in Ghana, certified organic coconut oil and paprika in Mozambique, ornamental plant cuttings and speciality coffee in Tanzania, exotic vegetable production and export, coffee production and processing in Uganda.

All the projects are working with locally registered businesses in developing countries. The projects are all based on a chain approach—working from the producer/farmer through to market connections (local or European). Senter International only to innovative and pilot projects provides the partial funding. This fits in well with the strategy to value add through niche marketing. Niche markets include: organic, specific qualities or the intrinsic value (sweetness of pineapple, altitude of coffee, crops grown out of season), certification such as HACCP, BRC, EurepGAP, Fair Trade and creating a boutique value (i.e. traditionally made jams, chutneys, sauces sold in up market shops and supermarkets in Europe)

There is a great potential for investment in Africa particularly due to the climate, water, labour and land availability. The advantages with regards to climate will become more evident as greenhouse heating costs increase and land becomes more limited in Europe. The potential is for Africa to become the bread basket for Europe.

There is a huge potential for Africa to develop, certify and market its products as organic. An increasing number of consumers in the West are demanding food that is fresh, tastes good and is good for them. There is an untapped potential for the supply of fresh fruit and vegetables during the European winter and for the supply of organic products both perishable and non-perishable. In most cases Africa is able to competitively supply organic products as the farming system which is being employed is generally low input (without the use of pesticides and chemical fertilisers) thus there is not a huge decrease in yield when the farmers switch to organic as seen by the high input farming systems.

The focus for agricultural products should be on quality and product differentiation. The product should be differentiated from other products in order that it is

not competing on price. The product should be developed and marketed to avoid competing on price – but rather focus on “niche marketing” the product.

Without assistance from outside it is very difficult for a private sector player to raise capital to pre-finance the purchase of the crop. Attention should also be placed on providing extension and training to farmers on the care and maintenance of trees (pruning, composting, replanting etc). Improving the health of the tree, in turn results in larger nuts which correlates to improved prices and greater efficiency.

The main challenges of doing business in Africa are the lack of basic infrastructure (roads, electricity, telephone), corruption & bureaucracy, access to pre-financing, consistency and ability to supply commercial volumes required by buyers.

The agribusiness development support project in Kenya Caleb Wangia, Kenya, Winrock International, Lagrotech Consultants and Technoserve

The project intends to help Kenyan farmers increase agricultural production by improving access to seed varieties and fertilisers, markets, credit, information, and training. It also focuses at enhance government policies that support the private sector and farmers. Declining productivity resulting from inability to get agricultural inputs to farmers and crops to market has led to heightened rural poverty. This problem is compounded by an inadequate credit structure, especially for women, government policies that do not support small farmers and the private agricultural sector, and poor soil conditions. Increased pressure to produce more food is creating massive destruction of natural resources.

Winrock is working to improve agricultural production through a participatory, collaborative, incremental, and sustainable approach. To make better seed available to more farmers, seed multiplication units are being set up across the country to produce seed within the many agri-ecological zones that exist. Training for agricultural suppliers will help them provide much needed technical information to farmers and increase their ability to sustain private agriculture businesses. Farm-level demonstrations are showcasing the benefits of improved seed and fertilisers. Findings from tests and demonstrations will be disseminated to farmers so they can make informed decisions and implement new techniques. Additionally, farmers and extension workers are learning techniques for soil conservation and improvement.

The expected results of the Agribusiness Development Support Project (ADSP) include a 20% increase in the use of improved seeds by small farmers, a 30% increase in fertiliser use by smallholder farmers, and a 40% increase in commercial seed maize produced by the private sector.

The Rockefeller Foundation, food security theme, Akin Adesina, Nairobi

The programme focuses on improving the food security of the rural poor through the generation of agricultural technologies, institutions and policies that will provide sustainable livelihoods in areas of sub-Saharan Africa and Asia bypassed by the Green Revolution. The work addresses the root causes of food insecurity through the following areas of work such as: development of improved crop varieties for Africa and Asia; enhancement of soil productivity; improvement of the efficiency and equity of markets to raise the income of poor farmers; The theme also addresses the generation of international public goods that can help developing countries to serve poor farmers in a better way.

The Farmers' Competence Initiative, Azenen Bekele-Tesemma Regional Land Management Unit (RELMA), Nairobi, Kenya,

The Farmers' Competence Initiative (FCI) for Building focuses on linking 'agricultural production' with small-scale agro-processing, quality grading, preservation, packaging and storage, marketing and saving, farmer entrepreneurship and asset creation. The initiative is a professionals' forum to advance skills and methods for capacitating farmers through the various development conduits. The Regional Land Management Unit (RELMA) at ICRAF supports, encourages and promotes the establishment of knowledge houses where professionals could jointly advance technologies at national and regional levels for communicating them down to the farmers' level. The Ministry of Agriculture in Ethiopia is part of this initiative and works for the awaited success of farmers' capacity building in Ethiopia. Various professionals are encouraged to devote their time and knowledge resources to this Farmers' Competence Initiative for a better farmers' life.

Public-Private Partnership in agribusiness support services: cashew rehabilitation pilot project Lawrence Mugabi, Action Aid, Kenya

ActionAid Kenya in conjunction with Bayer East Africa Limited, the extension service and leaders of a community based organization in Malanga started a project on cashew nut tree rehabilitation as a strategy to enhance economic empowerment of poor households. The rehabilitating of the cashew nut tree demonstrates that there are a lot of opportunities for farmers to increase their livelihood security. Partnerships are necessary for a project of this nature to succeed. This can only be realised when each stakeholder plays its role and has the will to participate. The private sector also presents opportunities to support initiatives of poor communities, which the civil societies need to explore and exploit more. The farmer's co-operative is a movement that can control exploitation by middlemen and negotiate with serious buyers in the interests of the farmer. What all stakeholders need to watch out for is the danger of politicisation of activities that are meant to assist local people to improve their standards of living.

The cashew nut rehabilitation project serves to influence other farmers in other

areas that it is possible to produce cashew and farmers can control the entire process of production. They can also have a voice while negotiating with buyers as long as they have a unifying institution, such as a co-operative, which can reduce exploitation and where they can achieve fairer prices for the produce.

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