IFAD

Agricultural Marketing Companies as Sources of Smallholder Credit in Eastern and Southern Africa

Experiences, Insights and Potential Donor Role

Eastern and Southern Africa Division

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Preface

The large majority of poor people in Eastern and Southern Africa live in the countryside, and most of the poor people in the rural areas generate a major element of their income and food security from small scale agricultural production. In IFAD parlance, they are smallholders. Notwithstanding several decades of "rural development" their incomes and productivity remain very low – and their food security is unstable.

This stagnation in the condition of the majority of the rural population has often been attributed – rightly or wrongly – to adoption of the incorrect development "model" by governments and donors alike. A combination of "top-down" approaches, state management of key economic relations and services, and subsidies contributed – or is thought to have contributed -- not to development and income growth, but to atrophy and poverty. Structural adjustment – while often not explicitly targeted at rural development models and institutions, and certainly not based upon an assessment of alternative possibilities – contributed to the demolition of much of the key policy and institutional "infrastructure" of rural economic life in the region. The "negative" accomplishments are tangible. The positive ones, less so. Certainly, the elimination of "distortions" has not led quickly to the unfolding of a dense system of new and modern relations and institutions underpinning accelerated development in rural areas. Rather, expansion of *per capita* income and production has been extremely modest (where achieved at all), and the rural institutional terrain has become curiously de-populated.

There is no particular mystery associated with raising production and income among smallholders in Eastern and Southern Africa. Smallholders need access to viable financial services, to well-functioning markets, to relevant technology, and to the land and water that are the bases of their system of production. The question is how they are going to get that access – including who is going to provide it. Generally speaking, direct provision of financial and marketing services, as well as of many technology services, are no longer considered public sector responsibilities. Some services, or some aspects of some services, can be provided by smallholders themselves. But not all. Producer associations and cooperatives have a contribution to make, but are not the entire story by any means. Solutions have to relate to problems, and nineteenth century solutions do not always answer well to twenty-first century problems. In particular, it is essential to explore better relations between smallholders and the larger scale private sector in key areas of service provision (e.g., mobilization and supply of finance, processing, marketing and technology supply).

This study arose from our concern that access to production finance among the region's smallholders is at an incredibly low level – and our assessment that the pace of formal rural finance system development will be quite slow in the short term in many countries, particularly with regard to production finance. The challenge was to identify alternative systems of finance that enhance the production and income generating capacity of the region's smallholders – systems that might contribute more to dealing with the finance famine of rural areas.

This report documents what many had already suspected, i.e., that credit under contract farming arrangements is one of the major (indeed, often, the only major) forms of access to production finance among smallholders. Rather more unexpectedly, it concludes that these credits are not necessarily exploitative (although the case of Mozambique suggests that they *may be* under certain conditions), and that farmers who access them definitely derive concrete benefits. For IFAD, this suggests that we should continue to explore the conditions under which the private sector could find it in its interest (and capacity) to expand these relations with smallholders – and under which smallholders gain significant benefit from them.

The phenomenon that Dr. Ruotsi describes is not just "about" finance, it is also about marketing and technology. Contract farming is principally about raw material sourcing from the point of view of processors/exporters – and very much about gaining market outlets from the point of view of the small producer. At the same time, the flow from processor/exporter to farmer is not just finance, it is also a flow of technology to produce specific outputs. In a certain sense, contract farming is a response on the part of *both* the smallholder and the large scale private sector operator to the poverty of the landscape of economic institutions. It reflects the lack of alternative finance institutions and relations – and technology supply systems. It also reflects the inadequacy of "normal" marketing mechanisms to elicit and absorb production.

Probably none of the actors involved sees this as an ideal system. The processors do not particularly wish to be involved in credit operations; and farmers may well wish to feel freer to sell their output at the highest going price. Certainly, IFAD is seeking to create the conditions for institutional development and diversification in which these various functions are "unpacked" and where smallholders have more choice (and, implicitly, bargaining power). In the present conjuncture, however, contract farming arrangements represent one answer to a real problem (or set of problems), and one that should certainly be exploited more.

This is not to suggest that these arrangements are simply transitional – and will/should be superseded by more differentiated functional arrangements. The contract farming that is so significant in the region combines elements of both past and future. On the one hand, it reflects the surrounding institutional underdevelopment that forced the development of the contract model in the past – the difference being that in the past the low level of modern institutional development reflected the realities of the colonizing "moment", whereas in the present it reflects the presumed failure of the post-colonial model (of public provision of economic services). On the other hand, it reflects a certain sort of future in which the exigencies of developed country markets will necessitate very close relations between primary producers and processors/traders.

From IFAD's perspective, the challenge is to identify and exploit actually existing options for improving the environment in which smallholders seek to make a better living – as well as to support the institutions and relations that look forward to new and better smallholder relations with evolving markets. This review points to a set of relations that are important in the present, could be made more important, and will be part of the future. What is intriguing about this review is which part of the rural system these arrangements most touch upon. On the whole, they are not about local subsistence crops. They are about higher-value added crops for rich people's markets. In a world in which only subsidized farmers in rich countries can really make much of a living from producing staple food crops, functioning arrangements that lead smallholders in a different direction are invaluable – and should be supported even as non-essential elements are stripped off in the long-term process of rural institutional development.

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ABBREVIATIONS AND ACRONYMS

AFRACA	African Rural and Agricultural Credit Association
AKFED	Aga Khan Fund for Economic Development
BAT	British American Tobacco
CANAM	Companhia Algodoeira de Nampula SARL
CLUSA	Cooperative League of the United States of America
EU	European Union
FAO	Food and Agriculture Organization of the United Nation
FFPI	Fundo de Fomento de Pequena Industria - *Small Industry Development Fund*
FRA	Fertiliser Credit Programme of Zambia
GDP	Gross Domestic Product
GNP	Gross National Product
HFE	Horticultural Farmers and Exporters Ltd
HIPC	Highly Indebted Poor Country
IDS	Institute of Development Studies
IFAD	International Fund for Agricultural Development
KCC	Kenya Cooperative Creameries
KES	Kenyan Shilling
KSB	Kenya Sugar Board
KTDA	Kenya Tea Development Agency
MADER	Ministry of Agriculture and Rural Development
MFI	Microfinance Institution
MT	Metical / Meticais
NGO	Non-governmental Organisation
PAMA	Agricultural Market Support Programme
SACCO	Savings and Credit Cooperative
SANAM	Sociedade Algodoeira de Nampula
SHEMP	Smallholder Enterprise and Marketing Programme
TAZ	Tobacco Association of Zambia
USAID	United States Agency for International Development
USD	United States Dollar
ZAHVAC	Zambian Association for High Value Crops
ZATAC	Zambian Agribusiness Technical Assistance Centre

EXECUTIVE SUMMARY

While the increasing role of private marketing and processing companies in the provision of agricultural credit in Africa has been recognised, very little accurate information on these operations is currently available. In order to gain a better understanding of the new financial and commercial relationships established between smallholders and market intermediaries, and in so doing develop a better of the functioning of rural finance markets in their entirety, the current Review focuses on examining the agricultural credit operations of marketing and processing companies in Kenya, Zambia and Mozambique. It assesses their mode of operations; the terms of the credit provided and related commodity prices offered; the characteristics of the provider companies and their clientele; the credit volumes, outreach and recovery performance; the current role of donors and NGOs; and other key aspects of the operations. The aim is to provide information that would be useful in developing both appropriate rural finance interventions involving not only financial institutions but also private non-financial providers of rural credit, and more broad-ranging, yet focused, interventions for improved market linkages.

The Review shows that credit provided by agri-marketing companies is an important source of funding for small-scale producers in all the three surveyed countries. In Mozambique, these arrangements are in practice the only source of input credit for smallholders. This is largely true for Zambia too. Even in Kenya, where rural financial services are better developed, the importance of credit from marketing companies has increased – particularly as many large cooperative unions, earlier major input providers, have collapsed. The survey also confirms that the advantages, disadvantages and problems arising from contract farming vary significantly according to the physical, social and market environment and therefore, the benefits for both the company and the farmer should be assessed case by case and sector by sector.

The financial services provided by market intermediaries are often grouped into three general categories:

(a) Credit by input suppliers and traders to increase their input sales;

(b) Crop buying advances to their agents by marketing companies; and

(c) Input credit to smallholder producers under contract farming/outgrower schemes with interlocking arrangements.

Of relevance to this Review, with its focus on credit to smallholder producers, are the first and the third options. It was found that the first option, in which a trader sells agricultural inputs on credit to farmers without linking it to the procurement of the crop, is not at all common in East and Southern Africa.

Interviews conducted clearly confirmed that this kind of input sales take place strictly on a cash basis. The finding was consistent for all the crops and geographical areas reviewed.

It is the third option, input credit provided by companies with interlocking arrangements to buy the smallholders' crops under farming contracts, that is dominant in all the reviewed countries. In contract farming, a processor or a marketing company issues the inputs to farmers on credit in order to help secure produce of sufficient quantity and quality. The credit enables the farmer to acquire the required inputs to which he/she would not otherwise have access.

In Kenya, with its better-developed and diversified agricultural sector, contract farming and the related company input delivery is more widely practised than in Zambia and Mozambique. While the relatively strong rural finance sector provides various types of services to the rural population, financing of inputs by processing and marketing companies is critical for the production of many high value and export crops. The largest company-financed smallholder credit operation in Kenya is in the tea sector, the country's leading agricultural export crop. Kenya Tea Development Agency Ltd, a private company, operates a fertiliser credit scheme that provides all the fertiliser the 406 000 smallholders in the sector annually require to cultivate high-quality tea. The annual total credit disbursements to farmers currently amount to USD 15.5 million. The importance of this well-functioning fertiliser credit scheme is crucial both to the quality and quantity of production and to the incomes of tea producing households. Yet also in the fast growing horticultural sector, in the sugar industry with some 200 000 outgrowers, and in the tobacco sub-sector, company credit is crucial for contracted smallholders' farming operations, and high credit disbursement volumes are commonly reached.

In Zambia, the diversity and volumes of input credit operations by marketing firms are much more limited than in Kenya. These are, however, very important operations for the smallholders who, apart from a poorly performing government fertiliser scheme with a limited outreach, have in practice no other access to agricultural production credit. By far the largest company credit schemes in Zambia operate in the cotton sub-sector. The total annual seasonal credit disbursements by the cotton companies are estimated to approach USD 10 million and cover some 150 000 smallholders. Outside the cotton sector, company-financed input credit schemes have a much smaller outreach. They operate through contract farming schemes mainly for paprika, tobacco, vegetables and maize production.

In Mozambique, both the contracting of smallholders and the provision of company input credit are principally associated with cotton and tobacco companies operating on government-allocated concessions. In the 2002–03 season, some 270 000 smallholders worked on cotton concessions and received an estimated total of USD 2 million of company-financed input credit. In tobacco, some 100 000 smallholder are estimated to receive company credit to a total annual value of USD 2.5-5.0 million. Outside the cotton and tobacco concessions, experiments with contract farming and company credit delivery have been of a very limited scale only.

The assessment of the performance of company credit schemes under interlocked arrangements has to follow somewhat different principles than is the case in standard financial sector operations. Thus a scheme can be profitable for a marketing company even with high transaction costs and a relatively high default rate, if it secures an adequate supply of quality produce. The Review shows that the repayment performance varies significantly between the schemes. However, unlike in standard banking operations, a relatively low recovery rate does not necessarily mean that the company input credit operation has failed. In all the reviewed operations, the target of the companies is to buy produce, not to make money of the input credit delivery. The credit amounts also tend to represent only a small share of the value of the crops produced with the inputs. Therefore, if the produce buying targets of the company can be reached, reasonable credit losses are acceptable.

In the reviewed African context, a number of factors threaten the viability of the contract farming schemes that involve input credit provision to smallholders. The biggest problems to scheme sustainability emerge when the company fails to procure the expected volumes and qualities of crops from the contracted smallholders. The first issue here concerns the quality of the produce. In a number of the reviewed cases, despite the inputs provided, smallholder producers had difficulties in meeting the quality standards required for export production. The second and even more important issue is the case of side-selling and side-buying. In the newly liberalised markets, the contracting companies find it often difficult to buy the crops from their own contracted farmers. Opportunistic competitors in all the three countries buy actively and systematically from farmers contracted by other companies, and often find willing sellers within the smallholder community. Another related threat to the sustainability of contract farming and input credit schemes is linked to the problems of law enforcement in contract farming in East and Southern Africa and the obvious lack of an appropriate code of conduct among both the companies and farmers in all the reviewed countries.

Concerning the terms and impact of the company credit, the overall conclusion of the Review is that in general, there is little evidence that smallholder farming contracts and the related input credit operations are of an exploitative nature. Most of the operations have a potential to benefit both the company and the farmer. An exception in this general picture are the Mozambican cotton companies working on monopoly concessions, as the prices of seed cotton offered on these schemes are low in regional comparison and the interest rates charged on smallholder advances are clearly higher than is typical for operations of this type. Thus, despite operating with lower risks and, formally at least, no competition within their concessions, these companies do not seem to pass the benefits of their favourable market position to the smallholders.

Forming partnerships with private sector companies providing input credit presents an interesting challenge for a donor such as IFAD, whose operational strategy in East and Southern Africa includes a focus on supporting the intensification of smallholder production through improved technologies, the sustainable development of rural finance markets, and the establishment and expansion of agricultural produce markets. When well implemented, credit-based interlocking arrangements with marketing and processing companies can in many cases provide solutions to all of these three inter-linked areas, even in the often-difficult operational environments in the region. They can serve as an important element in improving the chances of smallholders to participate in the production of high value crops. In a number of countries, they provide a unique link between the small-scale farmers and the international markets.

However, in some countries, IFAD may face government resistance to an approach which proposes working directly with private marketing and processing companies. Most IFAD financing is in the form of loans to the governments, and there may be reluctance to channel these funds on to private sector partners that could use them to improve their profits and market position, even if the process would at the same time benefit the smallholders involved in the operation. It is, however, relevant to point out that in the increasingly liberalised markets in Africa, there is very little public sector field presence left in the agricultural input or output markets or in the rural sector in general. Thus, to intensify smallholder farming and to increase household incomes, new approaches and partnerships need to be considered and tested, with such partners that have the ability to perform in the roles of the input and credit provider and the produce buyer. In many cases, this will in the future mean working with the private processing and marketing companies. This calls for both IFAD and the governments to use creative approaches in the programme designs, with adequate room for private sector participation in the implementation process.

There is evidence that where opportunities for profit making exist, private sector companies have often been able to innovate to overcome the failures in the markets, including those of inputs and credit. This process can be encouraged by IFAD and other donors that have an interest in the development of rural finance, agricultural input and produce market operations in the region. In Chapter V of the report, various types of interventions are proposed, through which IFAD could support the attempts to increase the outreach and improve the performance of company-credit based agricultural schemes in East and Southern Africa.

AGRICULTURAL MARKETING COMPANIES AS SOURCES OF SMALLHOLDER CREDIT IN EASTERN AND SOUTHERN AFRICA: EXPERIENCES, INSIGHTS AND POTENTIAL DONOR ROLE[1]

I. INTRODUCTION

A. Background to the Review

1. IFAD's Strategic Framework 2002 – 2006, titled "Enabling the Rural Poor to Overcome their Poverty" defines increasing the access of poor rural people to financial services and markets as one of its three major thrusts. This priority is reflected in IFAD's Regional Strategy for East and Southern Africa (March 2002), which includes promoting efficient and equitable market linkages, and developing rural financial systems, as two of its four strategic thrusts within the Region. This Review, titled "Agricultural Marketing Companies as Sources of Smallholder Credit in Eastern and Southern Africa" aims to enhance IFAD's understanding of a range of issues relative to these two strategic areas, and so to assist IFAD and its partner governments to develop projects and programmes which enable poor farmers to better access financial services and markets.

2. In order to assist governments to design appropriate and effective projects and programmes in rural finance, IFAD requires accurate information on the operations in the rural finance sub-sector in each country of the region. This information needs to cover the activities of the current providers of rural finance services, their future plans, as well as an assessment of the constraints and opportunities that can be identified for the progressive development of the sub-sector. In the past few years, such assessments have been carried out by IFAD in various countries of the region including Uganda, Mozambique, Zambia and Kenya, to create an adequate starting point for the design of the new IFAD-supported rural finance programmes.

3. When attempting to make comprehensive assessments of the rural finance markets in the Eastern and Southern Africa context, one particular difficulty has emerged. In most cases it has been relative unproblematic to put together a fairly complete picture of the type of products, the outreach and the financial condition of financial institutions providing services to the low-income rural population. However, it has been much more complicated to identify the **non-financial institutions** that also provide some sort of agricultural production pre-financing to smallholders (in-kind or financial, recovered at sale), and to make an accurate assessment of their outreach and relevance in the rural areas.

4. In recent years, ever-increasing numbers of poor farmers in Eastern and Southern Africa are developing new forms of commercial relations with input

[1] This report was prepared by consultant Jorma Ruotsi, under the guidance and supervision of Edward Heinemann (Regional Economist, Eastern and Southern Africa Division, IFAD).

suppliers and with market intermediaries such as traders, exporters and agro-processors. While there exists a body of literature relative to these new commercial relations, there is currently only limited information available on an important sub-set of these relations: the provision to farmers by the market intermediaries of inputs on credit terms. Despite the limited information, however, it has become obvious that various types of non-financial institutions now make important contributions to the rural finance market in Eastern and Southern Africa.

5. To better understand both the functioning of rural finance markets in their entirety, and the new commercial relations being established between farmers and market intermediaries, more information is needed on the operations of non-financial providers of agricultural credit – particularly on these type of services provided by traders, exporters and agro-processors. Improved understanding of these issues would make IFAD and its partner governments better able to design projects and programmes, which address the constraints and respond to the opportunities available to farmers seeking to commercialise their production systems. In particular, it would be expected to assist in developing, on the one hand, appropriate rural finance interventions involving not only financial institutions but also private non-financial providers of rural credit[2]; and on the other, more broad-ranging, yet focused, interventions for improved market linkage.

B. Purpose of Review

6. To increase the understanding of IFAD and its partners on the role, activities and relevance of non-financial institutions in the provision of agricultural credit in Eastern and Southern Africa, the current Review aimed to provide answers to the following key research questions:

- How important are non-financial institutions as sources of agricultural credit to smallholders in the Region?
- What type of institutions are the most active and important as providers of these services: agro-processors, traders or exporters?
- What is the outreach of these services, both as absolute numbers of farmers served and relative to the service volumes of financial institutions of various types?
- What sort of smallholders participate in such commercial relations? To what extent are participants drawn from the poorer sections of rural communities?
- How do these commercial relations get initiated and established? Do NGOs play a role in brokering such relations; are already-existing farmers organisations critical to the development of the relations?
- What are the main characteristics of these commercial relations concerning: (a) the types of crops typically financed; (b) the inputs provided; (c) other production support services provided (e.g. extension, tillage); (d) the

[2] Such an approach would be fully consistent with IFAD's **Rural Finance Policy** (June 2000), which stresses that given the emphasis on the approach to operate according to commercial principles, IFAD would seek new forms of cooperation with the private sector.

marketing arrangements; and (e) the terms of the actual financing arrangements?

- Do these arrangements represent a win-win situation? What are smallholder perceptions of these relations? What are the non-financial institutions' perceptions of the benefits and risks/limitations of the relations (default/side selling by producers, delivery problems etc)? To what extent do these discourage expansion of these operations?
- How do the input credit suppliers themselves finance their investments in seasonal advances?
- Are these practices mainly a result of the poorly developed nature of the rural finance sub-sector? Are they likely to lose their importance as the outreach of the financial institutions increases? Or do the suppliers of such credit see the practice as a core part of their contractual farming arrangements that they aim to go on with to secure their hold of the marketing of the farm produce?
- What are the key lessons that can be learnt of the reviewed practices? Are there obstacles to expansion, which can be addressed in a manner that ensures that both sides benefit from the relations?
- Have models of such practices emerged that are worth promoting or supporting within the framework of IFAD's Regional Strategy for Eastern and Southern Africa? If so, what are the sorts of interventions that IFAD, regional governments and other development partners might consider supporting, in order to promote more equitable commercial relations and their expansion to greater numbers of smallholder farmers?

C. Structure of the Review and Report

7. After a review of relevant literature, and in particular the most recent studies on subject in the developing country context, the field mission covered the three target countries, Kenya, Zambia and Mozambique. One week was spent in each of the countries, during which the key companies and other institutions and partners involved credit provision to smallholders were visited. Detailed interviews were with the companies carried out aiming at providing data on the focal research questions of the Review. In addition, in each country various government departments and sectoral apex bodies were visited to get aggregate data on the country level on credit operations in which marketing and processing companies have been involved. The successful completion of a very tight meeting and travel schedule in each country was made possible with the support from the local contact persons, Ms. Miriam Cherogony in Kenya, Mr. David Musona in Zambia and Mr. Custodio Mucavele in Mozambique.

8. The Review report is organised in two parts. The first one, consisting of five chapters, covers the main Review findings and conclusions. After the introduction, Chapter II provides a review of key concepts on the research subject and a literature review of earlier studies on smallholder credit provided by marketing intermediaries. Chapter III covers short background briefs on the country context for these activities in Kenya, Zambia and Mozambique. Chapter IV covers the key study findings and conclusions in each of the reviewed countries. In Chapter V, potential options and interventions for IFAD in the area of company smallholder credit are discussed.

9. Annexes 1, 2 and 3 form a key part of the report. In these annexes, detailed case briefs are presented on each of the marketing and processing companies (in some cases: sectors) interviewed. These case briefs are intended to provide more insights for an interested reader on why and how the companies participate in smallholder credit activities or why they have opted not to undertake such operations in different countries and operational environments.

10. At the end of the Review report, a list of references (Annex 4) and of key people and institutions visited (Annex 5) are presented.

II. REVIEW OF CONCEPTS AND EARLIER STUDIES ON SMALLHOLDER CREDIT BY MARKETING INTERMEDIARIES

11. **Despite importance, few studies.** In recent years, there has been an increasing recognition that private sector agricultural marketing companies have a key role to play in the financing of smallholder agriculture in Sub-Saharan Africa. Various developments and trends on the continent have led to this situation. The core underlining fact is that serious intensification of smallholder agriculture is essential if rural incomes are to rise and Africa is to feed its rapidly growing population. To reach this objective, increased and systematic use of farm inputs is a basic requirement. As Dorward et al (1998) have noted, despite adverse trends in the relative prices of seasonal inputs and harvested outputs for many crops since the onset of economic reform programmes, the use of purchased seasonal inputs (improved seeds, inorganic fertiliser, crop protection chemicals) remains profitable on smallholder cash crops in many parts of Sub-Saharan Africa. Moreover, given current population growth and declining soil fertility, significant increases in the use of purchased inputs are required to complement initiatives for better soil and water conservation. A key problem is, however, that at the start of the growing season smallholders in much of Africa do not possess cash with which to purchase the required inputs.

12. Prior to marketing liberalisation in Sub-Saharan Africa, much seasonal credit was provided to smallholders through parastatal marketing boards or government-controlled cooperatives. With the withdrawal of such organisations from direct service provision since liberalisation and the reluctance of most commercial banks to engage in business with small-scale farmers, a search has been on for new means of channelling seasonal inputs to smallholder producers on credit. In most countries the response has been poor, and most microfinance institutions and other newly established financial service providers have an urban orientation and seldom provide funding for smallholder production. In this situation private agricultural marketing companies have become dominant providers of smallholder input credit in Sub-Saharan Africa. In various countries of the region, they are today in practice the sole providers of seasonal input advances to the small-scale farming community.

13. Despite their generally limited outreach with smallholders, there is a very large body of literature on the operations of formal, semi-formal and informal financial institutions in rural credit. There have, however, been very few studies on the provision of credit services by the private sector marketing companies to African smallholders. Shepherd (2002) suggests that this situation may be indicative on "an anti-trader bias among the academic community, other researchers and those organisations that fund them". However, various current research initiatives on the subject by organisations such as USAID, FAO and now IFAD can be seen as indications of increased interest to understand these funding operations and develop ways of co-operating with the private sector commercial credit providers.

14. **General characteristics of marketing credit.** Pearce (2003) and various other writers have categorised the financial services provided by market intermediaries into three general groups:

(a) Credit by input suppliers and traders to increase their input sales;

(b) Crop buying advances to their agents by marketing or processing companies; and

(c) Input credit to smallholder producers under contract farming/outgrower schemes with interlocking arrangements.[3]

15. Basically, supplier and buyer credit arrangements aim to facilitate the functioning of product markets, stimulate increased farm productivity through access to inputs and are often accompanied by other services such as extension advice. In addition to inputs, the key benefit to farmers is the market access that credit-based relationships with buyers bring. However, as Pearce (2003) stresses, the range of financial services provided by the product buyers and suppliers is very narrow. It primarily consists of seasonal credit and short-term advances. These arrangements are not designed for longer-term investments in equipment or property to expand or start new operations. They also do not match well with the range of financial services needed by rural households, which require deposit facilities, access to transfer payments and credit products for household and emergency needs. Furthermore, buyer and supplier credit is seen in some cases to lack transparency, particularly as it operates outside external supervision.

16. Why is it profitable for firms to issue smallholder credit in areas where financial institutions are unable to do it on a sustainable basis? Simmons (2003) lists a number of advantages the marketing firms have over financial institutions in the operations. Through contracts with farmers, the company can monitor input use and establish a degree of control over crop management decisions that might jeopardise repayment. Firms can deduct repayments direct from crop payments, without having to rely on a third party to do this. They can also make future farming contracts depend on meeting repayment clauses of the current contract, a potentially strong repayment incentive in areas where no other source of input credit exists. Large marketing firms also can source funds from the formal financial sector, an advantage many small rural finance institutions do not have. But the core difference is considered by most writers to be that the companies hardly ever aim to make profit on the delivery of small credits but do it from the related produce transactions, and in this manner can bear the high transaction costs typical to smallholder credit. Adams et al (1992) summarises these views: "I have yet to find a merchant who would not prefer cash transactions over those involving credit. This suggests to me that most merchants view lending as a necessary nuisance rather than as a way to sweat additional profits out of their clients". Thus input credit is in most cases used to secure the volume and/or improve the quality of the produce the marketing company can buy, as a means to higher turnovers and profits from the marketing of farmers' agricultural products.

17. **Buyer and Supplier Credit in Africa.** There is very limited information available on the volumes and outreach of the credit operations of marketing companies in Sub-Saharan Africa. A few case studies exist, but more comprehensive sectoral and country level assessments have not been made or published in the past.

[3] Interlocking: providing inputs on credit on the basis of the borrower's expected crop.

18. Most of the reviews on the subject have been made on the Asian situation where the tradition for marketing finance is old and strong. Shepherd (2002) reports on the existence of many vertical financial linkages within Asian marketing systems. Both millers and wholesalers lend to traders who buy from farmers. These traders, in turn, make both production and consumption loans to farmers. Wholesalers and millers also lend in the opposite direction, to distributors and retailers. Farmers are significant providers of finance to the marketing system, by being prepared to accept short-term deferred payment. Shepherd concludes that such linkages seem to be generally non-exploitative and serve primarily to secure supply, guarantee markets and reduce transaction costs.

19. For Africa, Shepherd notes that the relatively recent demise of marketing boards, which in many countries were monopsony buyers, has meant that trader-farmer credit linkages are much less widespread than in Asia. Dorward et al (1998) summarises the Sub-Saharan situation by stating that in African studies, there are very few observations of local district-level traders with experience of trade and the creditworthiness to act as lenders. A few recent studies in Africa have evidenced some financial transactions between the different marketing agents. Gabre-Madhin (2001) found that grain traders in Ethiopia had access to substantial amounts of credit on a regular basis. Most of this credit was provided by brokers working in the Addis Ababa grains wholesale market, with traders receiving either a sales advance or a buyer credit. However, less than 5% of these traders provided any credit services to smallholder producers. In Mozambique, de Vletter (2003) observed similar produce buying advances from large-scale traders to their agents and sub-agents (these Mozambican operations will be further discussed later in this Review).

20. In Africa, as discussed later in this Review, the dominant form of input credit provided by companies to smallholder producers is supplied under contract farming arrangements. These usually involve a large-scale agribusiness firm integrating backwards by forming alliances with smallholders and, through written or verbal contracts, providing farm inputs and services on credit for guaranteed delivery of produce of specified quality often at a pre-determined price. In Sub-Saharan African countries, the size of contractual farming and outgrower schemes vary from small operations covering a few hundred farmers to massive operations in which hundreds of thousand of smallholders participate. Input credit is one of the core operations under nearly all these schemes. In many Sub-Saharan African countries, a vicious circle has emerged whereby low effective demand for inputs provides no incentives for the development of commercial distribution networks and this, in turn, further adversely affects input availability and use. Contract farming can help to overcome many of these problems through bulk ordering by company management and delivery to smallholders as seasonal input credit.

21. **Topical issues in credit by marketing companies.** The topical issues in recent discussions concerning credit services provided by marketing companies focus on the contract farming and outgrower scheme arrangements. A number of these issues, of relevance to the current Review, are briefly discussed below.

22. Especially in the earlier literature, a key subject tends to be the potentially exploitative nature of buyer and supplier credit. The key assumption was that the true cost of credit is difficult for farmers to ascertain, with discounted prices, delayed payments and other mechanisms that the credit providers were seen to use instead of,

or in addition to, interest charges. Contract farming was viewed as essentially benefiting the agri-companies by enabling them to obtain cheap labour and to transfer risks to growers. However, more recent evidence indicates that contract farming with linked input credit services represents a way of reducing uncertainty for both the farmer and the company. Eaton et al (2001) state that advantages, disadvantages and problems arising from contract farming will vary according to the physical, social and market environment. More, specifically, the distribution of risks will depend on such factors as the nature of markets for both the raw material and the processed product, the availability of alternative earning opportunities for farmers, and the extent to which relevant technical information is provided to the contracted farmers. These factors are likely to change over time, as will the distribution of risks.

23. Another issues which is crucial for successful contract farming and the related input delivery is the enforcement of contracts. A major problem in Africa is that agri-businesses are hampered by limited legal recourse when things go wrong. Contracted small-scale farmers may either divert inputs provided on credit by the companies to other on-farm end-uses or sell them, or divert the contracted production to other purchasers without facing the types of penalties imposed on developed country contract farmers who default. As Simmons (2003) comments, a major element in contract compliance in a developing country context is providing the smallholder with credible prospects, and desire, for contract renewal. In this regard, smallholders can be seen as collateralising future income rather than assets to secure upfront transfers from contracts. The contract must be sufficiently attractive to the smallholder so that the costs of default (related to exclusion in future seasons) exceed the benefits from default (such as being able to pocket forward payments). If a contract is only marginally attractive in terms of profit then default risk is higher.

24. In reality, extra-contractual selling and buying is a serious problem, which has reduced the interest of companies to invest in smallholder farming in Africa. In recent years, it has been the main reason for the closing of various otherwise profitable contract farming schemes. However, the companies as well as the producers can be guilty of extra-contractual practices. Eaton et al (2001) records a number of cases in which opportunistic buying from competitor's growers has been systematically done when production shortfalls occurred.

25. The assessment of the success of contract farming involving input credit is a somewhat complicated subject. Criteria for success of particular contracts in enhancing welfare can be derived from consideration of how contracts work. Simmons (2003) suggest that if contracts are entered freely and there are no barriers to exit, then persistence of contractual agreements over time indicates both parties believe they are better off and hence the contract can be said to be "successful". However, as is often pointed out, contracts can create groups of losers that can be relevant when in assessing the success of contract farming from a developmental point of view.

26. Related to the issue of the "success" of contract farming, a recent study by IDS –University of Sussex (McCulloch et al 2003) looked at this "community impact" of contract farming in Central Kenya. The study asked whether shifts into export production of fresh vegetables increased family incomes. Two significant results emerged. Firstly, under all circumstances the production of vegetables reduced household poverty. Secondly, the same degree of aggregate poverty reduction

occurred irrespective of whether the movement was into smallholder production supported with input credit, or into production on large farms which provide labour employment for poor rural people. Policy recommendations included that as smallholder contract production reaches a different group of the poor than production on large farms, promotion of both is important to reduce the potentially adverse "community impact" of contract farming, where the ones reached by the outgrower schemes benefit, and those excluded, often without access to suitable land, suffer. Thus, according to this study, while successful contract farming had a positive impact on participating households, also other methods to stimulate the local economies would be required to reach a balanced community impact.

27. Finally, there have been attempts to define an appropriate role for donor support in smallholder credit operations by marketing companies. While this discussion is still clearly at its initial stage, various themes and suggested working methods have emerged. Simmons (2003) and Pearce (2003) have both emphasised that, when seeking partnerships in private sector activities, donors should avoid actions which distort the markets. Summarising the experiences of the past few years of interventions, their lists of potentially appropriate donor actions include:

- Brokering linkages between farmers and their groups and potential providers of inputs and marketing outlets in the private sector;
- Promoting the formation of farmers' associations and cooperatives to improve their market position;
- Providing initial technical and business development services to smallholders and their groups to lower the high up-front costs of marketing companies in the establishment of contract farming schemes; and
- Assisting smallholders to access financial services such as investment credit, that are not supplied by the agro-marketing firms.

28. All these topical issues and themes are touched many times in the Chapters IV and V as the result and findings of the field review on credit provision by marketing companies in Kenya, Zambia and Mozambique are presented. Before that, a short description of the sectoral context in each of these countries is presented.

III. COUNTRY CONTEXT: KENYA, ZAMBIA AND MOZAMBIQUE

29. Three countries were selected for the field studies for the Review of Agricultural Marketing Companies as Sources of Smallholder Credit in Eastern and Southern Africa: Kenya, Zambia and Mozambique. Three main reasons for these selections were:

(a) An attempt to include into the survey countries from the Eastern and South African region at a different level of economic and agricultural development;

(b) The known importance of credit provision by marketing companies in these countries; and

(c) The existence of on-going or proposed IFAD-supported programmes in these countries in the areas of rural finance services or market linkage development, which could potentially directly benefit from the findings of the Review.

30. Below, a brief description is given on the country and agricultural sector context in each of these three countries. These conditions form the framework for the financial relationships between the smallholders and the marketing and processing companies, the key topic of this Review to be discussed in detail in Chapter IV of the study.

A. Kenya

31. Historically, Kenya has been viewed as the most prosperous of the East African economies, with well-developed agricultural and industrial sectors and substantial foreign exchange earnings through agricultural exports and tourism. However, during the past ten years, economic development in Kenya has been problematic. Particularly since the mid-1990s, most of the key sectors have performed poorly. From the annual level of 4.6% in 1996, economic growth has continuously declined and averaged a low 1.3% in the past five years. Reasons given to poor economic performance include the slow pace of privatisation, deteriorating infrastructure, high interest rates, corruption, inconsistent sectoral policies, increased international competition in some key cash crops, poor security in some areas and the vagaries of climate.

32. Kenya's well-developed and diversified agricultural sector is the backbone of the national economy. It provides directly or indirectly employment for 70% of the national workforce. It is further estimated that the sector generates some 24% of GNP, 60% of total exports, 75% of raw materials and 45% of government revenue. Smallholder production dominates the sector, accounting for over 60% of total area cultivated, 75% of production and 85% agricultural employment. Smallholders play a crucial role in the cultivation of the food crops for the domestic market. Of export cash crops, smallholders produce almost all rice, pulses and cotton, 60% of coffee, 60% of fruits and vegetables, 35% of tea and most of sugar cane.

33. The 1990s has been a decade of liberalisation for the agricultural sector in Kenya, and the new policy environment that both the farmers and service organisations now have to operate in is described in an array of new policies, Bills and Acts[4]. These changes in the policy regime, combined with internal mismanagement of organisations, have caused a collapse of various agricultural institutions such as the National Cereals and Produce Marketing Board, the Kenya Cooperative Creameries (KCC), the Cotton Lint and Seed Marketing Board, many leading cooperative unions and some other farmers' organisations including Kenya Farmers Association and Kenya Grain Growers Cooperative Union. While the private sector arrangements have started to fill the vacuum left in the marketing chain, the process is not completed yet. Consequently, farmers' access to output markets has been significantly curtailed across the country and the turnover of marketed produce has declined in many areas and sub-sectors.

34. During the 1990s in Kenya, the state withdrew completely from the marketing of fertiliser and other farm inputs. Smallholder farmers are today almost exclusively supplied by commercial trading companies. Various studies indicate that there has been an impressive private sector response to market reform, that the availability of fertiliser and other inputs is satisfactory in most parts of the country and that the market is generally competitive, especially at the retail level. As discussed later in this report, the key problems for the smallholder is that the practically all the stockists sell the inputs solely on a cash basis.

35. In the Sub-Saharan African context, the financial sector in Kenya exhibits greater financial depth and more institutional variety than is the case in most other countries.[5] Unlike most countries in the region, Kenya has operational financial systems with relatively large outreach that provide funding on a regular basis for agricultural production purposes, not only for short-term off-farm micro-enterprises. While the large commercial banks have been almost totally inactive in micro- or small-scale rural finance, Cooperative Bank of Kenya Ltd and the new microfinance banks target the economically active low-income population as their key clientele and use typical microfinance products and approaches in their operations. Furthermore, over 100 rural SACCOs operate with a clientele estimated to exceed one million, which makes the rural cooperative savings and credit movement the largest provider of financial services to smallholders in Kenya. Most of Kenya's microfinance activities take place in urban or peri-urban environment, but recent examples show that when MFIs expand their operations to rural environments, they can make a useful contribution to the small-scale rural finance activity. At the grassroots level, the most interesting community-based financial service models are on the one hand the financial service associations (FSAs) and village banks, on the other hand the managed accumulating savings and credit associations (managed ASCAs). However, even with these financial service providers of various types, a large segment of Kenya's smallholder population still lack access to appropriate rural finance services.

[4] For a presentation on these policies, see: "Kenya: Smallholder Marketing Study", IFAD, 2003.
[5] For a detailed assessment of the Kenya rural finance market, see IFAD: "Kenya Rural Finance Sub-Sector Review", June 2003.

B. Zambia

36. During the past two decades, Zambia's economy has experienced a serious decline. Since 1992, with the exception of the years 1993 and 1996 when growth was solid, real GDP has either grown slowly or recorded negative growth figures. While the leading weak performer has been the mining industry, practically all major sectors have suffered. For the life of ordinary Zambians, the poor economic progress and lack of earning opportunities in the 1990s have meant a serious economic and human development crisis. At the end of the decade the per capita GDP was USD 300, compared to USD 450 ten years earlier and USD 720 in 1981. An increasing proportion of the population is living in poverty in both urban and rural areas.

37. Despite the high level of urbanisation in the country, two thirds of the economically active population derive their income and employment from the agricultural sector. For most of the past 20 years, agricultural production has failed to keep pace with the population increase, which has caused the incidence of rural poverty to remain at a persistently high level. Although maize production continues to dominate the sector, the strongest growth in recent years has been recorded in cotton, vegetable and fresh flower production. While the majority of smallholders work near subsistence conditions producing mainly for home consumption, almost all the exports of the sector originate from a fairly limited number of commercial farmers or outgrower schemes.

38. Outside the large-scale farms and outgrower schemes, those smallholders who manage to produce marketable surpluses suffer from unreliable market outlets for their produce, especially in the outlying areas. Concerning input trade, the reforms of the 1990s legalised private trade of the key input, fertiliser, but the government has continued to distribute large quantities of fertiliser on subsidised credit terms in the major agricultural areas of the country. A salient feature of these operations is that it is the government that selects the loan beneficiaries of the fertiliser offered on credit – a process which lacks transparency and appears to fulfil political rather than production-oriented objectives. Under these circumstances, the private sector response to market liberalisation has been weak and the input delivery network remains poorly developed, as government operations introduce extra risks and costs to the operations and add considerable uncertainty to the investment activity. In general, private rural businesses suffer from limited competition, low sales volumes/poor economies of scale, high transport and power costs, and lack of access to capital, all of which has resulted in economic inefficiencies, high prices, dependence on imports and a general lack of dynamism in the sector.

39. Service delivery by Zambian financial institutions to the rural areas in general and the smallholder population in particular is very limited. Over the past decade, most commercial banks have closed their rural operations and today only two have any rural presence. The supply of rural finance services from cooperatives and development finance schemes, which played earlier a major role in rural agricultural finance, effectively ceased with the collapse of these institutions in the 1990s. Despite the recent growth of microfinance institutions, their rural outreach remains low and the total rural clientele scarcely exceeds 20 000. Despite its stated commitment to market liberalisation, the government has continued to issue subsidised fertiliser credit to selected clients. Outside this facility, practically all seasonal agricultural

credit to smallholders is provided by private non-financial companies under interlocking arrangements.

C. Mozambique

40. Despite a strong economic performance over the past decade, Mozambique remains one of the world's poorest countries, and a large majority of the poor live in rural areas. The rural economy is still dominated by smallholder agriculture and small-scale fisheries, typified by low yields and low returns that see most of the families operating close to the subsistence level. Many rural areas are strikingly poor and still not fully part of the monetized economy. The country is vast with difficult communications and a poor road network. The rural input and output markets are poorly developed and most rural communities have only limited knowledge of marketing or how the markets operate. Similarly, many rural traders have little understanding of how to operate effective in a free-market environment.

41. While the above is the dominant picture of the situation in rural communities in Mozambique today, the opportunities for major improvements in the quality of rural life are equally obvious. The country has one of the best natural agricultural production capabilities in Africa and a good potential to increase agricultural production both quantitatively and qualitatively. Significant untapped agricultural production potential exists in most rural areas. Less than one fifth of the farmable land is currently being productively used. Of the utilised land, the yield could be significantly increased by improved techniques and utilisation of improved inputs. There is also much room for adding value to commodities produced in Mozambique for local consumption as well as exports. Besides the cotton ginneries, tea and cashew factories, and sugar and maize mills, there are few agro-processing plants in the country.

42. At the same time it should be noted that since the resumption of peace in 1992, impressive progress in rural production and development has clearly been achieved. With market-driven approach and an improved policy environment focused on small-scale producers, the process of rural recovery has started. The total production of cereals increased from 239 000 tons in 1992 to 1.8 million tons in 2001, and the north and the centre of the country now regularly generate surpluses for export. While many of the obstacles for development remain, such as the poor road and marketing networks, Mozambique has reached the point where it can focus on the active development of a commercialised smallholder production system, operating according to local comparative advantage. Accelerated smallholder development can be observed particularly along the three main transport corridors: the Maputo corridor with South Africa, the Beira corridor with Zimbabwe and the Nacala corridor with Malawi. At the same time the operations of large commercial outgrower/agro-processing companies have grown in scale. These are run by local enterprises often affiliated with international companies. Today, some 400 000 families work on these schemes, representing about 12% of the rural population.

43. In recent years it has become apparent that as smallholders, livestock herders and fishers in Mozambique move from subsistence to higher levels of production and as the rural economy generally develops, there is an increasing demand for a broad range of financial services. To response to these growing demands for services by the

rural population and enterprises, the financial sector is as yet poorly equipped.[6] Most the rural population in Mozambique operate totally outside the reach of any financial sector operator. Nearly all of the rural districts have no formal banking facilities at all. The microfinance sector is small and has an urban orientation, while both the community-based financial arrangements and development credit institutions have a very limited outreach in rural areas. This institutional situation makes it very difficult for the financial sector to respond to the increasing demands for rural financial services in the country and today, as in the case of Zambia, practically all seasonal agricultural credit to smallholders is provided by marketing and processing companies under interlocking arrangements.

[6] For a detailed assessment of Mozambique's rural finance sector, see IFAD: "Rural Finance Support Programme Appraisal Report", Working Paper 1, 2003.

IV. AGRICULTURAL MARKETING COMPANIES AS SOURCES OF SMALLHOLDER CREDIT IN EASTERN AND SOUTHERN AFRICA: REVIEW RESULTS AND CONCLUSIONS

A. General Comments

44. The present Review showed that credit by agri-marketing companies is an important source of funding for small-scale producers in all the three surveyed countries. In Mozambique, these arrangements are in practice the only source of input credit for smallholders. The same applies to Zambia, with the exception of the government fertiliser credit scheme. Even in Kenya, where rural financial services are better developed, the importance of credit from marketing companies has increased particularly as many large cooperative unions, earlier major input providers, have collapsed. The survey also confirmed that the advantages, disadvantages and problems arising from contract farming vary significantly according to the physical, social and market environment and therefore, the benefits for either the company of the farmer should be assessed case by case and sector by sector. Furthermore, the Review showed that while company credit is a realistic, and sometimes the only, option when aiming at intensifying smallholder production and linking the small producers to markets, there are various obstacles that limit the expansion of this method of financing in the Sub-Saharan African context.

45. Within the time limits set for this Review, the field interviews in each country covered the key companies involved in smallholder credit, selected other leading companies in agro-marketing, institutions involved in market promotion, as well as selected farmers representatives and associations. In Kenya, the sectors included in the survey were various horticultural crops, tea, sugar, commercial seed production, tobacco, fisheries and honey production. In the traditional cash crop, coffee, there are no company-financed credit operations of any substance. In Zambia, the focus was on cotton, tobacco, maize and horticultural crops. In Mozambique, the focal sectors were cotton, tobacco, sugar, grains and horticulture. In Annexes 1, 2 and 3 of this report, the case studies on the companies reviewed are presented. In each case, these briefs aim to answer to the question why the companies participate or do not participate in the financing of smallholder activities. They also provide in each case data on the volumes, terms, operational performance and relevance of the credit-based activity the firms have been engaged in. These cases provide the main source of information for the general findings and conclusions of the review presented in this chapter.

46. As mentioned in Chapter II, the financial services provided by market intermediaries are often grouped into three general categories:

(a) Credit by input suppliers and traders to increase their input sales;

(b) Crop buying advances to their agents by marketing or processing companies; and

(c) Input credit to smallholder producers under contract farming/outgrower schemes with interlocking arrangements.

47. Of particular relevance to this Review, with its focus on credit to smallholder producers, are the first and the third options[7]. The first, in which a trader sells agricultural inputs on credit to smallholder producers, without linking it to the procurement of the crop, was found to be of only marginal importance in the countries and sectors reviewed, and it is discussed only briefly in the following section. The remaining sections of the chapter deal with the dominant (and almost sole) form of company funding to smallholders in the reviewed countries: input credit through interlocking arrangements in contract farming/outgrower schemes.

B. Input Trade Credit without Interlocking Arrangements

48. In trade credit, the primary motivation of district or village-based stockists is that by providing point-of-sale financing to their customers, vendors are better able to increase their sales volumes. As mentioned in Chapter II, there is evidence that these kind of credits are fairly commonly provided by traders in Asia, even where they do not procure the client's crop, as the village traders in turn receive financing from larger trading companies that deliver them the inputs.

49. In the three African countries surveyed during this Review, the collected evidence clearly indicates that input credit by traders in this form is not practised in any of the countries. All the interviews – with companies with large sales networks, village traders themselves and farmers' associations – showed that all sales of agricultural inputs take place strictly on a cash basis. The situation is the same in all the sectors and geographical areas reviewed.

50. All the interviewed distribution companies and village traders stated that input provision to smallholders on credit would be both uneconomic and too risky. As an example, Kenya Seed Company Ltd, with a turnover of USD 28 million, is the country's leading company in production and marketing of seeds for the agricultural sector (Annex 1.7). According to the company, there is no practice among its agents or sub-agents to accept credit sales when they sell on to the local-level stockists. The same applies when the local stockists sell on to the farmers. Kenya Seed Company Ltd has some 3 000 active local level stockists. The company management is not aware of

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7 Although not its main focus, the Review did look at the second option. It was not found to be a common practice in marketing operations. In Kenya and Zambia, all the marketing companies use mainly their own field networks to buy the produce. Where they do use buying agents, they issue cash advances to them only in special cases, such as when they face acute shortages in fulfilling their export orders. In Mozambique too, the cotton and tobacco companies, and agro-marketing companies such as Export Marketing Co. Ltd and APS-Agro-Industries Lda (Annexes 3.5 and 3.6), procure their crops mainly through their own field networks, and even where they purchase directly from agents, they do not issue buying advances. A key reason for this is their lack of trust in the agents – a concern reinforced by the lack of law enforcement system functions. An exception to the rule is V&M Grain Co. (Annex 3.8), which buys maize directly from smallholder producers, as well as from buying agents and farmers' associations. While the operation is principally cash based, the company also has a credit window for its agents and associations. All purchase credits are very short-term, and they range from USD 40 000 for the large-scale agents to USD 2 000 for associations. During an active buying season, V&M Grain Co. has some USD 200 000 – USD 300 000 outstanding as credit balances. The purchase credits are interest free, and the agents and associations are paid a mark-up over the farm gate price to make the operations viable for them. Credit losses have been small at around 2%.

any case in which a stockist/trader has a policy to advance seeds or other inputs to farmers on credit. In their view in Kenya, these sales are strictly on a cash basis, as the low margins, risks and lack of bank access for traders make credit sales both impractical and unprofitable.

51. As a rare example of trying to increase input sales with credit, Omnia Ltd of Zambia (Annex 2.6), a leading fertiliser producer and manufacturer, started a pilot credit scheme to boost its fertiliser sales to smallholders. In selected areas of Southern Province, it picked the best farmers from the government fertiliser scheme with a 100% repayment history and offered them a full credit package consisting of seeds and fertiliser. The total credit disbursements under this scheme were USD 300 000. Even after a careful client selection, the scheme did not work out as planned. The company suffered significant credit losses, especially as the retail margin in fertiliser does not exceed 15%. According to the firm's assessment, the main reason for non-repayment was that as there were no sanctions for default in the government fertiliser credit scheme, the smallholders did not expect the company would take serious action against defaulters. Due to the losses from this operation, Omnia Ltd closed its credit scheme after the first year of operations. Today, it does not give any credit to smallholders.

52. There have been some attempts by donors to encourage traders to sell inputs on credit to smallholders[8]. Under the IFAD-supported Nampula Artisanal Fisheries Projects of Mozambique, FFPI, a local development finance institution, issued working capital loans to local traders. One target of the operation was that the traders would in turn provide fishing implements on credit to fishermen. According to the FFPI field staff, this did not materialise. Despite the injection of loan capital and improved liquidity, traders continue to see credit sales as a too risky venture and deal only on a cash basis.

53. The overall consequence of this general lack of input credit from local traders is straightforward: if a smallholder aims to use procured inputs in his agricultural activity, he has to have either the required cash or a source of credit to do this, as the inputs are not available on credit from the local trading facilities. The reasons for weak trader-farmer credit linkages appear to be largely explained by the high risks commonly linked to these arrangements and the complications of contract enforcement in all the reviewed countries (see more in D (iv)). In Asia, there is also a much longer tradition for operations of this type, with longer "credit histories" reducing the risks in credit transactions.

8 At a higher level of the input supply chain too, donor-supported, NGO-implemented programmes which guarantee short-term sales credits from input suppliers to small, village level traders, have been implemented in a number of countries in the East and Southern Africa Region. While they have not been universally successful, a number have made a significant contribution to the development of rural trader networks, and have resulted in sustainable commercial relations between input suppliers and traders with, in some cases, short-term credit as a part of these relations. IFAD's experience in this area dates from 1995, and its support to the CARE-implemented AGENT Programme in Zimbabwe.

C. Company Input Credit under Farming Contracts

(i) Providers, Funding, Volumes and Outreach

54. By far the dominant form of smallholder credit by companies in all the reviewed countries is practised under farming contracts. In contract farming, a processor or a marketing company issues inputs to farmers on credit in cash or in kind to help secure produce of sufficient quantity and quality. The credit enables the farmer to acquire the required inputs to which he/she would not otherwise have access. With a written or verbal contract, the company guarantees the buy the farmer's produce, and the repayment for the provided inputs is deducted when the crops are sold to the contracting firm. Outgrower schemes operate in the same manner but normally involve more company control over the farmer's production process. With a lot of small variations of the theme, all the contract farming schemes reviewed in Kenya, Zambia and Mozambique follow this basic model.

55. **The type and ownership of companies** providing smallholder credit under farming contracts varies from country to country as well as between agricultural sub-sectors. In Kenya, the companies issuing the largest amounts of smallholder credit are in the tea and sugar sectors. The operator of the tea input credit scheme, Kenya Tea Development Agency Ltd (KTDA) is a private company owned by tea factories, which in turn are owned by smallholder tea producers. This large-scale scheme, which continues to perform well year after year, is a promising example of an entire production, processing and marketing chain owned and controlled by smallholders and their representatives. In the sugar industry, the biggest company, Mumias Sugar Co. has a local private majority ownership, while the other companies are majority government-owned. In tobacco, the companies are predominantly foreign-owned. All the rest of the reviewed Kenyan companies issuing this type of credit were under local non-African ownership.

56. In Zambia, by far the largest providers of smallholder credit, cotton processors Dunavant and Clark Cotton are foreign-owned, as well as the biggest horticultural firm Agriflora and the paprika company Cheetah Zambia. The Tobacco Association of Zambia and Enviro-Oil & Colorants, a paprika marketing firm, are in local ownership, and the CRM Farm, with a maize smallholder scheme, is in local non-African ownership.

57. In Mozambique, almost all the smallholder credit is issued on concessions with a buying monopoly for cotton or tobacco, and the companies are either in foreign or local non-African ownership. The only other reviewed company providing smallholder production credit, Cheetah Mozambique is a Dutch-owned firm.

58. The ownership structure and the country context influences **the way the companies finance their contracting and input supply operations**. In Kenya, the sugar companies with strong government influence have been allocated large amounts of operational funds direct from a consumer sugar levy. All the other companies finance their contracting with a combination of their own funds and borrowing from the local banking sector. There is no donor funding in these operations.

59. In Zambia, the large cotton companies finance their credit operations with own funds and overseas loans. The CRM Farm credit scheme is funded by the owner's initial capital and later from accumulated profits. The rest of the operations have a share of companies' own funding but all are supported by donor and government financial injections both for credit capital and for NGO implementation support.

60. In Mozambique, the cotton and tobacco companies on concessions finance their input supply operations with their own funds and overseas borrowing. The loans from the local banking sector are expensive and not much used. The tiny pilot Xinavane smallholder scheme in the sugar industry is almost 100% funded by donor grants. The Cheetah Mozambique paprika scheme, in which the company lost some USD 150 000, was allocated USD 600 000 of Dutch Government grants and benefited from large-scale NGO implementation support, although not all the donor funds were used, due to the company's inability to raise its agreed share of the investment.

61. One of the key tasks of this Review was to assess **the outreach and disbursement volumes** of the company smallholder credit. Not much information on this subject has been previously available. For the purposes of the present Review it was necessary to define the smallholder target group as accurately as possible, as errors are commonly made in this area. A couple of examples show the potential for confusions. Kenya's sugar sector is based on smallholder production, on average plots of 0.6 hectares under sugar. In Mozambique, the sugar sector also has a large area, 8 500 hectares, under outgrower production. These outgrowers, however, are South African large-scale farmers who have 250 hectares and more each under sugar, and who organise their own funding from banks in South Africa. The real smallholder presence in the industry is minimal, consisting currently of only 45 farming households on a non-viable outgrower scheme in Xinavane. Similarly, one of the leading Kenyan horticulture exporters, East African Growers Ltd, reports that 20% of its production comes from small-scale farms who they support with inputs. A closer look reveals, however, that each of these "smallholders" has from 4 to 50 acres under vegetables and employs a substantial workforce. In Central Kenya, with a very small average acreage, no smallholder can run such an operation, which should be rather categorised as medium-scale commercial. In the current Review therefore, a smallholder is defined as a farmer with a small plot of no more than 1–2 hectares under contracts in fertile areas and a maximum of around 4 hectares in dry areas such as in cotton farming, and who does most of the work on the farm using household labour.

62. **In Kenya,** with its better-developed and diversified agricultural sector, contract farming and the related company input delivery is more widely practised than in Zambia and Mozambique. While the relatively strong rural finance sector provides various types of services to the rural population, financing of inputs by processing and marketing companies is crucial for the production of many high value and export crops.

63. The largest company-financed smallholder credit operation in Kenya is in the tea sector, the country's leading agricultural export crop. KTDA, a private company, operates it with its shareholders, the smallholder-owned factories processing practically all the smallholder tea in Kenya (Annex 1.1). The Fertiliser Credit Scheme of KTDA provides on credit all the fertiliser the 406 000 smallholders annually require

to cultivate high-quality tea. Before each season, the Extension Officers in each tea factory identify the fertiliser needs of each tea farmer. For the 2003/04 season, the total fertiliser requirement equalled 65 200 metric tons. KTDA procured this amount direct from the world market and organised its shipping to Mombasa. The total credit disbursements to farmers were USD 15.5 million. To finance the procurement and delivery of the fertiliser, KTDA took a bank loan of the same amount from an internationally owned commercial bank in Nairobi. In the view of the KTDA staff at the factory level, the importance of this well-functioning fertiliser credit scheme is crucial for the quality and quantity of production and through them, for the incomes of tea growing households. The case is also a positive example of how an integrated operation covering production, financing, support services and export marketing can be a successful large-scale activity under smallholder ownership, when managed according to the standard principles of private business management.

64. In the sugar sector in 2001, Kenya's total production was 494 000 metric tons. Unlike in most Sub-Saharan countries, a large majority, some 85% of cane production takes place of smallholdings with an average 0.6 hectares under cane. Some 200 000 small-scale farmers are involved in sugar productions and for most of them, it is the main source of cash income. Until the early 1990s, sugar companies delivered on credit to smallholders practically all the inputs and services required in cane production (Annex 1.6). These included land preparation, supply of seeds and all other inputs, various tasks in crop husbandry, and all tasks in harvesting and transport. The efficiency of this service delivery depended much on the general management of each company. The farmers in the best and largest Mumias Sugar Company received timely and well organised services, while input delivery of such weaker schemes as Nzoia, Sony and Muhoroni was of much lower quality.

65. Following a government decision, in the mid-1990s most of the tasks of supplying input credits and other cane development services to smallholders were transferred from sugar processing companies to farmer-controlled outgrower companies. In the period 1992–2003 the government disbursed a huge total amount of USD 50 million to finance the input and service delivery operations in the sugar schemes. Loans were issued on a seasonal basis at a subsidised interest rate, in 2003 at 5%. The results of this funding and service delivery operation were disastrous. Of the USD 50 million issued to outgrower companies, most has remained unpaid and is ready for a write-off. At the same time, due to seriously weakened input and service delivery, the average cane yield collapsed from an average 90 tons of cane per hectare in 1996 to 60 tons in 2000. With these poor results, since 2001 the delivery of input and other services has been gradually been transferred back to the sugar companies, and in the 2003 season, all the credit-based input services were delivered by the companies themselves. However, the current poor status of the Kenyan sugar companies limits their ability either to use their own funds to finance input advances or to raise funding from the banking sector for these operations. Kenya Sugar Board estimates that company disbursements for input advances this year are unlikely to reach more than USD 5 million, which is much less than is required for proper cane cultivation on outgrowers' plots.

66. The third large sector for company credit in Kenya is horticulture. The industry has grown fast and in 2002 reached an export value of USD 350 million. In the flower subsector production is almost totally (over 99%) on companies' own farms. In fruits and vegetables, the smallholder share of export was in the 1990s

around 80%. However, more recently, there has been a move towards production on larger farms, mainly due to problems of quality control, farm traceability and side-selling/side-buying. Today, smallholders' account for some 60% of exports of vegetables and the share is declining. This trend has reduced contract farming on smallholdings and the related input credit delivery operations by companies.

67. In the horticulture sector, there are some 300 marketing companies that actively participate in export activities. Around 20 of these firms account for 50% of the exports. Among them are also the ones that actively contract smallholders and provide them with input credits to secure the volume and quantity of their procurements. While the amount of credit disbursed by these firms is not known, the Horticultural Crops Development Authority estimates that at least 100 000 smallholders participate in these activities with annual disbursement values in millions of dollars.

68. The interviewed large horticulture marketing firms spend annually USD 0.4 – 1 million in input credit disbursements. A particularly interesting case is Frigoken, which relies in its production almost entirely on genuine low-income smallholdings (Annex 1.2). For the French beans cultivation activity, Frigoken developed one standard package that is applied on every participating farm. Each Frigoken-dedicated plot is 200 sq metres, around the size of a domestic garden, and constitutes a small part of the average ½ - 2 acres farms. Each farmer signs an individual contract with the company. As an advance, each farm gets a standard package of seeds, fertiliser and pesticides. Each package costs the farmer around USD 10. In 2002, with the above-described format, Frigoken collected around 7 500 tons of French beans from smallholder outgrowers. The total production cost to Frigoken amounted to some USD 4 million, out of which around USD 2.8 million was actually paid to farmers for the produce. Today, the number of active farmers in the scheme is between 15 000 and 20 000 depending on the time of the year. The annual disbursements of inputs advances total around USD 400 000. Judging by their strong interest to continue on the scheme, smallholders around Muranga District appear to appreciate the income earning opportunities the French bean cultivation provides (annual net income USD 100 – USD 150 per plot), especially after the recent collapse of the coffee economy in the area.

69. By contrast, the smaller marketing companies, such as Horticultural Farmers and Exporters Ltd (Annex 1.4), seldom have long-term export contracts, only occasionally contract farmers, and in most cases fulfil their spot export orders by buying from any available source, including often contracted farmers that have received input credit from the large agro-marketing companies.

70. Outside the above three key sub-sectors, Kenya's tobacco industry has a well-organised system of contract farming and credit delivery based on comprehensive input packages. BAT alone has around 10 000 smallholder contract farmers (Annex 1.8), and a number of smaller schemes of the same type operate in the country. Smaller company input credit schemes have operated in many other sub-sectors, including operations of such diverse nature as macademia nut production (Annex 1.5), honey production (Annex 1.10) and fisheries (Annex 1.9). References to these are made when the scheme terms, performance and impact are discussed later in the report.

71. **In Zambia**, the diversity and volumes of input credit operations by marketing firms are much more limited than in Kenya. These are, however, very important operations for the smallholders who, apart from an poorly performing government fertiliser scheme with a limited outreach, have in practice no other access to agricultural production credit.

72. In the past and still today, Zambia's agriculture has revolved around maize production and the related fertiliser supplies. Data in Table 1 on the financing of fertiliser deliveries to smallholders in 1999/2000 give interesting insights on how the market operates in Zambia.

Table 1: Sources of Finance for Smallholder Fertiliser Supplies 1999/2000

Channel/Funding	**Tons**	**Percentage**
Government fertiliser loan scheme	16 749	35%
Credit under private company farming contracts	5 465	11%
Direct barter for agro-produce (no credit)	3 834	8%
Cash purchases	21 264	44%
Other	794	2%
Total	**48 017**	**100%**

Source: Central Statistical Office/Ministry of Agriculture/Food Security Research Project 1999/2000 Post Harvest Supplemental Survey

73. Of the 48 000 tons of fertiliser delivered to smallholders in 1999/2000, 35% was financed by subsidised loans by the government. Cash purchases accounted for 44% of the supplied amount. Some 8% was financed by barter deals for maize, mainly under an operation managed by Omnia Small-Scale Ltd, a South African private company (Annex 2.6). Private sector company credit financed 11% of the fertiliser deliveries to smallholders. It is important to note that all these credit sales took place under cash crop production schemes of the marketing companies, with interlocking arrangements for crop purchase. Private input traders in Zambia do not sell fertiliser on credit.

74. By far the largest company credit schemes in Zambia operate in the cotton sub-sector (in which fertiliser is not a critical input). Zambia's cotton sector was liberalised in 1994 when the state monopoly (Lintco) was sold to two private companies. Zambia is one of the few Sub-Saharan countries with almost complete absence of government in production, marketing, regulation, or direct financial contributions to the sector. Today, the level of concentration in the sector remains high, with Dunavant Zambia and Clark Cotton sharing about 90% of the market and new small companies, with often aggressive market strategies, accounting for 10% of the annual production.

75. Dunavant Zambia is the largest cotton company in Zambia with a 60% market share (Annex 2.1). The number of its smallholder contract farmers just exceeds 100 000. The area under cotton per farm varies, with an average of 1.4 hectares on the contracted smallholdings. The supply of inputs on credit is a key factor in Dunavant's production strategy as, according to the company's view, few farmers would have the cash or access to credit to buy the inputs in cash from them. More than 99% of the firm's contracted farmers take credit for the seasonal input package, which consists of graded and treated cotton seeds, a "hectare package" of chemicals, spraying

instruments and extension services. In the 2003 season, a hectare credit package cost USD 43. With its slightly more than 100 000 smallholders and an average plot size of 1.4 hectares, the total annual disbursements of Dunavant credit advances are approximately USD 6 million. Together with the other contracting companies in Zambia, the total annual seasonal credit disbursements by the cotton companies are estimated to approach USD 10 million and cover some 150 000 smallholders.

76. All other company credit schemes in Zambia are of much smaller scale. The two next biggest ones both focus on paprika production. Input credit was one of the core features in the original contract farming operations of Enviro-Oil & Colorants (Annex 2.3). In the peak 1999/2000 season, the company delivered the contracted smallholders a substantial input package consisting in all cases of all required seeds and chemicals, and in some cases also of fertiliser. Around 3 000 small-scale farmers received this package. The total disbursements of these input advances in that season reached several hundred thousand dollars. As the procured produce proved to be less than expected, the company has since reduced both the number contracted smallholders and credit package, and in 2002/03 season, the total amount of credit disbursed was around only USD 50 000. Enviro-Oil & Colorants is a leading partner in ZAHVAC, a commercial association of six local marketing companies. The five smaller companies all have paprika contract farming schemes with smallholders. The mode of operations follows the Enviro-Oil&Colorants model. A couple of year ago, the combined number of smallholders in these schemes was around 3 000 and some USD 200 000 was annually disbursed to farmers in input advances. Today, after disappointments in production performance and a 30-40% decline in the paprika world price, also these input schemes have significantly reduced in size.

77. The main competitor of the ZAHVAC group is Cheetah Zambia Ltd, a Dutch-owned private company (Annex 2.2). In the current season, Cheetah Zambia has around 5 000 directly contracted farmers and an additional 2 500 contracted through various NGOs such as CLUSA and Africare. While the Cheetah contract farmers are expected to buy the limited amounts of chemicals and fertiliser they need in cash, the company provides the required certified seeds on credit. In the 2003 season, Cheetah's total seed credit disbursements were USD 35 000 to directly contracted farmers and some USD 15 000 through the NGOs. An average seed credit per farmer was around USD 9. While Cheetah Zambia is currently a loss maker mainly due to increased competition and declining paprika prices, it plans to intensify its smallholder credit operations to secure raw material supply to its processing plant in Lusaka.

78. Outside the cotton and paprika sub-sectors, company input credit operations in Zambia have a very limited outreach. The Tobacco Association of Zambia, a commercial entity, provides comprehensive input packages on credit to its 200 member smallholders (Annex 2.5). The small-scale wing of Agriflora Ltd, the country's largest horticulture exporter, gives donor-supported (including IFAD) credit services to 300 elite smallholders around Lusaka (Annex 2.4). An interesting scheme is operated by CMR Farm, a commercial family farming enterprise close to Kabwe town (Annex 2.7). CMR Farm issues fertiliser on credit to smallholders around the commercial farm. Repayments are made in maize, based on the maize/fertiliser price relations. Some 70 farmers participated in the scheme this year, and the total value of the inputs issued on credit to smallholder was some USD 15 000. This well performing model, which can be applied also to other crops, could be potentially

suitable for many other commercial Zambian farmers, who often have excess processing capacity on their farms and a ready market for the produce.

79. **In Mozambique,** as in Zambia, in practice all smallholder production credit is issued by the processing and marketing companies. Most of the direct observations of this Review concern Northern Mozambique and especially Nampula Province, which are in the Mozambican context well-developed areas in crop production. In this region, both the contracting of smallholders and the provision of company input credit is almost totally limited to cotton and tobacco companies working on government-allocated concessions.

80. In the cotton sector, three Nampula-based companies buy produce on the concessions and gin it in their own ginneries. They have the monopoly to contract farmers in their areas of operation. Of these companies, CANAM buys seed cotton from a total of 30 000 hectares (Annex 3.1). Most of the outgrowers are small-scale farmers cultivating on an average area of 0.5–1.5 hectares. The company provides each farmer with a comprehensive package of seasonal inputs and implements, comprising treated seeds, pesticides for four applications, spraying equipment and bags. Seeds, spraying equipment and bags are provided free of charge, chemicals on credit. In the 2003 season, some 30 000 outgrowers participated in the CANAM operation, with an average area under cotton of around 1 hectare. With an average pesticide cost of USD 15 per hectare, the total input credit disbursement this year was around USD 500 000. The other two companies give basically the same type of services. JFS/SODAN operates on two concessions, one in Nampula Province and one in Niassa Province, both with two ginneries (Annex 3.2). It has 44 000 to 46 000 outgrowers cultivating a total area of some 44 000 hectares of cotton. A standard package of chemicals issued by JFS/SODAN on credit is around USD 12.5 per hectare. In 2003, JFS/SODAN disbursed some USD 600 000 in seasonal input credits. The third company, SANAM produces cotton within its concessions working with some 40 000 smallholders, whose average plot under cotton is a bit less than 1 hectare. It has also medium- and large-scale contract farmers, as well as partnerships with cotton farmers' associations. Because of the provision of tractor hire services for some of its smallholders, the average value of the input credit is higher than with other cotton companies, around USD 30 per hectare. The company reports that it used around USD 1 million on input credit this season.

81. For the whole cotton sector in Mozambique in the 2002/03 season, some 270 000 smallholders produced cotton on the 15 government-allocated concessions. The total area under smallholder cotton was 158 000 hectares. The average input credit package for the whole country is calculated to be around MT 300 000, or USD 12.5, per hectare, of which the three applications of insecticides form the main share (MT 210 000). This brings the annual company credit disbursements in the sector to around USD 2 million. The figure is slightly lower than in previous seasons, as weak producer prices and poor concession management have reduced the number of smallholders in the industry by some 30%.

82. Concession-based tobacco production is a growth industry in Mozambique. In the 2002/03 season, Mozambique's tobacco exports reached USD 30 million. The supply of input credit by tobacco companies is a key feature in this industry, and in practice all tobacco farmers receive input loans from the firms. Due to the nature of industry, more comprehensive and expensive input packages are provided to

smallholders than in cotton cultivation. The Nampula-based cotton company, JFS/SODAN diversified to tobacco six year ago. Today, the tobacco scheme of JFS/SODAN covers four provinces and produces some 8 000 tons of tobacco. The total area under the crop is 6 000 hectares, with some 40 000 farmers reported to participate in the scheme. The target is to increase the production to 12 000 tons per year and to establish a tobacco factory in Tete Province. The input packages supplied by the company include seeds, various types of production gear, fertiliser and chemicals. Unlike in cotton, there are no free items except the extension services.

83. Various other companies operate similar type of tobacco schemes in Mozambique and many are expanding their cultivation area. Unlike JFS/SODAN, some companies supply to their own processing factories and tend to offer more comprehensive credit packages than JFS/SODAN. The supplied items offered on credit commonly include tobacco seeds or seedlings, a selection of required fertilisers, herbicides and pesticides, equipment for cultivation, material to construct farm-level curing barns, bags for harvest, transport of crop to buying centres and extension services.

84. In the 2002/03 season, some 120 000 smallholders participated in tobacco production in Mozambique. The average area of tobacco per smallholder is estimated at 0.5 hectares. MADER estimates that typical amounts of seasonal credit offered per smallholder vary between MT 500 000 and MT 1 000 000, or USD 21 and USD 42. This would mean that the total annual disbursement of company credit to the sector would be around USD 2.5–5.0 million. As many new tobacco projects with ambitious production plans are in the pipeline, the input credit disbursements are likely to increase significantly in the coming seasons.

85. Outside the cotton and tobacco concessions, the only recent contract farming operation in Nampula Province of any substantial size was the paprika scheme of Cheetah Mozambique (Annex 3.4). In 2000, Cheetah Ltd decided to expand its paprika contract farming operations from Zambia and Malawi to Northern Mozambique, with a centre in Nampula Town. The idea was to use the same field approach as in Zambia, including the credit advances for quality seeds. The target was to reach 10 000 farmers, required for profitable operations in that area. In the peak season 2002/03, Cheetah contracted around 7 000 smallholders to grow paprika during the season. USD 48 000 was disbursed in input loans to support the operation. However, the whole scheme failed mainly due to the inability of Cheetah to capitalise the higher than expected costs of the operation and its nearly total reliance on NGOs in field activities. The total amount of credit, USD 48 000, was written off as bad loans and, in a major disappointment for the participating farmers, Cheetah withdrew from the Nampula-based operation.

86. Apart from the above scheme, contract farming and related company input credit provision is not practised in Nampula Province in any significant scale. Furthermore, even when including the concessions, the volumes of company credit have been decreasing. CLUSA tracks the volume of annual company credit received by some 800 farmers' associations it promotes in and around Nampula Province. Table 2 shows have these credits increased and reached their highest value of USD 450 000 in 2001. Since then, the decline has been rapid, with only USD 186 000 issued to associations this year.

Table 2: Company Credit Received by CLUSA-supported Associations (USD '000)

	1997	1998	1999	2000	2001	2002	2003	Total
Credit Received	64	280	460	305	450	317	186	2 062

Source: CLUSA Mozambique

87. The decline in company credit is partly related to the reduced interest in cotton farming due to the decline of cotton prices and misconduct of some associations in cotton operations (Annex 3.2). The main reason, however, is linked to the views of marketing companies concerning opportunities of successful contract farming in the area. The leading agro-marketing companies such as V&M Grain Ltd, Export Marketing Co. and APS-Agro Industries Lda all argue that the environment in Northern Mozambique is not ready for such operations outside the concessions. In their view, the production and credit culture among smallholders does not support contract farming. Furthermore, the prevailing trading culture among the marketing companies is seen as a major disincentive for the provision of input credit, as there would be no way to limit extra-contractual buying by other companies from the contracted farmers.

88. An interesting issue in company input credit delivery concerns **the size of individual advances**, which vary significantly from scheme to scheme and crop to crop. In many company operations, the credit and input need per farmer is very small. A typical case is the successful Frigoken horticultural operation in Kenya, where some 20 000 smallholders receive five times a year an input credit package of about USD 10 each, adequate for French beans cultivation on a 200 sq meter plot. In paprika production in Zambia and Mozambique, the input credits, mainly for seeds, also average around USD 10. While no microfinance institution or bank could economically operate such small loans with high transaction costs per dollar lent, it makes a lot of sense for a processing or marketing company which aims to make the profit from procured crop, rather than from the financial transaction.

89. In other crops, much higher average loans sizes are recorded, indicating the use of much more comprehensive input packages required for good quality and yields. In the largest scheme, the tea scheme of KTDA, the loans are between USD 70 and USD 100 per farmer. Even higher loans are recorded in smallholder tobacco, and Tobacco Association of Zambia issues seasonal advances of USD 400 – USD 600 per hectare. The company policy and its objectives also affect the credit size even within the same crop. A revealing case can be found from the cotton industry. Dunavant Zambia, a well performing company aiming at serious volumes and yields and with some 100 000 contract farmers, issued in 2003 loans based on a hectare input package of USD 43. At the same time most Mozambican concession-holding cotton companies used credit packages of around USD 12.5 – USD 15 per hectare, even when the prices of inputs are much higher in Mozambique. At these low credit and input levels, yields have remained low and, combined with low Mozambican seed cotton prices, so have the farmers' net earnings from contract farming in the cotton sub-sector.

(ii) Mode of Operations

90. Three different basic models are used by the processing and marketing companies when organising their field operations in their contract farming and credit delivery activities. The first one is based on the company's own field network and staff taking care of the whole operation. The second is based on the use of fee-based field agents in village-level operations. The third one relies on farmers' associations or cooperatives in the contacts with individual farmers.

91. Many of the big input delivery operations count solely on their own network in field operations with smallholders. This is the case with such companies as Kenya Tea Development Agency Ltd, Frigoken Ltd and BAT Kenya. Most of the field activities of the large tobacco and cotton concession companies in Mozambique are also organised in this manner. The successful operators, including Kenya Tea Development Agency Ltd, Frigoken Ltd and BAT Kenya consider that their hands-on control of the input delivery operations is crucial for the main objective of this activity: the need to secure adequate volumes of high quality raw material to the companies. If this objective is attained, the high investment and recurrent costs of the service delivery networks can be justified. A comprehensive field network for service delivery also makes it possible to deliver the extension messages to smallholders in an effective way which, while involving costs, is considered by many companies crucial for the production of crops in adequate volumes and according to their quality standards.

92. As an alternative to building a comprehensive field network based on salaried company staff, a fee-based agent system is widely practised in Zambia. The largest scheme, Dunavant, uses it in the cotton sector, as do companies such as Cheetah Zambia and Enviro-Oil & Colorants in paprika contract farming. For Dunavant, a local agent, a "Distributor", covers some 80 farmers. He distributes inputs to farmers and organises the collection of crops. The Distributors do not have a fixed salary but receive a commission on the amount of cotton collected. This commission increases as the recovery rate of the loan exceeds 90%. For particularly good output levels the company pays "volume incentives". The current model of credit provision seems to function well and the recovery rate is around 90%, which the company considers a satisfactory level that creates a basis for profitable operations. For paprika companies in Zambia, the Distributors or "Leaders" cover a smaller groups of 25–30 farmers and perform similar tasks as in the Dunavant operation on a fee basis. This model has been less successful than in the cotton industry, mainly because the Distributor system has not been able to adequately control the very active side-buying activities that are common in paprika marketing in Zambia.

93. The third model is based on the use of farmers' associations or cooperatives as contact points with smallholders in input credit delivery. This model was not practised at all in the reviewed operations in Kenya.[9] In Zambia, a part of the Cheetah Zambia operation is based on farmers' associations, and the pilot small-scale operation of Agriflora Ltd uses small cooperatives as its field agents. In Mozambique,

[9] However, some emerging donor/NGO funded small, partly socially oriented contract farming schemes plan to use farmers associations/groups or other community organisations as their agents, for an example, see Annex 1.3.

large cotton firms contract to a limited extent farmers' associations, as did the Cheetah Mozambique paprika scheme. The results of these operations vary even within the same sector. In Mozambique, the large cotton company CANAM has positive experiences with its operations with CLUSA-trained farmers' associations. In the view of the company, they have been of big assistance in credit recovery, reduce transaction costs in input and credit delivery, and cut paperwork otherwise involved in dealings with a large number of very small-scale farmers. At the same time CANAM's competitor, JFS/SODAN is disappointed in the performance of cotton farmers' associations as its field agents. According to the company, during the past two seasons some 30 cotton farmers' associations have misused the inputs the company has procured for them to be distributed to the member farmers. As the company losses of these activities total some USD 200 000, it has ceased to issue any inputs to farmers' associations except against a full bank guarantee. This difference appears to be largely explained by the difference in the nature of groups, as the CLUSA-trained multi-product associations in Mozambique appear to have a better performance record in these activities than the less trained single-product cotton producers' associations.

(iii) Terms and Conditions

94. As mentioned earlier, much discussion has taken place about the terms of contract farming and the related input delivery. Thus, while these arrangements provide an access to smallholders to output markets, the terms of the contracts have on impact on the benefits which each party, the company and the farmer, would achieve from the input delivery and produce buying transactions. It is crucial to analyse all the critical elements of the contracts to understand how the benefits are shared between the two parties. In addition to the types of services provided by the companies, the key issues here are the pricing of inputs, the interest rate on advances and the price paid for procured produce by the company. These conditions vary significantly from scheme to scheme.

95. In the largest reviewed operation covering over 400 000 smallholders, the KTDA credit scheme, the fertiliser is priced based on the overseas procurement price, the transport costs to the factories, and the amount of interest paid on the USD 15.5 million commercial bank loan KTDA takes to finance the operation. The resulting price per bag of fertiliser delivered has been significantly lower than the wholesale price in Nairobi and much lower than the retail price offered to the smallholders by the village-level stockists. The price of tea leaf is based on the actual auction price, with higher prices to farmers who operate under the more effective tea factories. The terms of the deal appear to be supportive to both the smallholder production activity and the processing and marketing process.

96. In the other schemes, by far the most common procedure is to price the inputs at the wholesale price the companies pays for the goods, without any mark-up or with a small, often 5% commission for handling charges. In some schemes, this mark-up is slightly higher. Agriflora of Zambia uses a 20% mark-up on top of wholesale price, Tobacco Association of Zambia adds 15% on top of their procurement price. Even these higher observed mark-ups could hardly be called usurious. The overall conclusion of this Review is that prices of inputs charged by the companies in credit

sales have been fair and in most cases lower than the smallholder can get from alternative supply sources.

97. Concerning interest rates, three different general approaches were identified. By far the most common is the practice that no interest is charged on the outstanding loan balances. This applies to nearly all the schemes. Another option is to pass the same interest rate on to the contract farmers in cases in which the company has to raise the on-lending funds through bank loans. This approach is used by KTDA and the Zambia Tobacco Association. The third option was applied on the cotton concessions in Northern Mozambique. Of the large cotton companies, CANAM charges on input credit a high interest rate of 2.5% per month on the outstanding balance; while JFS/SODAN charges an almost similar interest rate of 30% per annum. Both of these rates can be considered high on a relatively poorly paying crop such as cotton and are not necessarily in line with the long-term target of increasing the production quality and quantity.

98. The approach to the pricing of the procured crops presents a more complex picture. In the largest schemes, KTDA prices are not fixed in the contacts but based on actual tea auction prices. Dunavant Zambia guarantees in its smallholder contracts a fixed minimum price for seed cotton. This is later adjusted upwards if the world market price allows. As the market situation improved recently, the farm gate price for seed cotton was increased by 43% from the 2002 to the 2003 season. In a recent regional comparison between seven countries (Boughton et al 2002), the Zambian companies were found to pay the highest average producer price calculated as a share of the world market price. In the same study, the Mozambican concession companies were found to pay the lowest seed cotton prices in the region. These prices are negotiated with the government (which in many cases is a co-owner of the cotton companies) before each season and applied by all concession companies in the country. The regional monopsonies aim to guarantee that companies can buy their cotton at these low farm gate prices.

99. In other operations, companies such as Frigoken, Honey Care Africa Ltd (Annex 1.10) and BAT Kenya fix the prices of the procured produce for the whole season, while others pay according to the market or auction prices prevailing at the time of purchase. In a review of this type, it is not possible to accurately assess whether these prices have been better or worse than those a smallholder would have received during a particular season through other marketing channels, assuming such alternative channels had been available.

100. The overall conclusion of the Review is that in general, there is little evidence of the exploitative nature of smallholder farming contracts and the related input credit operations. Most of the operations, if well managed, have (or had) a potential to benefit both the company and the farmer. An exception in this general picture are the Mozambican cotton companies working on monopsonistic concessions, as the prices of seed cotton offered on these schemes are low in comparison to others in the region and the interest rates charged on smallholder advances are clearly higher than is typical for operations of this type. Thus, despite operating with lower risks and no competition within their concessions, these companies do not seem to pass the benefits of their favourable market position to the smallholders.

(iv) Credit Recovery and Scheme Sustainability

101. The assessment of the performance of company credit schemes under interlocked arrangements has to follow partly different principles than is the case in standard financial sector operations. Thus a scheme can be profitable for a marketing company, even where it faces high transaction costs and a relatively high default rate, if it secures the firm an adequate supply of quality produce. On the other hand, a full recovery of input credit does not guarantee that the whole contract farming operation is a success and that the company would want to continue to implement it. In the agricultural credit operations of the financial institutions, high recovery rates normally indicate good farm production results and a strong appreciation by the farmers towards the partnership between him/her and the financial institution. This is the general picture for company input credit too: if farming fails and/or farmers do not see the benefits from the scheme, they often do not repay their loans in full. However, various other factors have to be taken into consideration when assessing the success of a company credit scheme and its sustainability.

102. Concerning the recovery rates, the Review shows while the repayment performance varies significantly, consistently high recovery rates have been achieved in input credit schemes in various countries and sectors. The largest scheme managed by KTDA reaches a nearly perfect loan recovery year after year. Similarly, Frigoken (Kenya) has suffered very limited losses on its input credit operations. After experiencing problems in the past, Dunavant Zambia operates today at over 95% recovery level. Agriflora (Zambia) and Tobacco Association of Zambia also report 95-98% recovery levels in their smallholder seasonal credit.[10] In Mozambique, the concession-based cotton companies also report relatively good annual recovery figures. Of the small credit schemes, CRM Farm reports a perfect recovery performance year after year, with recovery problems in only one season when the government confused the produce market with free deliveries of relief fertiliser.

103. At the same time, some of the other schemes achieve low rates of recovery for their input advances. The paprika operations of Cheetah Ltd and Enviro-Oil & Colorants in Zambia have recorded recovery rates of around 50-60%. In the 1999/2000 season only, Tobacco Association of Zambia lost some USD 500 000 in non-recovered input loans. W.E. Tilley Ltd (Annex 1.9), a large fish marketing firm operating in Kenya and Tanzania, reports that it loses annually some 25% of the capital it issues annually as loans to its suppliers in the fishing community (Annex 1.9). Finally, some of the schemes have been outright operational failures. This was the case the Cheetah Mozambique paprika operation discussed earlier, in which the whole USD 48 000 issued as seed credit had to written off as bad debt.

104. However, unlike in standard banking operations, a relatively low recovery rate does not necessarily mean that the company input credit operation has failed. In all the reviewed operations, the target of the companies is to buy produce, not to make money of the input credit delivery. The credit amounts also tend to represent only a small share of the value of the crops produced with the inputs. Therefore, if the produce buying targets of the company can be reached, reasonable credit losses are

[10] Yet at the same time, the donor-funded and operated investment credit operation in the same Agriflora scheme reports that almost all of its loans are in default.

acceptable. In a typical remark, the Managing Director of W.E. Tilley Ltd commented: "The annual USD 50 000 loses of input credit are regrettable but this is a part of the business we can afford. The fishermen have a perception of W.E. Tilley as a company that pays competitive prices in cash and occasionally gives fishermen such extra services as input credits. This increases fishermen's willingness to sell to the firm. With the increased business volumes, the small losses in input credit are bearable". Similarly, the 57% recovery rate of JFS/SODAN in tobacco input loans did not discourage the company from increasing its credit volumes as "the profits in tobacco marketing are good".

105. According to the current Review, the biggest problems to scheme sustainability emerge when the company fails to procure the expected volumes and qualities of crops from the contracted smallholders. The first issue here concerns the quality of the produce. In a number of the reviewed cases, despite the inputs provided, smallholder producers had difficulties to meet the quality standards required for export production. In Frigoken's horticultural operation in Kisii District in Western Kenya, some 40% of the harvested produce had to be rejected, which strongly contributed to the closure of this operation involving 6 000 smallholders. Frigoken connected this failure to a large extent to a difference in the cultivating culture in Western Kenya, as a similar operation has been very successful in Central Kenya (see D(i) above). More generally, disappointments in the ability of smallholders to consistently adhere to quality standards have, according to the Horticultural Crops Development Authority of Kenya, been one factor explaining why the export production share of small-scale producers has declined, and with that the volumes of company input credit to smallholders.

106. The second and even more important issue is the case of side-selling and side-buying. In the newly liberalised markets, the contracting companies find it often difficult to buy the crops from their own contracted farmers. Opportunistic competitors in all the three countries buy actively and systematically from farmers contracted by other companies, and often find willing sellers within the smallholder community. According to the Review, this has adversely affected the sustainability of many input credit schemes and discouraged new companies from engaging themselves in these activities. In some sectors, such as Kenya's smallholder tea and Zambia's cotton, the dominant market share and the ownership of processing facilities, have protected the large input credit providers, KTDA, Dunavant and Clark Cotton from large-scale pirate buying by their competitors. However, Frigoken loses some 20% of its outgrower production of French beans to its competitors: many farmers sell to the company just enough produce to cover their small input credits and then sell the bulk of the crop to a competitor at a slightly higher cash price. Honey Care Africa closed its pilot credit scheme because of this factor, as did Kenya Nut Ltd for its credit input supplies (Annexes 1.5 and 1.10). According to Cheetah Zambia, opportunistic side-sales by its contract farmers are as high as 30-40% of the total paprika crop produced by them. Even in the relatively poorly organised, partly overlapping cotton concessions in Nampula Province, extra-contractual buying by competing firms has created major conflicts. In Mozambique, the leading marketing companies consider the expected losses due to side-buying as the biggest obstacle for starting new contract farming and input credit schemes. Clearly, on both the company and the farmer side, the "rules of the game" in liberalised markets have not yet been fully established or accepted to direct the behaviour of the market players in East and Southern African countries.

107. The above threat to the sustainability of contract farming and input credit schemes is closely linked to problems of law enforcement in contract farming in East and Southern Africa. The companies have little trust in the law enforcement systems and seldom take legal action against firms buying illegally from their contract farmers. In an exceptional case, in the mid-1990s, Kenya Nut Ltd, with support from the Horticultural Crop Development Authority, took legal action against its main competitor, which had started systematically to buy from producers contracted through their cooperatives to the Kenya Nut Ltd. The company had invested substantial amounts of money in the provision of macademia nut seedlings on credit to these smallholders. The case proved to be both expensive and disappointing to Kenya Nut Ltd. It has dragged on for nearly ten years in the Kenyan courts. The High Court ruled against Kenya Nut Ltd and the Appeal Court decision is pending. These legal proceedings (known in the local press as "the Nut Case") have convinced many Kenyan companies that it is impossible to establish rules to Kenya's agro-marketing through legal action. The same opinions regarding the impotence of the legal system to enforce farming contracts apply also to most companies in Zambia and Mozambique.

108. A special case linked to the above issues is the situation on the Mozambican concessions. In the strong view of all the interviewed concession holders, the monopolistic concession system is the only way they could operate their production system, based on input credit packages. In their view, the serious, violent troubles experienced during the partial, short-lived liberalisation a couple of years ago showed that if the concession system is terminated, nobody would provide inputs on credit, as side-buying by competing companies would surely ruin these investments.

(v) Impact on Farmer Households

109. Assessing the economic and social impact of company input credit on participating households was not a core objective of this Review. Such an assessment would require resources for detailed field surveys that were not included in the project. However, a number of comments can be made on the subject, based on the review findings and conclusions of the other recent studies in the same field.

110. As a general conclusion, input credit packages by processing and marketing companies make it possible for small-scale farmers to get involved in the production of such high-value crops that the cash-poor smallholders without access to credit would not otherwise be able to cultivate. The companies also provide them with channel to market the produce. In most of the reviewed cases, this has meant a clear increase in the cash earnings of the participating households. As shown in various studies, crops such as tea, various types of vegetables and fruits, and even cotton, typically cultivated under contractual arrangements, produce much higher per hectare net earnings than is the case with the most common alternative, the low-input production of maize. The positive income impact to households has been obvious in reviewed input credit-supported cases covering tea and horticultural production in Kenya, and cotton and vegetable production in Zambia. In such cases, the farmers have shown considerable persistence in continuing their contract farming arrangements, which is commonly used as an indicator that they see the schemes as beneficial to them.

111. The positive income impact of well-managed contract farming supported with input credit has recently been confirmed by a number of field surveys. The already-cited study by IDS – University of Sussex (McCulloch et al 2003) showed that in Central Kenyan smallholdings, any shift into the production of vegetables based on export contracts clearly reduced household poverty. In an on-going study by Rui Benfica in Mozambique, the initial findings show very positive primary and secondary results on household incomes when farmers transfer a part of their holdings from subsistence maize production to tobacco cultivation supported by comprehensive credit-based input packages. Furthermore, while there are reliable data available, successful contract farming has also a positive impact in the form of employment creation. The level of this effect depends largely on such issues as the size of the contracted holdings and on how labour intensive the contracted crops are.

112. On the other side of the picture are the clearly negative effects of the poorly managed contract farming and input credit supply schemes. In the weakly implemented Cheetah Mozambique paprika scheme, some 7 000 farmers were left without a market for most of their crop as the company's buying arrangements failed. This resulted in significant losses to smallholders in the form of wasted labour and surely reduced their confidence in similar arrangements in the future. Also in some other schemes, poor institutional and management arrangements have clearly reduced the compensation for farmers' labour and land. A typical case in this respect is cotton production on concessions in Nampula Province. The poor farm gate prices, confused concession arrangements and in some cases, poorly organised input provision services have adversely affected cotton yields and through them, the farmers' income.

113. To summarise, the Review confirms that the distribution of risks and benefits varies significantly between the schemes. Thus the benefits for either party, the company and the farmer, should be assessed case by case and sector by sector, rather than making generalisations about the whole production method.

D. Role of Donors and NGOs

114. The presence of donors and donor-funded NGOs in operations, in which companies finance smallholder activities, varies significantly from country to country. In Kenya, with a more developed and commercially oriented agricultural sector, the donor presence is both limited and marginal: companies run and control their own contract farming and input supply operations. Three minor cases of donor/NGOs presence were identified. Honey Care Africa Ltd financed its original credit operations from donor funds and later established its own short-lived credit operation based on donor-funded model (Annex 1.10). East African Growers Ltd is using NGOs to identify and train groups to receive input credit from the company, but this is clearly a social programme outside the firm's mainstream operation, established to improve the public image of the company (Annex 1.3). Lastly, the Care-operated REAP programme, partly funded by IFAD, aimed originally to link horticulture farmers groups to company input credit, but this strategy was recently abandoned and replaced by attempts to attract a microfinance provider to the operational area of the programme.

115. In Zambia and Mozambique, however, donor presence in company input credit operations is much more dominant. While the large and successful Zambian operations by the cotton companies are operated and funded entirely by the companies themselves, the smaller schemes receive substantial aid allocations. One third of the Cheetah Zambia farmers are contracted through NGOs, mainly CLUSA and Africare (Annex 2.2). Enviro-Oil & Colorants, another paprika company, has received investment capital from the EU and capacity building services from NORAD and EU-contracted NGOs. In 2003, the Tobacco Association of Zambia financed the whole of its USD 400 000 credit programme with loan from the EU-funded Export Development Programme (Annex 2.5). The small-scale scheme of Agriflora Ltd, covering 300 elite smallholders, is to a very large extent donor-funded, with investment grants from USAID-funded ZATAC project, loans from the HIPC facilities and a grant for irrigation investments of USD 106 000 from IFAD-funded Irrigation Water Utilisation Project (Annex 2.4). In addition, market support projects such as CLUSA, ZATAC and SHEMP all aim, as one of their key activity, to link farmers and their groups/associations to the financing and marketing chains of the processing and marketing firms.

116. In Mozambique, the failed Cheetah Mozambique paprika scheme was heavily donor-linked. The Dutch Aid allocated to the Dutch company an investment grant of USD 600 000. Furthermore, the whole field operation was based on minimum company investment in the field network and maximum use of NGOs in farmer identification, contracting and company input credit delivery. Furthermore, CLUSA has operated for years in Northern Mozambique to create links between farmers' associations and private companies and today uses the volumes of company credit received by associations as one of the four key indicators defining the success of the CLUSA programme. The IFAD-funded PAMA Support Project also aims to broker financial links between farmers, traders and large trading companies.

117. Experiences from donor participation in company credit operations indicate that a careful and selective approach in these operations would be recommended. On the one hand, training and capacity building operations by donor programmes and NGOs have been instrumental in the development of networks of farmers' associations, which are in turn used as intermediaries in company credit operations. As in the cases of CLUSA Zambia and Mozambique, they have managed to broker functional relationships between the companies and associations, including financial links. Their presence in the field has assisted the companies to reduce risks and transaction costs and thus catalysed private sector market development. These actions have served as useful starting points in the intensification of smallholder agriculture in the rural areas of Zambia and Mozambique.

118. On the other hand, overt donor presence in company credit operations can also have a serious adverse impact. The well-known role of a prominent donor in the investment credit operation under the Agriflora scheme in Zambia has surely contributed to the current situation, in which nearly the whole investment loan principal is unpaid and overdue. Similarly, using NGO field staff to collect signatures to company farming contracts, as was done in the case of Cheetah Mozambique, is likely to result in a very poor quality of these contracts and serious recovery problems as the company advances are easily confused with NGO grants.

119. In Zambia and Mozambique, most of the interviewed company managers appreciated the role of NGOs in farmer identification, capacity building and association support. At the same time they had strong reservations about the skills and capacity of NGOs to deal with the core business aspects of contract farming and to pass the right messages on disciplined contract farming to the smallholders. Furthermore, they seriously questioned the wisdom of converting marketing support projects into export trading companies. The private marketing companies regard the chances of these NGO companies surviving in international commodity trading as very limited indeed and see major risks developing for those smallholders who would have to rely in their produce sales on the marketing and trading skills of these new NGO-based enterprises.

V. RECOMMENDATIONS FOR POTENTIAL IFAD ROLE

120. This Review on marketing and processing companies as providers of agricultural credit has shown that in East and Southern Africa, these companies are important and in a majority of countries the primary source of agricultural production credit to smallholders. At the same time it is also clear that company credit is not, and does not aim to be, a substitute for the operations of the financial institutions. The range of financial services provided by the marketing companies is very narrow, consisting in most cases only of small in-kind seasonal loans. Banks, MFIs, SACCOs and other financial institutions can offer a more diverse range of services, including savings, investment loans and money transfers, and are expected to do it in a transparent manner under relevant supervision arrangements. Therefore, patient and long-term development of rural financial institutions and services remains crucial for the progress of rural economies in Africa. One of the key elements of IFAD's regional strategy is to support the development of rural finance markets, and programmes have recently been launched to provide such support on a longer term basis in countries such as Tanzania, Ethiopia, Uganda and Mozambique, with a pipeline proposal to do the same in Zambia.

121. However, the reality in most of the Sub-Saharan countries today is that due to the risk, transaction cost and informational constraints and the assumed limited prospects of profit making, both formal and semi-formal financial institutions have a very limited involvement in the financing of smallholder production. At the same time this Review has confirmed that in many cases, private marketing and processing companies have shown significant flexibility in including small-scale farmers in their credit-based transactions and have continued to issue large numbers of small seasonal loans to smallholders on a sustainable basis. The cases reviewed have shown that the provision of input credit by the marketing and processing companies can often solve the problems caused by imperfections in input, finance and agricultural produce markets. With interlocking arrangements, the companies have managed to overcome the high risk and cost constraints even when dealing with very small loans, as the aim of the operation has been not to make money on the credit transactions, but rather through the procurement of high quality and quantity crops. When well managed, these operations have been beneficial to both the farmers and the company.

122. The above situation presents an interesting challenge for a donor such as IFAD, whose strategy largely focuses on the issues of the intensification of smallholder production through improved inputs, the sustainable development of rural finance markets, and the development agricultural produce markets. When well implemented, credit-based interlocking arrangements with marketing and processing companies can in many cases provide solutions to all of these three inter-linked areas, even in the often-difficult operational environments in Africa. They can serve as an important element in improving the chances of smallholders to grow high value crops. In a number of countries, they provide a unique link between the small-scale farmers and the international markets.

123. When planning for potential IFAD-supported interventions involving credit provision by marketing and processing companies, three general, partly inter-linked issues would require attention. First, a dilemma for donors aiming to improve

smallholder access to company credit is how to avoid market distortions with these interventions. Working through individual companies may give them an unfair market advantage in their sub-sector. Based on global experiences, Pearce (2003) provides a useful list of guidelines on how to reduce or avoid distortions in this type of donor support:

- Focus on farmers who are poorly integrated into product markets, but who could be viable market participants if underlying constraints or market failures are removed. This can develop and/or extend markets, rather than risking distorting existing markets.
- Subsidise both farmer and company capacity, not the cost of loans in the system or the prices of the produce, as price distortions tend to lead to unsustainable operations on the longer term.
- Reduce the subsidies over time, with a clear end defined in advance to any financial support.
- Make support available through transparent selection criteria and open to more than one entity.
- Make future support dependent on reaching agreed performance criteria, including clear outreach targets and such non-credit factors as produce buying price, efficiency of operations, and on-time crop collection and payment.

124. Second, in some countries in the region, IFAD may face government resistance to an approach which proposes working directly with private marketing and processing companies. Most IFAD financing is in the form of loans to the governments, and there may be reluctance to channel these funds on to private sector partners that could use them to improve their profits and market position, even if the process would at the same time benefit the smallholders involved in the operation. It is, however, relevant to point out that in the increasingly liberalised markets in Africa, there is very little public sector field presence left in the agricultural input or output markets or in the rural sector in general. Thus, to intensify smallholder farming and to increase household incomes, new approaches and partnerships need to be considered and tested, with such partners that have the ability to perform in the roles of the input and credit provider and the produce buyer. In many cases, this will in the future mean working with the private processing and marketing companies. This calls for both IFAD and the governments to use creative approaches in the programme designs, with adequate room for private sector participation in the implementation process.

125. Third, the Review has clearly shown that when designing support interventions involving credit supply by marketing companies, a careful and comprehensive pre-assessment of the sub-sector and market is always required. A structured assessment should be conducted to identify domestic and export market potential for agricultural products of different types and the opportunities and obstacles for a viable operation. In the context of the market situation in most African countries, the output of the market analysis will in many cases identify contract farming operations as profitable businesses for smallholders, as the schemes can respond to the failures of financial and produce markets and help to the farmers to procure physical inputs on in-kind credit, supported by company extension and

secure markets. The findings of the market assessment would then be used to design the actual intervention plan for each sub-sector, and even each locality.

126. To support the increased outreach of company credit operations with the smallholder populations, various types of interventions have been tried by donors. A number of them have shown promising results and are discussed below concerning their further application under IFAD-supported marketing, financial sector and general rural development programmes. The new marketing linkages programmes in Zambia and Mozambique already include elements of company credit support, and the proposed Rural Finance Support Programme in Mozambique includes a sub-component aiming to identify and support financial linkages of these types.

127. First, by forming farmers' associations and cooperatives, smallholders can make themselves more attractive clients for contract farming and input-credit provision by the companies. Well functioning associations can reduce costs and risks of the activities and make the daily operations of credit delivery, input supply, extension, and produce collection much easier to manage. However, in many areas, smallholders need technical support and training in order to establish and operate effective associations. This often involves higher up-front costs than the companies are prepared or able to pay. A justified donor intervention is to contract specialist intermediaries, such as consulting firms and NGOs, to support the associations and coops during their infant operational period. The Review identified various cases in which the marketing and processing companies favoured contract farming with well-functioning associations and were prepared to expand their credit-based operations to cover the members of these associations. The Review also concludes that the associations are likely to require such support at least during their first and second year of operations, as poorly trained cooperatives and associations often proved to be ineffective and unreliable partners in contract farming or produce buying operations.

128. Short-term training contracts from donors with NGOs and specialised companies can stimulate the long-term access of cooperatives and associations to company credit. However, for this to happen, this and earlier reviews argue that the NGOs and projects should not take the easier short-term route of providing their own marketing services directly to farmers. Similarly, attempts to convert marketing support projects into export trading companies, as is now happening in Zambia and Mozambique, may involve major risks to smallholders and are likely to lack sustainability, especially after the external support contract expires. Thus, instead of getting involved in direct service provision, the specialised intermediaries should focus on strengthening the capacities of all the existing market actors and facilitate long-term linkages between them.

129. Related to the above, contracted intermediaries can play an active role in brokering linkages between the smallholder population and marketing and processing firms to increase the supply of credit-based inputs. Based on their knowledge of actual or potential production in the smallholder community, intermediaries can aim to attract such companies to operate in the area that have the capacity to provide the required inputs on credit and to procure the produced crops. These linkage operations can consist of general publicity campaigns among the local agribusiness community, regular meetings and fora for the companies' and farmers' representatives to meet, as well as detailed discussions between individual companies and the farmers' representatives to agree on the terms of actual cooperation in

production, input supply and marketing. These brokering operations should apply a pro-active approach, building data bases on potential partner companies and keeping contacts with their management on a regular basis, discussing new outreach opportunities with the smallholder population. Particularly in countries where there is little experience of credit based input delivery by the marketing companies and of the related responsibilities of the contracted farmer, the brokering of linkages by donor-funded intermediaries can be crucial to the establishment of appropriate and sustainable contractual relationships between the companies and the farmers.

130. Furthermore, this Review confirmed that trade credit (without interlocking arrangements) between farm input suppliers and wholesalers and community traders, and between traders and smallholders is very seldom practised in Sub-Saharan Africa. To promote these arrangements and through them, the smallholders' access to relevant inputs, there is still much room for support operations[11]. These operations could be made more profitable and attractive for the emerging entrepreneurs if the input supply operations could be connected to the produce buying activity through the same business premises. Here, the newly established village-level trader could act as a buying agent of a larger produce marketing firm, which may be convinced to provide its agent with short term advances to be used in produce buying. Under IFAD-supported projects, both sides of the agency relationship, the input supply and produce buying, could be actively promoted, to develop new viable rural businesses.

131. The Review provided evidence of various problems linked with the weak legal and judiciary systems in Africa, which make enforcement of financial and commercial contracts difficult or expensive. Related to this issue is the wider problem of a lack of code of conduct between the firms and smallholders participating in credit-based input deliveries, resulting in widespread side-selling and side-buying activities. IFAD-supported programmes could aim at improving this situation by supporting the governments to improve the legal framework for contract farming activities and through organising discussion fora for the relevant government offices, private sector companies and farmers' representatives on various aspects of contract farming operations. These could aim at creating appropriate procedures and mechanisms in areas such as the regulations for collective bargaining, conflict resolution and standard contracts, as well as developing an appropriate code of conduct for these operations.

132. Most of the above-proposed activities, appropriate for donor support, rely on the contracted intermediaries or the project staff to play an active role in the implementation activity. However, it was shown in the Review that many of the large and successful credit-based input delivery operations count solely on the companies' own networks in field activities with the smallholders. <u>An interesting challenge and opportunity would be in developing the ways of using IFAD funding to widen the outreach of the mainstream contract farming operations of these well-performing marketing firms to new areas with a large number of low-income smallholders, using the companies' own networks to carry out the whole field operation, without any direct project or NGO field presence.</u> If this support would engage a large number of

[11] Such as the IFAD-supported, CARE-implemented AGENT programme in Zimbabwe.

smallholders in new profitable cash crop cultivation activities, the infant industry argument could be used to justify the direct support to the contracting company.

133. The modalities of scheme expansion support of this type is likely to vary from situation to situation. In case of smaller companies, the volume of credit provided is often limited by the firms' own access to credit (as was often the case in Zambia). In this situation the IFAD support could be in the form of a credit line for these companies for scheme expansion, preferably through the formal financial sector institutions. In other cases, support could be in the form of initial support to establish the field service network, provided either in loans or matching grants. Direct company support should be provided only for the establishment and expansion of schemes that can demonstrate long-term sustainability without prolonged external assistance, and its duration limited to the initial phase of the operations. These potential IFAD-supported operations for scheme expansion should as far as possible be conducted in the name of the marketing company, with the donor flag down, to avoid the image of a donor-supported scheme in which loan default might not be sanctioned.

134. A particular case of potential direct support to marketing and processing companies could be the partnerships formed with farmer-owned companies, to assist them to enter into the markets of high value products and to increasingly capture added value for their members. The successful operations of the Kenya Tea Development Agency Ltd show that an integrated operation covering production, financing and export marketing can be a successful large-scale activity under smallholder ownership, when managed according to the standard principles of private business management. IFAD could support such operations, initially to develop the required systems and establish the required contacts to financial and produce markets, and later to increase the outreach of such operations among the smallholder farmers.

135. Finally, there is evidence that where opportunities for profit making exist, private sector companies have often been able to innovate to overcome the failures in the markets, including those of inputs and credit. This process can be encouraged by IFAD and other donors through facilitating the exchange of experiences and best practices. Exchange visits could be organised, to enable managers of agricultural marketing and processing companies to visit other countries and learn about successful credit-based contract farming operations in their actual implementation environments. Experience shows that similar exchange visits under the AFRACA network between institutions in the rural finance sector have been useful and effective in transferring innovative practices between different African countries.

ANNEX 1
CASE BRIEFS: KENYA

1.1 Kenya Tea Development Agency Ltd: Successful and Large Company Credit Operation

Kenya Tea Development Agency Ltd (KTDA) operates by far the largest company-funded credit scheme identified during this Review. It is also a successful operation, which has had a major impact on the farm level incomes and on the quantity and quality of smallholder tea grown in Kenya.

In 2002, Kenya Tea Development Agency Ltd replaced the Kenya Tea Development Authority, which was a parastatal company in the smallholder tea sector. The present KTDA is a fully private company owned by 51 tea factories. Each of these tea factories is in turn organised as limited liability companies owned by the tea farmers who supply tea to the factories. The Board of Directors of KTDA consists of the representatives of tea factories. There is no government involvement in the production and marketing operations in the smallholder tea sub-sector.

KTDA acts as a management agency for the independent tea factories. Each tea factory processes the tea supplied by 5 000 – 10 000 smallholders cultivating tea on an average ½ - 2 acre plots. The total number of active tea farmers in this production and marketing chain is currently 406 000. KTDA advises the factories on the technical side of the production and factory operations, and provides a comprehensive package of management services including marketing, procurement, accounting, banking and crop payment services. It should be noticed, however, that the tea from each factory is sold in the auction under the factory's own name, which encourages actions aiming at high quality production and through them, at high payments to farmers who own the factories.

For this Review, the interesting feature in this well-managed operation is the **Fertiliser Credit Scheme of KTDA**. The Scheme provides on credit all the fertiliser the 406 000 smallholders annually require to cultivate high-quality tea. As no other major inputs are required, fertiliser use is crucial to high yield and quality. Before each season, the Extension Officers in each tea factory identify the fertiliser needs of each tea farmer. These figures are first compiled at the factory level. From the factory totals, the KTDA Head Office aggregates the total fertiliser needs of 406 000 farmers. For the 2003/04 season, the total fertiliser requirement equalled 65 200 metric tons. This converts into 20 000 – 26 000 bags of 50 kg for each factory. KTDA procured this amount direct from the world market and organised its shipping to Mombasa.

To finance the procurement of the fertiliser, KTDA took a bank loan of USD 15.5 million from an internationally owned commercial bank in Nairobi. This loan covered the purchase price of the fertiliser and its shipment costs (total USD 12.5 million) as well as its delivery costs by lorries from Mombasa to each tea factory (USD 3 million). The repayment of the loan to the commercial bank is organised in an interesting manner. This year the loan of USD 15.5 million was taken in July 2003 and will be fully repay in one instalment in January 2004. At that time, the 51 factories pay their full shares of the fertiliser loan to KTDA, which in turn pays the bank the full borrowed amount. The liquidity for the factories to raise to required funds, which this season amount to an average USD 300 000 per factory, originates from the deliveries of tea during the period July 2003 – January 2004. The initial monthly payments for the tea leaf delivered are at the moment at the level of KES 9 of the total price of KES 29 per kilo. The balance of the auctioned price accumulates on the factory accounts and is used to pay the fertiliser loans to the bank. Each picking season for tea is considered to be 15 months. Later in 2004, through the interim and final payments, the bulk of the farmers' tea deliveries are paid, with the final payment including a significant bonus that depends on the materialised auction prices and the efficiency of each factory.

KTDA Head Office calculates the repayment requirements of each farmer. The fertiliser is priced based on the procurement price, the transport costs to the factories and the amount of interest paid on the commercial bank loan. No mark-up is added. The resulting amount per bag of fertiliser delivered has been significantly lower than the wholesale price in Nairobi and much lower than the retail price offered to the smallholders by the village-level stockists. In 2002, the Kagwe Tea Factory had to supplement their main fertiliser order from KTDA with a small purchase from a Nairobi fertiliser agent, MEA Ltd. This fertiliser cost KES 1 200 per 50 kg bag, which was 33% more than the price KTDA charged (KES 903) for their imported fertiliser of the same type.

After KTDA has calculated the repayment requirement for each farmer, the deductions are made from the monthly leaf payments. The potential remaining balance is deducted from the final payment. All transactions are made through a computer programme in the KTDA Head Office, which handles all the crop delivery, payment and credit transactions for the 406 000 smallholders. After an active campaign by KTDA, some 85% of the farmers now have a bank account through which all their tea-related transactions are made. The rest are paid in cash at the factory.

KTDA has experienced very few problems in the recovery of its fertiliser credit. KTDA Head Office always recovers in full as it has direct access to the bank accounts of the factories. At the factory level, the recoveries are reported to be perfect or near perfect. In the visited Kagwe factory, the recoveries in the 2002 season were 100%. Only individual cases have been experienced among the factory's 5 300 farmers, in which a farmer tries to avoid recovery by selling through neighbours or friends. These cases are often soon discovered by the extension staff from the delivery records. The threat of exclusion from the next year's fertiliser credit normally is an adequate safeguard for full repayment.

In the view of the KTDA staff at the factory level, the importance of the fertiliser credit scheme is totally crucial for the quality and quantity of production and through them, for the household incomes. No traders provide credit facilities for input purchases for smallholders in Kenya and only few farmers have access to bank or MFI loans. An average farmer needs five 50 kg bags of fertiliser per seasons. This costs in cash some KES 5 000 – 7 000. Very few tea producing smallholders would have liquid cash to procure the required amounts at a correct time. As the positive impact of fertiliser for both the volume and quality of tea is well known, the view of the field staff of KTDA is that the impact of the closure of the KTDA Fertiliser Credit Scheme would be devastating for smallholder tea production in Kenya. At the same time the bulk imports by KTDA have guaranteed that the fertiliser applied in the smallholdings is of appropriate type for tea production and of high quality.

1.2 Frigoken Ltd: Horticulture Contract Farming with Genuine Smallholders

Established in 1989 as a provider of premium horticultural products, Frigoken Ltd is a member of the Industrial Promotion Services (IPS) group of companies, which is in turn a member of the Aga Khan Fund for Economic Development (AKFED). AKFED is an international development agency that promotes private sector entrepreneurship in the developing world, especially in Sub-Saharan Africa and South-east Asia. Currently Kenya's largest producer of processed vegetables, Frigoken's customers include a broad range of leading European companies and supermarket chains. Frigoken is Kenya's second largest exporter of fruits and vegetables, with a share of 5.1% of the total 2002 exports from the sector. Functioning as a part of the Aga Khan group, Frigoken has well-developed relations to the Nairobi banking market.

Frigoken is a unique large-scale horticultural operation in Kenya as it relies almost entirely on production on genuine low-income smallholdings. It has focused solely on high-priced classical varieties of French beans exported to the EU markets. These have very strict size and quality specifications and the process is very labour-intensive. The crop cycle lasts 12 weeks, and four to five crop cycles can be cultivated in a year. Each cycle has a harvesting period of some five weeks, during which picking of the produce and its delivery to Frigoken have to be done daily.

Frigoken's started its French bean operation in 1989 as a "free buyer" from the market as the crop was already cultivated in Kenya for the fresh produce market. The results were not encouraging as the quality of the purchased produce did not meet the requirements of the high-priced segment of the EU market the firm was aiming at. To increase its control of the crop production, in 1995 the company started pilot contract farming with 50 small-scale farmers under tight Frigoken support and monitoring. As this approach gave better results, the company started full commercial production based on smallholder contracts. The activity covered two districts, Muranga in Central Province and Kisii in Nyanza Province. Both areas have ideal conditions for year-round production of high class French beans. By 1997, the Muranga operations covered 12 000 farmers and produced some 3 200 tons annually and in Kisii, some 6 000 farmers participated and produced annually 1 000 tons of French beans. Annual payments to smallholders reached some USD 1.6 million by the late 1990s.

For the French beans cultivation activity, Frigoken developed one standard package that is applied on every participating farm. Each Frigoken-dedicated plot is 200 sq metres, around the size of a domestic garden, and constitutes a small part of the average ½ - 2 acres farms. Each farmer signs an individual contract with the company. The price of the produce is fixed for the whole year and the company commits itself to buying all the produced beans that meet the quality specifications. A major investment was made by Frigoken in Service Centres, which employ a Supervisor, field controllers, four to five grading staff, four to eight praying staff and a bookkeeper. At the end of the 1990s, Frigoken's operations were run from around 100 such centres. All inputs are provided by the firm as advances. From the Service Centres, the company gives the required technical advice, monitors each farm on a weekly basis and does all the spraying. Farmers provide the labour for other farming activities and during the harvest season, deliver the crop on a daily basis to the Service Centres, from where it is daily transported by the firm to the factory in Nairobi.

As an advance, each farm gets a standard package of seeds, fertiliser and pesticides. These are provided interest-free strictly at Nairobi wholesale prices. Each package costs the farmer around USD 10. After each crop cycle is harvested, Frigoken calculates the payments to individual farmers. The payment is made in cash within 7 – 10 days after each harvest. From this payment, the USD 10 advanced for inputs is deducted.

The results of Frigoken's outgrower operations with smallholder differ significantly depending on the implementation area. In Kisii, serious problems were experienced. Farmers had difficulties with adherence to tight production and harvesting schedules. Despite substantial technical advice and monitoring, quality requirements were often not reached and commonly, as much as 30% - 40% of harvested crop had to be rejected. Side-selling was common. While losses from input credits were small with low individual advances, the high investment and running costs of the Service Centres could not be covered due to low quantity and quality of the purchased produce. After losing some KES 30 million (USD 400 000) in a couple of years with smallholder outgrowing activity, Frigoken closed the whole operation in Kisii District in 2001.

The Muranga-based operation in Central Kenya, on the other hand, has been both successful and profitable. In 2002, with the above-described format, Frigoken collected around 7 500 tons of French beans from smallholder outgrowers. Some USD 4 million was used to produce it, out of which around USD 2.8 million was paid to farmers for the produce. Today, the number of active farmers in the scheme is between 15 000 and 20 000 depending on the time of the year. The annual disbursements of inputs advances total around USD 400 000. Recovery problems are minimal. The operations cover now various districts around Muranga and are run from some 50 Service Centres with a staff of around 600 field workers. The company turnover resulting from the smallholder operations is around USD 8 million and the activity is profitable for the firm.

Smallholders around Muranga appear to appreciate the income earning opportunities the French bean cultivation provides, especially after the recent collapse of the coffee economy in the area. Acre-per-acre comparisons show three times higher net income for French beans than for coffee, and six times higher than for maize. From their 200 sq metre plots an average household earns an annual net income of USD 100 – 150 as a compensation for their labour and land. A clear advantage for the cash-poor households is the fact that they do not need to buy any inputs during the production process.

While Frigoken continues to expand its outgrower production of French beans and pilots currently with the same method with new crops, a number of problems remain in the scheme. The biggest of them, and the most difficult for the firm to tackle, continues to be the active and systematic poaching of the produce by other companies from Frigoken outgrowers. Small "briefcase" exporters systematically approach Frigoken outgrowers and offer slightly higher cash prices, which they can easily afford as they do not have to cover any other production or extension costs. Some of these firms have field agents who daily intercept Frigoken outgrowers on their way to deliver crops to the Service Centres. Similarly, large and well-established export firms poach among the Frigoken contract farmers especially during the peak demand for fresh vegetables in Europe and are willing to pay high cash prices in order to fill their export orders. As court action against either farmers or the poaching companies seldom brings any useful results in Kenya, Frigoken has received support from local Chiefs and Administrative Police to chase illegal buyers away from around the Frigoken Service Centres.

1.3 East African Growers Ltd: Vegetables, Fruits and Flowers to EU Markets

East African Growers Ltd, a Nairobi-based private company, is one of the leading Kenyan horticultural exporters. In 2002, its total exports reached USD 38 million, consisting of flowers, and fresh fruits and vegetables. Payments for the raw material accounted for approximately 50% of the total exports. Some 90% of the produce was sold to the UK markets mainly through direct export contracts with leading supermarket chains.

Of the total supplies to East African Growers Ltd, 60% come from their own farms, which at present cover some 400 hectares in Central and Eastern Kenya. The whole flower exports originate from these company farms. The remaining 40% of production is from contract farmers. One half of the produce from contract farmers comes from large-scale farms each with a minimum of 50 acres under crops contracted to the company.

The other half of contracted production, covering 20% of the firm's total supplies, is from producers the company lists as "small-scale farmers". For the purposes of the current Review, this term requires further assessment. East African Growers Ltd considers as a small-scale farmer any producer that has under the company crops a minimum of four acres and a maximum of 50 acres of land. The company considers that on plots under four acres, contract farming for the firm is not profitable, and no contracting is done with farmers that can not allocate a minimum of four acres to the company crops. In Central Kenya, where an average smallholding is some 2-3 acres, this minimum acreage requirement in practice excludes all farmers that are generally regarded as "smallholders" out of the East African Growers Ltd operations. The company small-scale farmers in reality consist of some 100 medium-scale farmers that are able to allocate between four and 50 acres for contract farming.

To its contract farmers in the 4 – 50 acre category, East African Growers Ltd gives two types of production credit. Firstly, it supplies with seeds and seedlings, while the inputs have to be procured by the farmers themselves. In 2002, the disbursements for the seed credit totalled around USD 500 000. The seeds are provided to the farmers at the wholesale price plus a 10% mark-up. The credits are deducted from produce sales, and these deductions can be extended over a period of six months. As the seed credit represents only a small share of the output sales, losses to the company from seed credit sales have been minimal.

Secondly, the company gives to its smaller contract farmers cash advances for crop husbandry. These advances total some USD 5 000 per month and around USD 60 000 per year. These advances are for a maximum period of three months and deductions from produce sales have been unproblematic.

The importance of the input and cash advances for East African Growers Ltd is clearly much more limited than is the case for instance for its competitor, Frigoken. East African Growers Ltd deals with contract farmers, who have relative large holdings and are in most cases able to procure their inputs in cash either from the company or the other suppliers. As no genuine smallholders participate in the scheme, the demand for credit services is limited.

In addition to problems of economics in dealing with very small contracted plots, East African Growers Ltd mentions three additional or related factors that make them favour medium – or large-scale contract producers. First, under the EUREP-GAP certification required for the EU markets, quality requirements are so strict that the company sees difficulties in quality control if the contracted plot sizes are very small and contracts numerous. Second, traceability will be problematic with a large number of smallholders, particularly as the UK supermarket chains require that tracebility extends to a level of each individual farm in the case of fresh vegetables (for processed produce and fruits, traceability by collection centre is commonly accepted). Third, in the East African Growers experience, problems with side-selling tend to increase as the plot size decreases, because the cash poor smallholders are seen as easier targets for competing companies than the more affluent large-scale farmers.

During the past year, East African Growers Ltd has included social goals to its otherwise strictly profit-oriented company strategy. This includes working more also with genuine smallholders, while still aiming at sustainable, profitable operations. With USAID support, the company has opened a number pilot projects in which relatively limited numbers of fruit trees such as avocado and passion are grown by smallholders. In each project, an NGO such as Care-Kenya or another institution such as a local church are acting as facilitators and middlemen. Contracts are signed in the name of the facilitating institution, which also receive the inputs from the company, act as collection points during harvest and organise the crop payments. In these new pilot schemes, East African Growers Ltd provides all required inputs in credit as well as an extensive technical advice service to smallholders. Based on the success and profitability of the pilot, the company will later decide whether this production method fits to its future mainstream operations.

1.4 Horticultural Farmers and Exporters Ltd: Small Exporter in Fruits and Vegetables

Horticultural Farmers and Exporter Ltd (HFE) is an example of the numerous small Kenyan-owned export companies operating in the horticultural sector. It was established in the early 1980s as the potential for Kenyan vegetable and fruits exports started to be recognised. The company turnover grew steadily but this development was disturbed when its General Manager started a new company and took away with him most of the business contacts. Today, HFE has 25 local shareholders. In 2002, it employed 10 permanent staff and had a turnover of some USD 200 000. The company deals mainly in beans, Asian vegetables and various fruit crops.

As most of the small local horticulture export companies, HFE has not built up its own network of contract farmers. While the current Kenyan policy on horticultural production requires that all production for exports should come from contract farmers, this rule is seldom adhered to by smaller exporters. HFE is too small a firm to qualify for long-term export contracts with major buyers. It aims to identify spot export opportunities from markets such as Near East where the regulations on quality and traceability are more relaxed than in the European markets. When HFE gets a spot supply contract, it buys the produce through its mainly female agents direct from the villages. These are also the incidences when small firms of the HFE type often get involved in poaching activities with contract farmers who have received input advances from larger export firms.

In 2001, HFE tried to establish itself as more stable buyer of horticultural crops, especially beans and Asian vegetables. It contracted a number of smallholders in Central Kenya and provided them with seed and chemicals advances for the short growing period. The total input credit disbursements by HFE in that year were approximately USD 10 000. It funded the operation with a combination of its own funds and a small bank loan. While the operation was generally successful for the company, crop failure affected credit recovery in some areas.

Since 2001, HFE has neither provided input advances nor been engaged in contractual production operations. While the company sees contract farming as the way forward to larger turnover and profits, various interlinked factors make contracting at the moment an impossible option:

- The difficulty for small companies to enter into long-term supply contracts with major foreign firms, which commonly include a commitment for minimum supply targets;
- Lack of access to funding from banks to finance contracting operations; and
- The high cost of bank credit when it is available.

1.5 Kenya Nut Ltd: Effects of Competition without Rules

The production of various types of nuts is in Kenya considered a part of the horticultural sector. The leading company in the sub-sector is Kenya Nut Ltd. Established in 1975, this private company operates a nut processing factory with 200 employees in Thika Town north of Nairobi. The company focuses on the procurement and processing of macademia nuts. The whole production is exported to the markets in Europe, the USA and Japan.

Macademia nuts are an appropriate crop for Central Kenyan highlands and can be cultivated as an additional cash crop on smallholdings that produce coffee as their main income earner. Kenya Nut Ltd started in the late 1970s to encourage macademia nut cultivation as a new farming activity in Kenya. It established a commercial nursery with assistance from the main agricultural research institute, KARI. To reach the farmers, the firm established contacts with the well functioning cooperative societies operating in the area. The roles of each party in the process was detailed in contracts signed between the company and the cooperatives. According to these contracts, Kenya Nut Ltd would provide all macademia tree seedlings on credit to farmers. The cooperatives would deliver the seeds to the farmers. The farmers would deliver the nuts to the cooperatives, to which the company would pay a 10% buying commission on the top of the prices of the nuts. When buying the nuts, the cooperatives would provide the farmers with receipts indicating the kilograms procured. Kenya Nut Ltd would organise payment days in each cooperative. The cooperatives provided the company with the list of the seedlings given to farmers on credit. Based on these lists, Kenya Nut Ltd made deductions from farmers' payments during the 5 months' picking season.

The system functioned well from the late 1970s until the mid-1990s. Kenya Nut Ltd distributed annually some 30 000 macademia seedlings on credit to farmers. At KES 40 per seedling, this meant disbursements of some KES 1.2 million a year. Tens of thousands of smallholders grew small amounts of these nuts to supplement their cash income. In 1995, the company bought three million kilograms of nuts from farmers through cooperatives. This activity involved a payment of around USD 1.5 million to the participating smallholders and a profitable agro-business for the company.

In the mid-1990s, the produce buying activity in Kenya was liberalised. With sizeable investments Kenya Nut Ltd had created a production network that started immediately to attract poachers. Newly established companies started to go around the farms of the suppliers of Kenya Nut Ltd, offered the same price as the company but in cash and without deductions for the seedlings provided on credit. The cooperatives proved incapable to stop the widespread side-selling activities of their members. Kenya Nut Ltd started to lose money on its credit delivery of macademia seedlings. As a consequence, in 1996 Kenya Nut Ltd made the following changes in its mode of operations:

- Excluded cooperatives from the whole macademia nut operation;
- Established its own buying centres in the villages;
- Stopped all credit sales of macademia seedlings and started to sell from their nurseries strictly in cash; and

- Started to pay cash on delivery for the produce.

Furthermore, in the mid-1990s, Kenya Nut Ltd, with support from the Horticultural Crop Development Authority, took legal action against its main competitor, Kenya Farm Nut Cooperative Society, which a local private company despite its name. The Kenyan government policy on horticultural production requires that all production for exports should come from contract farmers. Thus all exporting companies should have their own contract farmers. Kenya Nut Ltd had invested substantial amounts of money in the provision of seedlings on credit to farmers at a price that included no profit. When its main competitor started to buy from farmers who were contracted to Kenya Nut Ltd though their cooperatives, the company and HCDA saw a good case for legal action to establish rules to the market competition.

The case has proven both expensive and disappointing to Kenya Nut Ltd. It has dragged on for nearly ten years in Kenyan courts. The High Court ruled against Kenya Nut Ltd and the Appeal Court decision is pending. These legal proceedings, known in the popular press as "the Nut Case", have convinced many other companies that attempts to establish rules to Kenya's agro-marketing through legal action is impossible.

Kenya Nut Ltd is convinced that the current competition without rules in macademia nut marketing seriously discourages companies to make long-term investments and to use input credit on a wider scale. The total production, which today does not exceed 5 million kilograms, could be expanded as the world demand is strong for processed quality produce. Encouraging the cultivation of this crop would be particularly important as it could bring supplementary cash income to households that have recently suffered due to the collapse of the coffee economy.

1.6 Kenya Sugar Companies: A Case of Unsuccessful Credit and Service Delivery

Sugar is the most important smallholder cash crop in Kenya's less developed western parts. Production is centred around eight sugar factories, which have until the recent privatisation efforts been majority government-owned. In 2002, their total production of sugar was 494 000 metric tons. Unlike in most Sub-Saharan countries, a large majority, some 85% of cane production takes place of smallholdings with an average 0.6 hectares under cane. Some 200 000 small-scale farmers are involved in sugar productions and for most of them, it is the main source of cash income.

Over the past decade, Kenya's sugar industry has faced a major crisis. A recently published comprehensive report[12] on the sector see this crisis as a result of poorly managed liberalisation process, large-scale mismanagement of companies, poor factory maintenance, delayed upgrading of production technologies, corruption and high costs of cane production. For this Review, the interesting feature of this process is the role played by the companies and farmers' organisations to support the cane cultivation and the way the input delivery has contributed to the sectoral crisis.

Until the early 1990s, sugar companies delivered on credit to smallholders practically all the inputs and services required in cane production. These included land preparation, supply of seeds and all other inputs, various tasks in crop husbandry, and all tasks in harvesting and transport. The efficiency of this service delivery depended much on the general management of each company. The farmers in the best and largest Mumias Sugar Company received timely and well organised services while input delivery of such weaker schemes as Nzoia, Sony and Muhoroni was of lower quality. The major change in the system took place in the early 1990s. A decision was taken by the government to give the responsibility of all input and service delivery in cane production to outgrowers' companies. Two main reasons were given for this. First, it was seen that sugar companies should focus on milling and marketing, to improve the efficiency of their operations. Second, it was thought that outgrower companies could deliver services and input at a cheaper price as they would service their own members/owners. The decision also responded to loud political demands to give farmers and their institutions more say in the production of the main cash crop in Western Kenya.

To finance the change in the service delivery from sugar companies to outgrower institutions, very large funding from the government was required. In 1992, the government established the Sugar Development Levy of 7% on all sugar produced in Kenya or imported to the country. The Kenya Sugar Authority, the Kenya Sugar Board (KSB) was given the task to administer the levy funds through the Sugar Development Fund. It was also decided that around 30% of this levy would be used to finance the input and service delivery operations of the outgrower companies. After this decision became public knowledge, an outgrower company was quickly established to each of the sugar schemes by farmers' representatives and local leaders/politicians. Previously, only Mumias Sugar Company had had an outgrower company, although performing mainly representational and advocacy functions.

12 Government of Kenya, Ministry of Agriculture: "Report of the Task Force on the Sugar Industry Crisis", July 2003, Nairobi.

By the mid-1990s, most of the tasks of supplying input credits and other cane development services to smallholders were transferred to outgrower companies. From the Sugar Development Fund, KSB issued in the period 1992 – 2003 a huge total amount of KES 3.5 billion, or USD 50 million to finance the input and service delivery operations in the sugar schemes. Loans were issued on a seasonal basis with a subsidised interest rate, in 2003 at 5%.

The results of this funding and service delivery operation were disastrous. Of the USD 50 million issued to outgrower companies, most has remained unpaid to the Sugar Development Fund. The Fund expects to have to write off some USD 40 million as bad debts, which is very significant loss in a very short operational period. At the same time due to seriously weakened input and service delivery, the average cane yield collapsed from an average 90 tons of cane per hectare in 1996 to 60 tons in 2000. According to KSB, the collapse in input delivery was a major factor behind this yield collapse, which added to the raw material supply problems of the sugar companies.

What went wrong in the field when the outgrower companies took over from the sugar companies the tasks of credit-based input and service delivery? KSB experts and the findings of the above mentioned study summarise the key reasons for failure as follows:

- Leaders of outgrowers companies did not focus on service delivery but on securing their access of to public funds, and few principles of normal company governance were applied in the operations of the outgrower companies;
- Technical staff to the outgrower companies were recruited based on other factors than professional merit and consequently, there was little technical capacity to supply services to smallholders;
- Much of the funds borrowed for input and service delivery were used in salaries and other operational expenditures of the outgrower companies;
- Loans received for purchase of tractors and trailers, fertiliser and chemicals were not transparently utilised and large amounts of funds were not accounted for in procurement activities; and
- Sugar companies were not in various cases able to deduct for farmers input credits as outgrower companies, due to their weak accounting function, were not able to produce up-dated deduction lists.

Furthermore, the Task Force on the Sugar Industry Crises concluded that "since outgrower companies act as middlemen making a mark-up on every activity or services provided by them, e.g. land preparation, acquisition of credit fertiliser and other inputs, their inputs and services are more expensive than when negotiated direct with the factory or private contractors". The Task Force also strongly recommended that "an investigative audit be carried out on all outgrower companies with a view to litigating those who have plundered these institutions".

With these disastrous results, the delivery of input and other services has since 2001 been gradually been transferred back to the sugar companies. In the 2003 season, all the credit-based input services are delivered by the firms themselves. The depleted Sugar Development Fund is able to lend only some USD 3.5 million to support these operations. At the same time the current poor status of the Kenyan sugar companies limits their ability to either use their funds to finance input advances or to raise funding from the banking sector for these operations. KSB estimates that company disbursements for input advances this year are unlikely to reach more than USD 5 million, which is much less than is required for proper cane cultivation in the outgrowers plots.

1.7 Kenya Seed Company Ltd: A Large-scale Producer and Distributor of Seeds

Kenya Seed Company Ltd is the country's leading company in production and marketing of seeds for the agricultural sector. It is owned 60% by private shareholders and 40% by the Agricultural Development Corporation, a parastatal. It operates as a private company without government interventions. It is involved in the research activities, large-scale production of seeds, seed processing and marketing. The focuses particularly in maize, wheat, sunflower, dry beans and horticultural products. In 2002, its turnover was approximately USD 28 million, making it a market leader in Kenya.

For commercial production of seeds, Kenya Seed Company Ltd operates a large contract farming scheme. The total area under these contacts currently is 31 000 acres. The whole operation is, however, based on contracts with large-scale farmers. In addition to the perception that larger contracts are easier to manage, an additional reason for excluding smallholders is the requirement to isolate seed production plots from other cultivation, which would be impossible on smallholdings.

For this Review, it is interesting to note how the Kenya Seed Company's marketing activity is taking place. This is the main business of the company. The firm sells to three different types of companies: agents, sub-agents and stockists. Agents and sub-agents are large companies that sell in bulk to the stockists that are engaged in retail sales in towns and market centres. What is obvious is that nearly all business is based on cash sales. The policy of the company is that all sales are cash on delivery. In exceptional cases short (45 days), interest-free advance can be given to the largest agents to boost sales, but even these have to be secured by a bank guarantee. No credit is advanced to sub-agents and stockist.

In the 1980s and 1990s, a number of large and well-performing cooperatives such as the Muranga District Cooperative Union acted as an agent for Kenya Seed Company Ltd and received short trading advances from the firm. This had a positive impact on quality seed delivery to farmers in the operational areas of these cooperatives. With the decline of the cooperative movement, Kenya Seed Company Ltd does not today have any cooperative institutions as its agents, who could possibly pass the benefits of bulk purchasing of seeds on to their members.

Furthermore, according to the company, there is no practice among its agents or sub-agents to accept credit sales when they sell on to the local-level stockists. One reason for this are the low margins in the seed trade in Kenya. The price structure in the marketing of 1 kg of maize seeds all over Kenya is as follows:

Kenya Seed Co. to Agent	Agent to Sub-Agent	Sub-Agent to Stockist	Stockist to Farmer
KES 110	KES 115	KES 120	KES 125

These low margins add to the reluctance of agents and stockists/traders to bear any additional financial costs that would result from credit sales.

The same applies when the local stockists sell on to the farmers. Kenya Seed Company Ltd has some 2 500 – 3 000 active local level stockists. The company management is not aware of any case in which a stockist/trader has a policy to advance seeds or other inputs to farmers on credit. In their view in Kenya, these sales are strictly on a cash basis. In the view of the company, lack of both cash and credit facilities adversely affects the use of high quality seeds among the smallholders in Kenya. The company links the reduced cash incomes in many Kenyan rural communities to the collapse of marketing arrangements in recent years in many traditional cash crops in Kenya, including particularly coffee, dairy and cotton sectors.

1.8 BAT: Comprehensive Input and Service Packages

British American Tobacco (Kenya) Ltd (BAT) is Kenya's leading company in tobacco production, processing and marketing. In 2002, the company had a turnover of USD 125 million, of which it made a profit of USD 18.6 million.

BAT's method of production is based on smallholders with very intensive input and extension service support from the company. Tobacco is grown on smallholdings with an average plot size of around one acre. The company requires that tobacco must regularly be rotated with maize to conserve the soil. Each farmer is also required to grow trees on a wood lot to reduce the damage of tobacco growing on environment.

Each farmer signs a contract in which he/she agrees to produce a minimum amount of tobacco for BAT. The price of the crop is annually fixed based on seven grades. To reach the required targets in quantity and quality of production, each farmer gets a comprehensive input and service package from BAT on credit. These packages includes:

- Tobacco seeds or seedlings;
- Inputs to establish farm-based nurseries;
- A full package of the required fertiliser;
- A full package of required herbicides and pesticides;
- Equipment for cultivation including clothes for protection in spraying;
- Bags for harvest;
- Material to construct farm-level curing barns;
- Transport of crop to buying centres; and
- Extension services, with each farm visited at least twice a week.

Inputs are bought by BAT in bulk and delivered to farmers without mark-up. The prices are in most cases lower than the Nairobi wholesale prices for similar products. Individual packages are designed for each farmer based on the requirements of his holding and land under tobacco. After pricing, the cost of the input advance package is entered to each farmer's production card. Based on these records, deductions are made from farmers' cash payments when the harvest starts.

BAT considers the provision of the comprehensive input and service advance packages totally crucial for reaching its production targets. From the technical point of view, it would be difficult for farmers to select the correct inputs and cultivate the crop without frequent technical advice. From the financing point of view, tobacco is grown in most cases in the dryer regions of the country. Few smallholders in these areas are considered to be in a position to buy inputs in cash. Similarly, most production takes place in areas where no rural credit services are available to tobacco growing smallholders from banks, SACCOs or MFIs. Lack of input credit by BAT would inevitably lead to low input use with adverse impact on crop volume and quality. For farmers, various studies show that with the credit packages they can reach production volumes that provide them with cash earning per acre that exceed those of competing crops such as cotton, maize and sunflower, which has made farmer recruitment relatively easy for BAT in the past two decades.

The recovery of BAT input credits is made relatively easy due to the close contact between farmers and the relative low to cost of inputs and services as compared to per-acre income. In recent years, however, recovery problems have increased with the strong competition from newly establish tobacco marketing companies. Poaching is common and rival companies buy direct from BAT contract farms and offer a shilling on top of the BAT price. The problem is serious as BAT has, in addition to direct investments in seasonal inputs and services, large sunk investment costs in its smallholder network. To stop illegal buying from its contract farmers, which endangers the viability of the input credit operations, BAT has taken actions of the following type:

- Extra loyalty bonuses are paid to smallholders that consistently deliver their crop to BAT;
- Supervision by the BAT field staff has been intensified;
- Local Administration witnesses all contract and support in BAT in disputes;
- Local farmer representatives, “Elders”, witness all contracts; and
- The national BAT Farmers Association has been established, to work towards the long-term sustainability of contract farming operations with smallholders.

1.9 W.E. Tilley Ltd:
Advances through Buying Agents in Fish Trade

W.E. Tilley Ltd is a locally-owned private company that has operated 20 years in fish marketing and processing in Kenya and Tanzania. It has its Head Office and a major fish processing plant in Nairobi. Around 95% of its sales consist of fresh and frozen fish to international markets. While the competition in the trade is severe, W.E. Tilley has based its company strategy on large volumes. Today, it is the largest fish buyer in Kenya and procures daily an average of 35 tons of fish from the beaches of Lake Victoria. Its current turnover is USD 30 million per year.

To boost its fish buying activity and to tie producers to the company, W.E Tilley uses both produce buying advances and short term input credit particularly when there is a large demand for fish from Europe. The company does it through its agents that buy fish for them on a commission basis at the landing points. In 2002, the firm advanced approximately USD 100 000 to its agents in cash to be used by them in buying fish in cash. Furthermore, it advanced another USD 200 000 to the agents to issue input on credit to fishermen. Roughly one half of this was used for procurement of outboard engines, the other half for nets and other fishing gear. All credits were interest-free. The company sees these credits more or less as overdraft facilities to its agents, a kind of "rolling accounts".

The fact that W.E. Tilley advances credit with the purpose of securing a constant supply of its raw material can be observed from its attitude concerning credit losses. With the migrant nature of the Lake Victoria fishing community, losses in input credit to fishermen are frequent. In 2002, the company estimates that it lost about USD 50 000 in its input advances to fishermen. According to the Managing Director of the company, "The annual USD 50 000 loses of input credit are regrettable but this is a part of the business we can afford. The fishermen have a perception of W.E. Tilley as a company that pays competitive prices in cash and occasionally gives fishermen such extra services as input credits. This increases fishermen's willingness to sell to the firm. With the increased business volumes, the small losses in input credit are bearable".

1.10 Honey Care Africa Ltd: From Donor Loans to Piloting Commercial Credits

Honey Care Africa Ltd is a new small private company specialised in honey production and marketing. Originally functioning with heavy donor support, the case illustrates the problems a small firm faces in Kenya when issuing farmer credit from its own funds.

Honey care is owned by three individuals. One of them, who is also the General Manager of the firm, has strong expertise with agricultural marketing and contract farming from his earlier position in Frigoken, a leading horticultural company. The company's strategy was to link this marketing expertise to improved production methods by introducing to smallholders the Langstroth-type of hives, which are more productive than the ones traditionally used in Kenya.

Honey Care started in the late 1990s its field operations with a tripartite approach between the firm, the farmer and a donor. Honey Care identifies and contracts the farmers, provides them with the hives, trains the farmers through their extension service and buys the produce. Farmer commits to selling all its produce to Honey Care at a fixed price, which compares favourably with the average farm gate price in Kenya. The identified donor provides the funding for the provision of the hives. The interest-free credits for hives in these donor-funded operations cover a maximum of 80% - 90% of the hive price, the balance coming from the farmer. Honey Care deducts the repayments of hive loans when making its payments for the produced honey.

The scheme has been popular with the Kenyan farmers. In 2003, approximately 2 500 households participate in contract production for Honey Care and the company has provided them with 14 500 hives. Honey Care reports that in 2002, the average earning per household from honey production was USD 213, providing a useful extra income to these smallholders.

As the next step of the programme, Honey Care Ltd, with support from the EU and the World Bank, started to operate the scheme using the same basic approach but lending the money for hives at 15% interest rate and with a recovery period of 3 years. As the results were promising, the company decided in 2001 to use its own funding to boost its money supplies. Under the programme "Honey for Hives", Honey Care Ltd delivered hives to contract farmers at a zero interest rate, bought the honey at its standard price and deducted 50% of the farmer's produce payments until the whole credit was paid. As a pilot operation, in which the risks were obvious, the firm signed contracts with only 15 experienced smallholders to test this credit product. It invested some USD 10 000 of its own funds in hives delivered on credit to farmers.

Honey Care Ltd soon found out that its pilot operation with company credit to farmers was difficult to manage. Two main problems emerged. Firstly, farmers produced honey from both the grant-funded hives and the new company-funded hives. When Honey Care Ltd started to deduct 50% of all honey payments, farmers argued that most of the produce came from their old hives and big arguments developed in the field. Secondly, new competitors had noticed the presence of some 14 500 Honey Care hives in the fields and started active buying from the company's contract farming. When Honey Care Ltd started the 50% deductions for its hive credit, farmers' willingness to side-sell substantially increased, which further worsened the company-farmer relationship. Due to these problems the company closed its "Honey for Hives" credit programme and today provides hive loans to farmers only in cases in which a donor provides the required funds or underwrites the credit risk of the operation.

ANNEX 2
CASE BRIEFS: ZAMBIA

2.1 Dunavant Zambia Ltd: Active Company Credit in Cotton Sector

Zambia's cotton sector was liberalised in 1994 when the state monopoly (Lintco) was sold to two private companies. Cotton production had been trending downwards under Lintco and the company had been accumulated debts, but the sector remained functional. Following liberalisation, production rose from 20 000 mt to surpass 100 000 mt in the 1998 harvest, and has averaged around 80 000 ever since, nearly all by smallholders. Zambia is one of the few Sub-Saharan countries with almost complete absence of government in production, marketing, regulation, or direct financial contributions to the sector. Today, the level of concentration in the sector remains high, with Dunavant Zambia and Clark Cotton sharing about 90% of the market and new small companies, with often aggressive market strategies, accounting for 10% of the annual production.

Dunavant Zambia is the largest cotton company in Zambia with a 60% market share. The number of its smallholder contract farmers just exceeds 100 000. The area under cotton per farm varies, with an average of 1.4 hectares on the contracted smallholdings. The supply of inputs on credit is a key factor in Dunavant's production strategy as, according the company view, few farmers would have the cash or access to credit to buy the inputs in cash from them. More than 99% of the contract farmers of the firm take the seasonal input credit. The input package consists of the following elements:

- Graded and treated cotton seeds;
- A "hectare package" of chemicals, covering all the spraying needs of quality cotton production;
- Spraying instruments; and
- Extension services.

Inputs are procured by the company through a local tendering process and priced for input advances without a mark-up. The straying instruments are procured in bulk and priced at 50% - 75% of the price the smallholder would have to pay in cash purchases from traders. Extension services do not add to the value of farmer advances. No interest is charged on the input advances. The company has the principle that a hectare package of input credit should not exceed 30% of the value of the farm gate price paid for an average crop of seed cotton from a hectare plot.

In the 2003 season, a hectare credit package costs USD 43. With its slightly more than 100 000 smallholders and an average plot size of 1.4 hectares, the total annual disbursements of Dunavant credit advances are approximately USD 6 million. Together with the other contracting companies in Zambia, the total annual seasonal credit disbursements by the cotton companies are estimated to approach USD 10 million and cover some 150 000 smallholders.

In the past, Dunavant has experienced serious repayment problems in its input credit operations. To improve the situation, the company organised its field operation through Distributors. These are village level agents who each cover an average of 80 farmers. They issue inputs to farmers, collect the crop and store it until it is collected by the company. The Distributors do not have any fixed salary but receive a commission on the amount of cotton collected. This commission increases as the recovery rate of the loan exceeds 90%. For a particular good output levels the company pays "volume incentives". The current model of credit provision seems to function well and the recovery rate is around 90%, which the company considers a satisfactory level that creates a basis for profitable operations.

For Dunavant Zambia, the biggest obstacle for full recoveries, and also for the expansion of contract farming, is side selling by contracted farmers. The competing companies, especially the new smaller ones, poach actively among the Dunavant-contracted farmers. A relatively common practice for the farmers is to sell to Dunavant only the 30% of their crop, just enough to cover the company credit and potentially secure the next year's input credit, and market the rest to a competing company at a slightly higher price, which other firms can afford as they have not invested anything in the production process.

Dunavant finances its input credit and other field operations through a combination of own funds and borrowing from the parent company and local banks. In its smallholder contracts, Dunavant guarantees a fixed minimum price for seed cotton. This is later adjusted upwards if the world market price allows. As the market situation improved recently, the farm gate price for cotton was increased by 43% from the 2002 to the 2003 season. In a recent regional comparison between seven countries (Boughton et al 2002), the Zambian companies were found to pay the highest average producer price calculated as a share of the world market price. Still, compared to many other new cash crops, the returns from cotton to smallholders are still smallish, with some USD 140 gross earnings per hectare. On the other hand the crop is a traditional one with a well-organised marketing chain, and the expectation of continuity of the activities over a longer terms keeps cotton farmers cultivating this crop for the marketing companies.

When expanding its area under contract farming, Dunavant has received in some areas support from NGOs in farmer identification, training and the provision of extension services. Its experience is that these partnerships tend carry high implementation costs while at the same time producing less than ideal results for the company. Dunavant would prefer direct contract with donors interested in intensifying smallholder production, with a full implementation responsibility in the opening of new areas for smallholder contract farming.

2.2 Cheetah Zambia Ltd: Contracting Paprika Farmers in Zambia

Cheetah Ltd is a Dutch-owned private company specialised in paprika production. It started its Africa operations in the Republic of South Africa 15 years ago, expanding later to Malawi. In 1993, Cheetah Zambia Ltd was established. Its initial contract farming activities were on large-scale commercial farms, with a minimum 10 hectares under paprika. In 1997, cooperating with CLUSA, the company started limited smallholder production. In 1999, the first 400 smallholders were contracted by Cheetah. In the 2003 season, Cheetah Zambia has around 5 000 directly contracted farmers and an additional 2 500 contracted through various NGOs such as CLUSA and Africare. In 2002, the company's total paprika operation created a turnover of around USD 3 million. For the current season, the turnover is expected to decrease significantly due to climatic and operational problems and the drop of 30% - 40% of global paprika prices. With its lower turnover, Cheetah Zambia is currently making substantial losses.

While the Cheetah contract farmers are expected to buy the limited amounts of chemicals and fertiliser they need in cash, the company provides the required certified seeds on credit. Each farmer is expected to pay 25% of the seed price in cash and Cheetah gives a seasonal advance for the remaining 75%. The field activities are carried out though the leaders of groups of 20 – 25 farmers. The leaders are responsible for collecting the farmer contributions to seed purchases, delivering the seeds to farmers and collection of the crops, for which they are paid a commission.

In the 2003 season, Cheetah's total seed credit disbursements were USD 35 000 to directly contracted farmers and some USD 15 000 through the NGOs. An average seed credit per farmer is USD 9. For a full payment of the credit, a significant bonus is paid and only an amount of USD 3 is deducted from the crop payment. This is to discourage side selling by the farmers, which is a serious obstacle for paprika contract farming in Zambia.

To repay the seed loan, some 30 kg of paprika should be delivered per acre. As an average production per acre is around 200 – 250 kg, this would not seem a very serious repayment responsibility. However, the recovery rate on seed advances for the current season does not exceed 50%, down from the 60% of 2002. While climatic problems explain low production and recovery figures in some area, a key factor is that the company estimates that its losses due to opportunistic side sales by its contract farmers are as high as 30% - 40% of the total crop. As the most active pirate buyers Cheetah names the group of companies formed around Enviro-Oil&Colorants Ltd (see Annex 2.3 below).

Despite the tight competition, Cheetah Zambia aims to increase the number of its contract farmers to 10 000 in the next season. It is also planning to include a chemical package into its credit scheme, in addition to seeds.

Cheetah's partnerships with NGOs have not been unproblematic. The key problem is that while NGOs are experienced in farmer identification and group training, their success in developing appropriate business skills and attitudes in the farming community are less prominent. Furthermore, an additional irritation has been the tendency of the NGOs to develop themselves into marketing companies, a process that is not seen to be in line with the NGO partnership contracts with Cheetah Zambia. The company sees it as an appropriate partner for direct partnerships with donors that would have an interest in intensifying commercial smallholder production in new districts. With this attitude, Cheetah Ltd recently expanded its activities to Northern Mozambique (see Annex 3.5).

2.3 Bimzi Ltd/Enviro-Oil&Colorants /ZAHVAC: Problems in Smallholder Contracting

Bimzi Ltd, Enviro-Oil&Colorants Ltd and ZAHVAC are group of business entities focusing on paprika marketing and processing. Enviro-Oil&Colorants Ltd was formed from the Agricultural Department of Bimzi Ltd and is now an independent private company, which produces, processes and export this crop. In the late 1990s, it started to contract farming operations with smallholders. It uses the Distributor model that is popular in these activities in Zambia. The Distributor is an agent of the company who works with 25 – 30 farmers. For every 15 Distributors, Enviro-Oil&Colorants recruits one company Extension Officer. Distributors deliver the required inputs to the farmers and organise the collection of the crop from smallholdings at harvest.

Input credit was one of the core features in the original contract farming operations of Enviro-Oil&Colorants. In the peak 1999/2000 season, the company delivered the contracted smallholders a substantial input package consisting always of all required seeds and chemicals, and sometimes also of fertiliser. Around 3 000 small-scale farmers received this package. The total disbursements of these inputs advances in that season are reported at USD 650 000. Inputs were delivered at local wholesale price plus a 5% - 10% mark-up for handling. No interest was charged on the advances. The input delivery has been financed with a combination of own funds, government loans and the EU-funds.

The experiences from the 1999/2000 season smallholder operations with input credit were not encouraging. While the firm managed to export paprika to the total value of USD 2.5 million, the credit activity resulted in substantial loses. The overall recovery rate was only around 60%. The company sees as the key reason behind this weak performance the climatic factors: in rain-fed agriculture without irrigation facilities, substantial crop losses for paprika were experienced. The company, which together with Cheetah Ltd (Annex 2.2) share the paprika market, does not consider side buying or selling a major obstacle for contracting smallholders.

Since the 1999/2000 season, Enviro-Oil&Colorants has significantly reduced its smallholder contracting and input credit operations. The number of smallholders in the scheme has declined to 2 000. At the same time the coverage of the input packages has become much smaller and in the 2002/03 season, only USD 50 000 worth of inputs were given on credit. At the same time the company has invested heavily on its own farm of some 110 hectares and plans to contract in the future commercial large-scale farmers. These latter options it sees as more profitable and easier to manage than the smallholder schemes. In the current season, with the reduced acreage and the fall of world market prices, Enviro-Oil&Colorants expects to reach paprika exports of USD 1.2 million.

Closely related to the above operation, ZAHVAC is a commercial association of six local marketing companies. Enviro-Oil&Colorants is the leading partner in this group, and the other five marketing firms buy produce, which is then processed and exported by Enviro-Oil&Colorants. The five smaller companies all have contract farming schemes with smallholders. The mode of operations follows the Enviro-Oil&Colorants model. At its peak, the combined number of smallholders in these schemes was around 3 000 and some USD 200 000 was annually disbursed to farmers in input advances. The achieved recovery levels were even lower than for Enviro-Oil&Colorants, and as weak annual recoveries as 25% were recorded. According to ZAHVAC, all the five smaller firms, following the example of Enviro-Oil&Colorants, are moving towards commercial large-scale scheme and reducing the numbers of their small-scale suppliers.

Enviro-Oil&Colorants Ltd, a company with good political connections, has always received substantial government and donor backing in its operations. The Zambian Government and the EU have been important sources of capital, and capacity building services have been provided by Norad and the EU-contracted NGOs. While the Enviro-Oil&Colorants/ZAMVAC management sees a potential useful role for NGOs in the initial identification of farmers and in the formation of groups and cooperatives, it is highly critical on their prolonged presence on contract farming schemes. In their view, the messages by the NGOs and the companies are often contradictory. While the company messages focus on quality issues and continued, disciplined production to increase company profits and family incomes, NGOs often focus on social aspects of poverty alleviation, with less attention to the actual production activity. Things tend to be especially problematic when the company needs to exclude poorly performing and side selling farmers from the schemes. Furthermore, the high-cost smallholder training events organised by donor supported NGOs and development programmes are seen to complicate the training schemes of the firms that aim at focused results with the smallest possible operational costs.

2.4 Agriflora Ltd: Intensive Contract Farming with Elite Smallholders

Agriflora Ltd, a private Lusaka-based company is a leading flower producer in Zambia and with a market share of 70%, the largest exporter of fresh vegetables and fruits. Its whole export production has traditionally come from the company's own commercial farms. In 2002, the total exports of Agriflora were approximately USD 25 million.

In 1999, Agriflora started a smallholder contract farming scheme focusing on vegetable production in greater Lusaka area. Two reasons are given by Agriflora for this decision. First and foremost, the company wanted "to be part of the Zambian community" and get a reputation as a socially oriented firm. This was seen a particularly important factor considering the recent events in the neighbouring Zimbabwe. The second reason was that smallholder production was a potentially useful source of strategic exports during the peak European demand. For its smallholder operation, the company established a subsidiary called Agriflora Small Scale Ltd.

Today, Agriflora works with some 300 contract small-scale farmers with a radius of 100 km around Lusaka. Most farmers have dairy cows and grow as their main cash crop vegetables for Agriflora, in most cases interplanted with coffee. The company has established seven collection centres with cold storage facilities. As in most of the Zambian operations, donor support for this has been sizeable, as all the costs of the establishment of the collection centres were covered Japanese grants funds from the HIPC facility.

The profile of Agriflora's small-scale contract farmers is an interesting one. Most of them are well- educated persons, many retired from the civil service or private companies. They have an average 2 hectares of irrigated land under export vegetables. They also have 5 - 10 dairy cows. They normally employ 5 permanent workers as well as some 20 casual workers during harvest. Clearly, Agriflora has recruited its farmers from among an elite group of small-scale landowners who are expected to better suit for demanding agricultural operations for export.

The operation is organised around the seven collection centres. Under each centre, the contract farmers are organised into a cooperative. When the cooperatives develop into more business-oriented organisations, Agriflora has transferred more of the scheme management responsibilities to them and aims to continue to do this also in the future.

Substantial farmer credit has been provided through Agriflora to establish and operate the scheme. Unlike in almost all company credit, medium-term investment loans have been issued to each farmer for irrigation structures. The maximum amount for this has been USD 2 000 for a period of 36 months at 10% annual interest. The current portfolio of the medium-term loans is around USD 300 000. While the company makes deductions for the repayment of these loans, the operation is financed by USAID, and the medium-term credit scheme is administered by ZATAC, a USAID-funded development project.

Seasonal loans to farmers cover typically an annual package of USD 800 per farmer. Initially, these consist of seeds, sprays and spraying implements as well as cash for working capital. The company has done much of the actual spraying and does a lot of farmer training. In 2002, Agriflora disbursed some USD 120 000 as input advances from its own funds. This year, farmers' cooperatives have had access through the government to HIPC funds and they have financed most the farmers seasonal credit needs. Consequently, Agriflora's own annual contribution to input advances has reduced to around USD 45 000.

For the inputs the company has advanced to farmers, Agriflora charges no interest but adds a mark-up of 20% to the wholesale price to cover delivery costs. For the procured product, Agriflora agrees with the farmers on a fixed price for the whole season and guarantees the market for all such crop produced that fulfil the quality requirements.

Recovery performance on both the seasonal advances and the investment loans was initially poor, mainly because of mistakes in farmer selection. As the farmers have become more organised and the cooperatives perform better, the in-time recovery of seasonal credits increased to 87% in 2002 and is expected by the company to exceed 95% in the current season. One of the key reasons for this is that side selling and buying has not been a big problem in the scheme, which is specialised in crops such as snow peas and baby corn.

On the other hand, the recovery of the medium-term irrigation loans administered by ZATAC has been poor. Most of the outstanding principal, now totalling some USD 300 000, is badly overdue for payment. Various reasons have been given for this situation:

- Poor farmer selection when the scheme was established;
- Less than expected production levels on many farms;
- Confusion between ZATAC and Agriflora on responsibilities in loan administration and recovery; and
- The presence of donor money in the activity and the clients' perception (many of the ex-civil servants) that default on donor schemes will not be seriously sanctioned.

In 2002, the company paid the small-scale farmers some USD 180 000 for their produce. Net earning per hectare, indicating the compensation for farmer's own land labour, are reported to be on an average level of USD 700 – 1 000 per a two hectare plot for active farmers, which is very high for a cash crop in the Zambian context. In the 2002, the best farmer earned USD 11 000 from his two hectare farm, which is totally exceptional in Zambia. In general, the above figures, even with the heavy donor support, show the potential of intensive smallholder agriculture on irrigated land in the country.

Agriflora has invested annually some USD 150 000 – 200 000 to the operational costs of the scheme. With donor support covering much of the costs, it expects the scheme to break even for the company in 2004. In 2002, the export value of the procured small-scale farmer crop for the company was USD 300 000, a fraction of Agriflora's total exports of USD 25 million.

Agriflora is currently expanding the scheme with the establishment of two new collection centres. Again this has been heavily supported by HIPC and donor funds. IFAD has contributed to this exercise with an allocation of USD 106 000 from the Smallholder Integrated Water Utilisation Project funds. USD 80 000 of that has been used to set up the collections centres, while USD 20 000 was used to finance the investments to irrigation structures by 10 farmers. Agriflora reports a nearly perfect credit recovery of these loans mainly due to successful farmer/borrower selection.

Due to significant donor interest, there has been a heavy NGO and development project presence on Agriflora's small-scale contract farming scheme. The company view is that these institutions can play an important role in group and cooperative development, especially in governance issues. They feel, however, that in the areas of production and the marketing NGOs have little knowledge or skills, and sometimes pass messages to farmers that complicate the company's mainstream operation.

2.5 Tobacco Association of Zambia: Input Advances to 200 Smallholders

Tobacco Association of Zambia (TAZ) is commercial entity, which after recent changes in the industry operates the country's only leaf processing factory and markets the tobacco crop of its 250 member farmers. Around 200 of these farmers are considered smallholders cultivating 1 – 5 hectares of tobacco each. In 2002, the total crop payments by TAZ to farmers were USD 11 million, of which the smallholder share was some USD 1 million.

TAZ offers its 200 smallholder members a comprehensive input advance package. For this service, farmers are organised in groups of 5 – 20 smallholders, who secure the group loans with a joint and several guarantee. Each farmer signs an individual farming contract with TAZ. The association delivers the inputs to groups. Farmers/groups transport all tobacco to the warehouse of TAZ in Lusaka. The association classifies the tobacco, sells it and pays farmers the whole amount minus a 1% commission.

Each input advance package covers the following items:

- 10 bags of fertiliser;
- 3 bags of top dressing;
- Required insecticides;
- A cash advance for labour;
- Roof sheets for curing barns;
- Packing material; and
- Funds for transport to a collection point.

The packages can also include sprayers, flew pipes and recently also oxen for ploughing. The total value of this package is around USD 400 – 600 per hectare. Practically all smallholders take the input credit. With some 700 hectares under smallholder tobacco for the association members, the annual disbursement of seasonal input was around USD 400 000.

TAZ prices the input at the wholesale price plus 15% except for the fertiliser, which is priced at wholesale price plus 3%. On top of this, farmers pay an interest rate of 8.5% on outstanding loan balances.

In earlier years, TAZ has financed its input credit scheme from the EU-funded Export Development Programme, but the second phase of the programme did not include funding for an operation of this type. This year the scheme is funded from loans from the companies that are buying the tobacco from TAZ. These loans carry an interest of 8.5%, which is transferred to smallholder loans.

In 1999/2000, when the number of financed smallholders was much higher than today, TAZ lost some USD 500 000 in its smallholder credit scheme. This was due mainly to extensive side selling by contracted farmers: many farmers just did not deliver any crop to TAZ. Various actions were taken to avoid future losses of the same type:

- The role of the Credit Control Committee was strengthened and criteria for lending made significantly tighter;
- The number farmers taking part in the scheme reduced from 400 to 200, and barn construction made a farmer-financed activity, to show their commitment in the crop; and
- Group loans and guarantees were introduced.

While side selling still occurs, the above changes and the fact that defaulters are automatically out of next year's credit has made it possible that TAZ has in the past two seasons managed to recover some 98% of its seasonal advances.

The input packages have made intensive tobacco farming on smallholdings possible. The average yield is currently around 1 770 kg per hectare. Average net compensation for farmers land and own labour is some USD 1 200 per hectare, many times more than can be earned with the most common crop, maize.

While TAZ has used no NGOs or development project staff in its extension and training activities, it has borrowed from government and donor sources to expand and operate its smallholder scheme. It is interested to continue to do this at rates in the category of 8% to 10% on dollar loans, as required funds are difficult to access from the local commercial banks.

2.6 Omnia Small-Scale Ltd: Government Interference in Fertiliser Markets

Omnia Ltd is a large South African fertiliser manufacturing and marketing company. In 1991, expecting the liberalisation of the Zambian agricultural input and output markets, the company opened its Zambian subsidiary. Initially, it sold only to commercial farmers and public sector buyers. This is still its core market. Selling some 60 000 tons of fertiliser per year in Zambia, the company currently hold a market share of around 40%.

In 1996, the company made a decision to expand its operations to the smallholder sector. Its assessment of the market came out with two conclusions. First, the smallholder sector did not have the liquidity to buy in cash the required amounts of fertiliser. Second, the same farmers suffered from poor access to output markets for the maize harvest. Following this assessment, the company has followed two strategies to increase its sales to small-scale farmers.

First, the company established a scheme called Fertiliser for Crops. This was a barter system in which a farmer lacking cash could barter fertiliser for an agreed amount of agricultural produce. In the pilot operations in the central parts of the country, a bag of maize was exchanged for two bags of maize. Later, as the price relations changed, the ration was three bags of maize to one bag of fertiliser. The same type of arrangement was agreed for soya beans.

Initially, the systems functioned well. The company sales increased and additional money was made on the trade of the bartered maize and soya beans. Consequently, a subsidiary to focus on the smallholder operations, Omnia Small Scale Ltd was established. However, the problems started when the government started to use private dealers as agents in its subsidised fertiliser credit programme, the FRA. Omnia agreed to act on a commission basis as an agent in these operations. It offered from the same "window" both its barter services and fertiliser under the government input credit scheme. Not surprisingly, the clients preferred the government facility, known for its relax attitude to loan default. In this situation the barter sale arrangements of Omnia Small Scale Ltd were first scaled down and then, as there was no demand for them as the government scheme continued, it was finally closed in 2001.

As the barter scheme was losing importance as a marketing instrument, Omnia Small Scale Ltd tried another approach. In the 1999/2000 season, it started a real pilot credit scheme to boost its fertiliser sales to smallholders. In selected areas of Southern Province, it picked the best farmers from the government scheme with a 100% repayment history and offered them a full credit package consisting of seeds and fertiliser. The total credit disbursements under this scheme were USD 300 000.

Even after a careful client selection, the scheme did not work out as planned. The recoveries were only at 80% level. The company suffered significant losses, especially as the retail margin in fertiliser does not exceed 15%. According to the firm's assessment, the main reasons for non-repayment were:

- As there were no sanctions for default in the government fertiliser credit scheme, the smallholders did not expect the company would act take serious action against defaulters.
- The company expected that as they issued credit for farmers' fertiliser needs, they would not borrow from the government. However, many saw the opportunity and took two loans, and defaulted on both.
- There was genuine crop failure in some areas.

Due to the losses from this operation, Omnia Small Scale Ltd closed its credit scheme after the first year of operations. Today, it does not give any credit to smallholders. Furthermore, does not know of any case in the country where a smallholder would get input credit from any fertiliser retailer. Even in the large-scale commercial sector, the company gives input advances only against a full bank guarantee. According to the company, the direct presence of government in the smallholder fertiliser marketing and financing complicates the operations and reduces private sector interest in developing its services to the sub-sector.

2.7 CMR Farm:
Successful Smallholder Credit by Commercial Farmer

CMR Farm is a commercial family farming enterprise close to Kabwe town north of Lusaka. The key businesses on the farm are wheat, production and manufacturing of stock feeds, production and processing of soya beans, and maize. The total area under cultivation is around 1 000 hectares.

The CRM smallholder credit scheme is an innovative approach to small-scale finance and also a reflection of the structure and farmer relationships in Zambia's agricultural sector. The scheme has its origins in the severe 1994/95 drought. CRM Farm is on one side surrounded by a nature reserve, which is cultivated by a fairly large smallholder population. As government was late to react to the serious hunger caused by the drought, CRM farm started to face significant losses due to crop theft. To counteract the situation, the owner of CRM Farm designed a private credit scheme to increase acreage and improve the yields of smallholder maize production around his farm. In the first year, the 1995/96 season, CRM Farm procured 200 bags of fertiliser from the private traders and distributed it to 20 farmers operating around the commercial farm. The deal was that based on the price fertiliser-maize price relation, the farmers were to pay the loan back to CRM Farm by delivering at harvest two bags of maize for each bag of fertiliser received. The scheme achieved a 100% in-time recovery in its first year of operation. It should be mentioned that the Government fertiliser credit scheme achieved a 6% recovery rate the same year.

CMR Farm sold the maize received from the farmers on the commercial market and used the proceeds to increase the volume of the scheme. In the next season, 1996/97 smallholders received 400 bags of fertiliser as input advance and again paid back in full. Since then, the scheme has continued to grow annually. In the current season, CRM Farm disbursed 1 000 bags of fertiliser to smallholders on credit. New farmers in the scheme received also quality seeds as a part of the package. Some 70 farmers participated in the scheme this year and the total value of the inputs issued on credit to smallholder was some USD 15 000. This amount is about 1/3 of the amount Cheetah Zambia Ltd disbursed in the same period in its much better-known smallholder scheme.

Repayments in the scheme have remained nearly perfect and in 2002, the 100% recovery level was again reached. The operators of the scheme see the following key factors behind this performance:

- The small-scale farmers see the scheme as a reliable source of inputs to which they would otherwise have very little access. Default would automatically exclude them from this appreciated service.
- The Farm Supervisor, who manages the scheme in practice, has very good knowledge of his clientele, which has been the basis for successful farmer selection to the scheme. He has also used the local Chiefs to assist him in farmer selection.
- The Farm owners have from the start introduced the scheme as a commercial operation, not a social service, and the responsibility for repayments has been made clear to the farmers.

- The option to pay back in maize has made it easy for the cash-poor farmers to take care of the repayments.

The only problems in recoveries were experienced in 2001. Two main reasons contributed to the problems. First, the price of dropped sharply and the price of fertiliser went up. The repayment ratio was changed to 3.5 bags of maize for one bag of fertiliser. This caused some concern with the smallholders. Second, in the mid-season the government started to distribute in the villages free fertiliser, which it has received from donor relief sources. This confused the commercial maize and fertiliser marketing situation in the area and adversely affected the credit scheme operations. In 2002, the price ratio was reduced to three bags of maize to one bag of fertiliser and the scheme achieved a 100% recovery again.

The farmers' positive view of the importance of this private sector credit scheme can be observed from their good repayment performance in a sector where wilful default has been the rule of the game, and in farmers' willingness to borrow more and intensify their maize cultivation. The more active smallholders have now much larger areas under maize, and the biggest borrower received 80 bags of fertiliser in this season and invested also own funds to his small-scale but increasingly commercial maize operation.

For CRM Farm, the main impact has been that crop theft has virtually stopped. The owner considers that he has earned back his initial investment many times as a result of reduced theft but also in the form of a much smaller number of required farm watchmen as compered to his neighbouring commercial farmers who do not supply similar services to close-by smallholders. All the trading income from the repaid maize has been used to expand the scheme. As the biggest problem for the continued successful operations of the credit scheme the owner of the CMR farm sees the continuous interference of the government in both the input market and the pricing of maize.

With the above positive experience of smallholder operations, CRM Farm is considering starting outgrower operations with the surrounding small-scale farmers in soya. He has adequate processing capacity for this on the main farm and could issue the required seeds and herbicides on credit to smallholders. This model could be potentially suitable also for many other commercial Zambian farmers, who often have excess processing capacity on their farm and a ready market for the produce. The key constraint for CRM Farm to progress in this way is the perception of the owner that smallholders in the area still lack the business orientation to farming which would be required for sustainable production of more sophisticated and better paying cash crops based on outgrower contracts.

ANNEX 3
CASE BRIEFS: MOZAMBIQUE

3.1 Companhia Algodoeira de Nampula SARL: Cotton Input Credit on a Concession

Companhia Algodoeira de Nampula SARL (CANAM) is a large cotton production, processing and marketing company owned 76% by Portuguese institutional and individual investors and 24% by the Government of Mozambique. It operates on three concessions in Nampula Province, each of which has a cotton ginnery. Inside its concession, CANAM, as well as the other concession holders, have a monopoly to contract farmers and buy their cotton crop.

Currently the company buys seed cotton from a total of 30 000 hectares. Most of the outgrowers are small-scale farmers cultivating on an average an area of 1/2 – 1.5 hectares. There are also medium-scale farmers cultivating 4 – 10 hectares of cotton, and a small number of farmers with large cotton operations of 10 – 100 hectares. CANAM has farming contracts also with various farmers' associations, which bulk seed cotton from among their membership and sell it to the company. Full written contracts are issued only to medium- and large-scale farmers and associations. For the smallholders, there is only an individual card for each smallholder on which input credits, seed cotton sales and deductions are recorded.

In all its concession areas, CANAM has a team of technicians that give technical advice and monitor the cotton production. The company provides each farmer with a package of seasonal inputs and implements consisting of:

- Treated seeds;
- Pesticides for four applications;
- Spraying equipment; and
- Bags.

Seeds, spraying equipment and bags are provided free of charge. For the key input, pesticides the company charges the wholesale price plus a small handling commission. Exceptionally for contract farming schemes in Africa, CANAM charges on outstanding seasonal credits a high interest rate of 2.5% per month. In the last season, the recovery rate of seasonal input credits was 95%, which the company considers adequate for a viable operation.

In the 2003 season, some 30 000 outgrowers participated in the CANAM operation, with an average area under cotton of around 1 hectare. With an average pesticide cost of USD 15 per hectare, the total input credit disbursement this year was around USD 500 000. The company finances this operation with its own funds or overseas loans. Local banks have been reluctant to lend for agricultural operations of this type, especially at reasonable interest rates.

The annual average yield of cotton in the CANAM concessions is a low 500 kg per hectare, although even lower yield figures are recorded in various districts. With the current price of MT 3 800 per kg (the same for all cotton companies in the province), this brings an average gross income of USD 79 per hectare. When the input loan is deducted, the company reports that the average net income for farmer's labour and land is around USD 64. While not a high income, the company informs that in the Nampula context it is attractive enough to keep the farmers in cotton production.

The company considers the concession system the only way they could operate their production system, based on comprehensive credit packages. In their view, the serious, violent troubles experienced during the partial, short-lived liberalisation a couple of years ago showed that if the concession system is terminated, nobody would give input credit as side-buying by competing companies would surely ruin these investments.

CANAM has very positive experiences with its operations with farmers' associations. The key benefits to the company from the associations are:

- Associations have been a big assistance to credit recovery. Nearly all of them recover at 100% level;
- Associations reduce transaction costs by buying in bulk and delivering the seed cotton direct to the ginneries. For this CANAM, as the only cotton company in the province, pays the associations a commission of 5%- 10%;
- Associations significantly reduce paperwork otherwise involved in dealings with very small-scale farmers.

3.2 JFS/SODAN: Contract Farming of Cotton and Tobacco in Four Provinces

JFS/SODAN is a large Portuguese majority-owned company producing cotton and tobacco on various concessions in Northern Mozambique. It started as a cotton company but expanded to tobacco seeing the good commercial potential for the crop in the area.

In **cotton** production, JFS/SODAN operates on two concessions, one in Nampula Province and one in Niassa Province, both with two ginneries. It has 44 000 to 46 000 outgrowers cultivating a total area of some 44 000 hectares of cotton. While the company has a number of medium- and large-scale producers, most of the plots are small, with an average of just one hectare of cotton per household. As is the practice with moth large companies, JFS/SODAN issues written contracts only to medium- and large-scale producers and farmers' associations. The smallholder producers have a crop card on which the input credits, sales and deductions are recorded.

JFS/SODAN provides its farmers with a various types of input services. It gives free to the farmers the seeds, spraying equipment and bags. The seasonal credit consists of spraying chemical, in most cases for three applications. Larger farmers have also access tractor hire services. A standard package of chemicals issued on credit is around USD 12.5 per hectare. This year, JFS/SODAN disburses some USD 600 000 in seasonal input credits.

The company prices its inputs at wholesale price with duties but no mark-up. On the other hand, it charges a 30% interest per annum on outstanding balances of credit, which is high for a company scheme but in line with what the other cotton companies charge on concessions.

For seed cotton, JFS/SODAN pays this year the same price as other companies, MT 3 800 per kilo. The yields vary from to farmer and from concession to concession. In Nampula, yields are reported to be 800 kg to 900 kg per hectare, in Niassa in the category of only 350 kg per hectare. The low yields in Niassa are attributed by the company to the poor cultivation practices in the area. The net compensation for farmer's labour after paying the input credit and land is reported by the company to vary between USD 32 and USD 122, with the higher figures in Nampula and lower in Niassa.

On the recovery of input credits, the company has faced two major problems. First, in the past two years there have been major disputes between cotton companies on the buying rights. These have involved both large companies such as CANAM, JFS/SODAN and SANAM as well as new entrants operating without ginneries or concessions but with a licence to buy by the government (Abacasse, Arlindo Martins, Alberto Marques). These conflicts have adversely affected the buying activity and deductions for input loans. Second, unlike CANAM, JFS/SODAN is disappointed in the performance of cotton farmers' associations as buying agents. According to the company, during the past two seasons some 30 cotton farmers' associations have misused the inputs the company has procured for them to be distributed to the member farmers. As the company losses of these activities total some USD 200 000, it has stopped to issue any inputs to associations except against a full bank guarantee.

In the view of the company, stopping the concession system would introduce “a total anarchy” to the cotton buying market, which would also stop the provision of input credit by most if not all the companies.

Tobacco production by JFS/SODAN started six years ago. Originally, the operation involved only large-scale farmers and was connected to the company’s production base in Malawi. However, smallholder started to approach JFS/SODAN with requests of growing tobacco on their cotton fields, especially as returns from cotton were considered low. Today, the tobacco scheme of JFS/SODAN covers four provinces and produces some 8 000 tons of tobacco. The total area under the crop is 6 000 hectares, with some 40 000 farmers reported to participate in the scheme. The target is to increase the production to 12 000 tons per year and to establish a tobacco factory in Tete Province.

All farmers, including the smallholders sign a production contract. The input packages supplied by the company are included in the contracts and cover seeds, various types of production gear, fertiliser and chemicals. Unlike in cotton, there are no free items except the extension services. All inputs are given at credit basically at their wholesale value. The average yield for tobacco is around 200 kg – 250 kg. The current farm gate price is on average MT 18 000 per kilo. After deduction for the inputs, the net earning per hectare are reported to be significantly higher than in cotton production.

The recovery performance last season was weak at 57%. According to the company, the key reason for this is illegal buying by companies such as DIMON and SONIL within the JFS/SODAN concession. While the company aims to continue in tobacco because of the still high profit level, it seriously doubts if any company would issue seasonal inputs on credit if the concession system stops.

In the past year JFS/SODAN has implemented in partnership with the local offices of CLUSA and CARE an EU-funded programme, which aims at diversification of smallholder farming in the company’s concession. The new crops supported include sesame, maize and groundnuts. The EU supports the programme with funding for extension support and various investment items including vehicles for field activities. JFS/SODAN aims to seek such partnerships also on its Niassa concessions.

3.3 Sociedade Algodoeira de Nampula (SANAM): New Entrant to Ginning and Contract Farming

The main owner of Sociedade Algodoeira de Nampula (SANAM) was a large-scale cotton farmer in Nampula Province during the colonial period. Forced out of farming by the colonial authorities, he acquired after the peace accord a total of some 1 100 hectares of land and restarted cotton production. In 1992, SANAM was established and, in addition to production on the nucleus farm, the company started active buying from farmers associations. The company ginned the cotton in the ginneries of concession companies, such as CANAM and SODAN.

In 2000, this well-connected company got an exceptional permit to construct a ginnery in an area inside the SODAN concession in Nampula Province. This started a major conflict between the companies, which ended in the government allocating a part of the SODAN concession to SANAM. Later, the company acquired another ginnery from another concession company. With these arrangements, SANAM became a major player in cotton production in the province.

Today, SANAM produces cotton within its concessions working with some 40 000 smallholders. It has also medium- and large-scale contract farmers, as well as partnership with cotton farmers' associations. The potential maximum production area is around 47 000 hectares, although poor cotton prices have recently reduced farmers' interest in the crop. On smallholdings, the average plot under cotton is a bit less than 1 hectare.

As other concession companies, SANAM supports outgrowers operations with input credit. Seeds are delivered free of charge. The input package consists mainly of pesticides for 4 – 5 applications and in some cases of tractor services for land preparations. Due to this latter element, the average value of the input credit is higher than with other cotton companies, around USD 30 per hectare. The company reports that it used around USD 1 million on input credit this season.

Inputs are priced at wholesale prices without mark-ups. The recoveries have not been unproblematic and this year the loss due to bad loans was USD 140 000. The main causes for this are seen to be bad weather conditions and loss of farmers' interest in the crop due to weaker cotton prices, which with yields of 400 - 600 kg per hectare lead , to low net earnings. Problems have emerged also in various cases when the leaders of cotton farmers' association have misused cotton payments for their own use. Today, SANAM has a policy that a company extension officer must be present when the associations pay for cotton to their members.

SANAM future strategy in Nampula Province is closely linked to the ginnery it constructed in 2001. This processing facility has a much too large capacity when compared with the amount of cotton the company is or will be able to buy from it concessions. This year, the whole seed cotton crop SANAM buys can be ginned in the new ginnery in less than a month. When asked why such an oversized and expensive investment was made, the CEO of the company refers to possibilities of expanding the company procurement operations to other concessions, in which its competitors operate much older processing facilities.

3.4 Cheetah Mozambique Ltd: A Donor/NGO-Supported Failure in Contract Farming

Cheetah Ltd is a Dutch-owned private company specialised in paprika production. It started its Africa operation the republic of South Africa 15 years ago, expanding later to Malawi. In 1993, Cheetah Zambia Ltd was established. In 2000, Cheetah Ltd decided to expand its paprika contract farming operations to Northern Mozambique, with a centre in Nampula Town. The idea was to use the same field approach as in Zambia, including the credit advances for quality seeds. The target was to reach 10 000 farmers, required for profitable operations in that area.

The strategy of Cheetah Mozambique was based on heavy donor and NGO support. The Dutch Aid approved a USD 600 000 grant to establish a paprika processing plant in Nampula, to provide funding for equipment such as vehicles and to cover most of the operational costs for the two first years. Nampula-based NGOs, such as Care and CLUSA were to play a key role in the field activities, particularly in the identification and training of farmers. The Cheetah investment was to be USD 400 000.

The operation started in a small scale in 2001. Cheetah Mozambique provided seeds on credit to some 500 farmers and at the end of the season, bought around 30 tons of produce from the farmers. Towards the end of that season, the scheme started to face serious financial and operational problems. Cheetah proved unable to raise its USD 400 000 share of the project costs. The business in Zambia was starting to lose money (see Annex 2.2), most of the assets were fully used as loan securities and the Dutch owners of the company were unwilling to inject more funds to the operation. Consequently, the Dutch donor decided to disburse only small amounts of operational funds until the company's own funding was secured. As this did not materialise, the Nampula-based operation became increasingly short of cash and lacked such basic equipment as vehicles for field operations.

The failure to capitalise the contract farming scheme had very severe implications for the operations of the 2002/2003 season. Cheetah had contracted around 7 000 smallholders to grow paprika during the season. However, lacking any operational funds and field mobility, it had to leave the whole contracting operation to various NGOs working on marketing support in the area. The result was that the bulk of the contracts were poorly written and often unsigned, and many of them never reached the Cheetah office in Nampula. Furthermore, all seeds that were provided on credit had to be disbursed by the NGOs. The obvious consequence was that the credit disbursements of some USD 48 000 were confused in the minds of many farmers with the grant seeds that many NGOs disbursed in the area, making the credits very difficult to recover.

The active buying of paprika by Cheetah should have started in June 2002. However, the company lacked the funds to do this. With small fund allocations from the donor and participating NGOs, the buying progressed slowly and continued till February 2003. However, much of the paprika was lost in the farms and of the target of 400 tons, only 100 tons was procured. The situation created much unrest among the participating contract farmers against the company and significant publicity in the media. Similarly, the NGOs lost their fate in Cheetah as a serious development partner. Facing this situation, Cheetah Mozambique decided that it would not recover the input loans of USD 48 000 when buying produce and would write off this amount as a bad loan. Finally, Cheetah decided to withdraw completely from the Nampula activity and move the paprika scheme to Tete Province of Mozambique, where the activity may be more easily managed from the company's Malawi base.

According to the management of Cheetah Ltd, the company made too optimistic assumptions concerning operations in Northern Nampula. The long distances to villages and export markets, the poor roads, the scattered communities, non-optimal climatic conditions and the lack of farmers' experience in commercial farming operations meant that operational costs were much higher than in Zambia or Malawi. However, the company admits that it seriously overestimated its capacity to raise the funds that an operation of the Nampula type would require, which resulted in chronic cash shortages, almost total reliance on NGOs in the core business activities and finally, in inability to buy the produce from smallholders. Only a small amount of the Dutch USD 600 000 grant was used and the proposed processing facility was never constructed. Cheetah Ltd reports that it lost some USD 150 000 in the Nampula operation, including the whole amount of the disbursed input credit. At the same time thousands of farmers lost their much needed cash revenue, as well as their faith in Cheetah Mozambique and probably also in the NGOs involved in the paprika scheme.

3.5 Export Marketing Co. Ltd: Why Marketing Company Avoids Contracting and Input Credit

Export Marketing Co. Ltd is an Asian-owned private agricultural marketing company. With its Head Office in Tanzania, it operates today also in Kenya, Uganda, Malawi and Mozambique. The company identifies itself as an "agricultural commodity dealer". It trades in a very large number of crops and products. The procurement network in Eastern and Southern Africa is effectively used to satisfy the demands from overseas markets: when there is a scarcity of a certain produce in one country, the company's presence in the other countries secures that export orders can be filled.

Export Marketing started its operation in Mozambique in 1998. Starting from Pemba, it has expanded to Nampula and Beira. The company key investments are a substantial number of warehouses in rural towns and centres, with en export godown in Nacala, and a wide network of buying post in the rural areas, to which farmers sell their produce. From these buying posts the firm transports the produce initially to its warehouses and finally to the main collection point in Nacala Harbour. The company also sells maize to the neighbouring countries when there is a profitable market for this. The main crops bought from Mozambique are maize, cashew nuts, sesame, and pigeon and cow peas. In 2002, its total exports from Mozambique totalled some USD 13 million.

The operational strategy of Export Marketing Co. in Mozambique is simple. It buys all the produce in cash. It does not contract any farmers to secure its supplies. It does not provide any inputs on credit to its supplies. While well aware of the potential to increase the volume and quality of procured crops through contract farming, the company lists various reasons for not getting engaged in these activities in Northern Mozambique:

First, the company records a long list of incidents where it has lost significant sums of money due to dishonesty of its produce buying staff. When it advances cash to its buying posts, in several cases the buying officers have disappeared with the money. This has discouraged the company from taking any such risks that input credit provision would surely involve.

Second, in recent past, Export Marketing made a deal with a number of NGOs involved in sesame extension. The NGOs would deliver the seeds as grants to smallholders and Export Marketing would buy the crop. However, the project attracted other buyers to the area, to whom the farmers sold the crop despite their agreements with the NGOs. When the staff of Export Marketing went to collect the crop, there was nothing to purchase. In the view of the company, when a grant-based scheme failed, what chance would an input credit operation have to survive with eager competitors waiting for others to invest in production activities?

Third, in the view of the firm, law enforcement is very weak in Northern Mozambique. The police has been unable to trace any of the known persons that have stolen cash from the company. Without efficient law enforcement, contract farming would be very difficult to manage.

Fourth, the transport network in the area is so weak that while simple crop buying activities are possible to conduct successfully, the conditions of infrastructure would make it very difficult to manage a substantial contract farming operation on a sustainable basis.

With these perceptions of the trading environment and the local farming community, Export Marketing Co. Ltd aims to continue with its low risk strategy in Northern Mozambique, with no farming contracts or no provision of input credit to farmers.

3.6 APS-Agro Industries Lda:
Investments on Agro-Production and Marketing in Nampula Province

APS-Agro Industries Lda is a private Asian-owned Dubai-based agro-trading company. It has traditionally procured large quantities of cotton seed from Northern Mozambique. In 2000, it decided on a backward integration strategy and established a permanent subsidiary in Nampula. Its initial project was large-scale agricultural production scheme. APS leased an area of 7 000 hectares spreading over three districts in Nampula Province. For the 2001/02 season, the company recruited some 1 500 villagers to work on the scheme focusing on cultivation of pulses for exports. It also made significant investments on equipment such as tractors. For the first season, 1 500 hectares were planted on pulses. The results were disappointing: the yields were low at 250 kg per hectares, compared to 850 kg achieved in India. As the production levels were very much under expectations, the firm decided to sell its equipment and stop its direct involvement in agricultural production in Nampula Province. The company reports to have made a loss of USD 700 000 of this project.

As a next strategy, APS contracted farmers' associations to grow pulses for the company. The target was to gradually reach an area of 500 – 700 hectares under the contracts. The company decided to provided the required inputs (seeds, pesticides, fertiliser, bags) in the first year free to associations and in the following years to give these on credit. The outcomes of this contract farming scheme were poor. The company reports that associations and farmers sold much of the seeds and fertiliser and actual area planted remained small. The company managed to buy only some 20% - 30% of the expected volumes. This led to a strategic decision to stop any contract farming with input provision to smallholders by APS in Nampula Province.

Today, APS has a small core team of some 2 – 3 employees in the province. It buys crops on a relatively small scale and on a cash basis from farmers and their associations and does not provide any other services. Based on its bad past experiences, the company has no plans aiming at potentially higher trading volumes through contract farming.

3.7 Mozambican Sugar Industry: Unsustainable Piloting with Smallholder Outgrowers

In the early 1970s, the Mozambican sugar industry produced some 320 000 tons of sugar per year. After the war period in the early 1990s, the production on plantations and in the mills was on a very limited scale, with an annual production of around 20 000 tons. Since then, a major rehabilitation programme has been implemented and currently, four sugar factories are operational. All of them are owned by foreign companies. In 2002, the production reached 170 000 tons of sugar and is further increasing. The Mozambican sugar industry is heavily protected with high taxes on imported sugar. The local production meets the local demand and small amounts of sugar are exported under preferential price agreements.

The production structure of the Mozambican sugar industry differs significantly of what was discussed earlier in the Kenyan case. In Mozambique, the role of small-scale outgrowers is very marginal. In the Mafanbisse and Maromeu sugar factories, the whole production takes place on the companies' own plantations. In the Maragwa sugar scheme, 50% of cane is produced on the company plantations and outgrowers account for 50% of total production. All of these are, however, large-scale producers of South-African origin cultivation 250 – 350 hectares each. In the Xinavane scheme, 70% of the cane comes from the plantation and 30% from outgrowers, who consist of four south Africans cultivating some 1 500 hectares of cane. All the large-scale outgrowers organise their own financing, mainly from South African banks. The companies do not issue them any inputs on credit to support their operations.

The only smallholder scheme in the sugar industry was started in the late 1990s in the Xinavane sugar scheme. Two partly interrelated reasons for the scheme start-up are given. The South-African owners of the company saw a need for local participation in cane cultivation, partly motivated by the developments in the neighbouring Zimbabwe. The Mozambican government saw the pilot project as an opportunity to support smallholder agriculture in a new crop. The target was to be established a scheme of some 100 hectares with average smallholder plots of two hectares.

The scheme was heavily supported by public funds. The South African government gave a grant of USD 600 000. This covered the irrigation investments of USD 3 000 – USD 3 500 per hectare. It also covered all the planting and input costs for the first planting season of 2001. Furthermore, the government Fundo responsible for irrigation recruited a full-time extension agent to the scheme, who was supported in his work by the company extension staff.

In the following seasons, the Xinavane sugar company has provided the seasonal inputs as land preparation, harvesting and cane transport services on credit to the 40 – 50 households operating in the smallholder scheme. For these inputs and services, the procedure is to deduct the advances from the cane payments.

The scheme performance has been poor. With average cane yields of 85 – 90 tons per hectare and cane prices of USD 22 – USD 24 per ton, the proceeds from cane sales have hardly covered the production costs, even when all the investment costs and the first year's inputs were paid from the grants. This year the company decided to pay the farmers' electricity bills from its own pocket to keep the electricity-powered overhead sprinklers operational. Had they deducted for these electricity payments, there would have been nearly nothing to pay to many farmers after input deductions.

Various factors in the scheme design and implementation can be identified to explain the unprofitable and unsustainable nature of contract farming and input supply operations of this type:

- The original idea was based on the successful Mumias smallholder scheme in Kenya. However, Mumias is all rain-fed while Xinavane is irrigated, powered with electricity. The economics of these operations are entirely different, making the Xinavane pilot scheme with a few small-scale outgrowers unprofitable even when the whole investment costs are grant-funded;
- The selected farmers had no experience of irrigation farming and cash crop production, which made it very difficult for them to adhere to the discipline required in irrigated sugar production; and
- The scheme got an image of a social, grant-based operation, which the company and government continue to support despite its obvious lack of viability. Full recoveries on input loans are difficult in this atmosphere.

In Xinavane, a new 200 hectare smallholder scheme is starting to be implemented following the above model, involving input supply by the company but based on an increased sugar plot size of five to seven hectares. It is funded with a loan from the African Development Bank.

Furthermore, in the Mafanbisse sugar scheme, a plan has been prepared for a scheme which would involve some 150 – 200 farmers on larger 13 – 22 hectare plots of sugar. For this scheme, based again on electricity-powered overhead irrigation, funding would be sought from various donor agencies, including IFAD.

3.8 V&M Grain Co.: Offers Produce Buying Advances – An Exception to the Rule

V&M Grain Co. is a European-based agro-marketing firm operating in Northern Mozambique. Its main owner, a Dutch businessman Andre Vonk, created his reputation and good government connections initially through NGOs operations and later through supply of grain to food relief operations in the country. In late 1990s, his company managed the warehouses of Mozambican Institute for Cereals (ICM), which later, through various contracts with the government, developed into the core field infrastructure of the company. While operating with many crops in the international market, the core operation of V&M Grain is the procurement of maize and selling it in bulk mainly regionally to food relief operations such as WFP.

In 2002, V&M Grain Co. bought some 30 000 tons of maize from smallholders in Northern Mozambique. About 65% of this was procured direct in cash from farmers delivering the crop to the company godowns. Company buying agents, some 10 – 15 of them, bought 30% of the crop, while around 5% was procured from farmers' associations. Even for V&M Grain Co., the whole operation is principally based on buying in cash on delivery. These operations cover some 90% of the activity, and even more during the years when the business is low. However, to supplement its cash buying activity, the company has organised a credit window for its agents and associations. This is particularly used when market demand for maize is good. For the associations, which normally possess little cash at harvest time, the firm offers the credit option each year, partly as a legacy of the owner's development work background. All purchase credits are very short-term revolving arrangements, in which the agent at the delivery of produce to the company can get the next tranche to continue the buying operations. For the large-scale agents, the revolving credit can be as high as USD 40 000. For associations, a typical credit is around USD 2 500. During an active buying season, V&M Grain Co. has some USD 200 000 – USD 300 000 outstanding as purchase credit balances. The purchase credits are interest free, and the agents and associations are paid a mark-up over the farm gate price to make the operations viable for them. Credit losses have been small at around 2%.

V&M Grain Co. has worked with some 30 farmers' associations, most of them supported by NGOs such as CLUSA. While generally happy with their performance as partners, as practically no credit losses with them have materialised, the company complains about the limited procurement capacity of most associations, which results to uneconomically small contracts. From their side, the associations have felt uncomfortable with the clause of these agreements that requires them to sell the produce to V&M Grain Co. In various cases the associations have broken the agreements for the sake of obtaining better prices from other marketing companies as the market situation has developed, and returned the V&M Grain advances to the company unused. These short-term benefit-seeking arrangements have excluded various associations from the next year's company credit. The associations further complain about such issues as lack of credits in the early part of the trading season and poor delivery arrangements at the warehouses.

While the V&M Grain Co. trading advance system is clearly a pilot operation and of relatively marginal importance for the company's mainstream business, it is an interesting attempt to develop the output marketing system in a relatively difficult operational environment where trading tradition is still at an infant stage. When the trust between market players develops, a much wider application of this type of arrangements in the whole region would potentially benefit both the smallholders and those agri-marketing companies that would finance the procurement credit operation.

ANNEX 4

LIST OF REFERENCES

Adams, D.W. & Fitchett, D.A. *Informal finance in low-income countries*. Bolder – San Francisco – Oxford. Westview Press, Inc., (1992).

Aeton, C. & Shepherd, A. *Contract farming: partnerships for growth.* FAO Agricultural Services Bulletin 145, Rome (2001).

Boughton, D, Tschirley, D, de Marrule, H, Osorio, A & Zulu, B. *Cotton Sector Policies and Performance in Sub-Saharan Africa: Lessons behind the Numbers in Mozambique and Zambia.* MADER-Directorate of Economics (2002)

Dijkstra, T. *Trading the fruits of the land.* Leiden, the Netherlands. African Studies Centre Leiden (1997)

Dorward, A, Kydd, J, Lyon, F, Poole, N, Poulton, C, Smith, L & Stockbridge, M. *Commercial Financial of Seasonal Input Use by Smallholders in Liberalised Agricultural Marketing Systems.*ODI Natural Resource Perspectives Number 39 (1998).

Fafchamps, M. & Minten B. Relationships and traders in Madagascar. *Journal of Development Studies*, 35(6): 1-35 (1999).

FAO. *Financing of trading in agricultural produce in Ghana.* Accra. Technoserve (2001).

Gabre-Madhin, E.Z. *Market institutions, transaction costs, and social capital in the Ethiopian grain market.* Washington D.C. *IFPRI Research Report* 124 (2001).

Goveneh, J, Jayne, T, Nijhoff, J, Shava, J, Haantuba, H, Belemu, A, Ngulube, E, Zulu, B & Banda, K. *Developments of Fertilizer Marketing in Zambia: Commercial Trading, Government Programmes and Smallholder Farmer.* Food Security Development Project – Zambia (2002)

Howard, J, Massisque, J, Jeje, J, Tschirley, D, Boughton, D & Serrano, A. *Observations and Emerging Lessons from the 1998/99 High-Input Maize Programme in Nampula Province, Mozambique.* MARD- Directorate of Economics Paper (2000).

Jayne, T, Govereh, J, Wanzala, M & Demeke, M. *Fertilizer Subsector Development: A Comparative Analysis of Ethiopia, Kenya and Zambia.* Food Policy study draft (2003)

McCulloch, N, Ota, M & Humprey, J. *Smallholder Production: More pro-poor than commercial farming?* IDS-University of Sussex research summary (2003)

Parker, S. *CLUSA Zambia Rural Group Business Program.* Case Study for USAID (2003).

Pearce, D. *Buyer and Supplier Credit to Farmers: Do Donors have a Role to Play?.* CGAP Research Paper (2003).

Simmons, P. *Overview of Smallholder Contract Farming in Developing Countries.* University of New England, Australia (2003).

Shepherd, A. *Financing of agricultural marketing- Case studies from Asia.* Draft FAO research paper (2002).

de Vletter, F. *A Review of Three Approaches to Agricultural Microfinance in Northern Mozambique.* Report prepared for CGAP (2003).

de Vletter, F & Legrand, J. *Design of rural finance scheme for Cabo Delgado and Niassa Provinces.* MADER/IFAD (2003)

ANNEX 5

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