

Approaches to linking producers to markets



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A review of experiences to date

by

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Preface

Supply chains are changing rapidly, with transactions increasingly based on chains that involve coordinated links between farmers, traders, processors and retailers. It is against this background that organizations working with farmers, such as donors, NGOs and government extension services (“linking organizations”), are seeking to promote farmer welfare by using the “linking farmers to markets” approach, which usually involves organizing farmers into groups to supply identified markets.

This Occasional Paper examines experiences of linking farmers to markets, in order to reach some tentative conclusions regarding success factors. It considers examples of linkages promoted both by linking organizations and by the private sector without external support and then reviews in detail the linkage activities of the former. Emphasis is placed on markets chosen for linkages, on the capacity of the linking organizations, and on the relationship between the private sector, linking organizations and farmers. Mutual trust between all actors in a chain is essential and the paper discusses how such trust can be developed. Linking farmers to new markets invariably involves farmers organizing into formal or informal groups. Experiences with group organization are reviewed, as is the question of finance. Problems faced by farmers in maintaining linkages are examined and sustainability and scaling-up of linkage activities considered.

Broader issues also emerge. Working with farmers will have little impact if the enabling environment that governments provide is inappropriate for development of market linkages. A question that may merit research is whether linking organizations are actually increasing the size of the market or whether they are just replacing one group of farmer suppliers with a new set of “target beneficiaries”. Finally, it needs to be asked whether the limited donor, NGO and government resources would be better channelled towards activities likely to benefit a larger number of farmers.

The paper is aimed at staff of NGOs, both those working at the policy level and in the field; at donor organizations and the projects they support; and at ministry of agriculture policymakers and extension services. It is hoped that it will also prove useful for private sector companies seeking to develop linkages with small farmers.

Acknowledgements

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Particular use has also been made of: the FAO publication [“Strengthening agribusiness linkages with small-scale farmers – Case studies in Latin America and the Caribbean”](#); an unpublished presentation by Doyle Baker at the post-IAMA workshop on Inaugurating New Partnerships in the Global Food Chain: Experiences from North Africa, the Near East and Asia, Chicago, July 2005; a presentation by Carlos da Silva on [“The Growing Role of Contract Farming in Agri-food Systems Development”](#) to an Asian Productivity Organization workshop on Contract Farming, Colombo, Sri Lanka, July 2005; and case studies on [Linking Farmers to Markets](#) presented on the web site of FAO’s Agricultural Marketing Group. Other sources are fully cited in the text.

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A.W.S.

Summary

Marketing systems are undergoing rapid transformation. Traditional marketing channels with *ad hoc* sales are being replaced by coordinated links between farmers, processors, retailers and others. As incomes increase, food consumption patterns are changing, with a greater emphasis on meat, dairy products and fruits and vegetables. Consumers are becoming more demanding in terms of quality and safety and demographic and income trends are leading to increased demand for convenience foods, together with assurances of product safety.

It is against this background that donors, NGOs and others are recognizing the need for activities that link farmers to market demand. Thus approaches such as “Linking Farmers to Markets”, which assume the development of long-term business relationships rather than support for *ad hoc* sales, were identified. The paper briefly reviews examples of linkages developed both directly by the private sector and by projects where donors and NGOs provide the catalyst for farmers to work more closely with the private sector. It then considers the factors most likely to lead to success of the latter category.

Following the Introduction, Chapter 2 describes different types of linkage. Farmer-to-trader linkages may simply involve working to bulk up supplies so that traders’ costs can be reduced. Extension workers or NGOs can play an important role as traders may be unable to make such arrangements on their own. However, traders can also be proactive without NGO intervention and examples of this are provided. It is important to note that in many cases linkages are based on mutual trust and there is no written contract. Farmers can link directly to retailers such as supermarkets or fast food chains or can supply through intermediaries. Most stores prefer to work through intermediaries who may organize production and coordinate deliveries.

In many cases it is found necessary to organize farmers into groups or work with existing groups, associations or cooperatives in order to supply markets successfully and this also applies to links to export markets. An alternative to group activities is linkages developed by a leading farmer. Many private companies have chosen to link directly with individuals. Larger ventures, such as contract farming, often involve companies in providing inputs on credit. NGOs may make credit arrangements, preferably through existing financial institutions, where companies are unwilling to do so.

Chapter 3 discusses the different types of market that are available. Markets must be capable of showing a higher profit for the entrepreneur and the farmers with the same or little more risk than they could obtain from existing activities. Farmers must be able to supply the market in terms of the quality required and the reliability of supply expected by the buyer. Markets for high-value products can be unreliable and price competitive. Increasingly stringent rules regarding quality and other factors may make it more and more difficult for small farmers to compete. For some products demand may be relatively limited and easily supplied if several countries go into production.

Niche marketing is possible when exporters are able to match supply potential to demand at a particular time of the year. Identification of niches is not limited to international trade. In some countries producers in one zone can take profitable advantage of the inability of farmers in other areas to supply for a particular period. Organics offer potential for market development although arrangements for certification can be costly and the extent to which supply of organic products by small farmers can be sustainable merits further research. There is a growing trend towards branding on the basis of quality or taste attributes, and this may have the advantage of not requiring certification.

Among some development agencies there tends to be emphasis on helping farmers to identify profitable markets overseas rather than domestically. Overall, developing countries export less than ten percent of fruit and five percent of vegetables produced by them. However, some donor projects have had success with developing local markets, including for native varieties. Allied to moves to develop local markets could be efforts to promote domestic consumption, which can benefit a large number of farmers. This could, for example, be done within the framework of the WHO/FAO Fruit and Vegetable Initiative.

There is potential for adding value to agricultural production. On international markets there is a growing demand for pre-cut salads and fruits. On domestic markets of developing countries scope exists, for example, for juices, jams and dairy products. In recent years the share of processed foods as a percentage of agricultural exports by Least Developed Countries has been increasing. However, smaller processors have to compete with larger manufacturers that can benefit from significant economies of scale and meet the need of supermarkets for a wide range of products.

Chapter 4 considers factors affecting the success of linkages. Many donor- and NGO-driven projects have been somewhat hostile to the private sector. This may have led them to try to establish alternative marketing channels, but farmer groups or cooperatives have always found it difficult to carry out marketing activities as efficiently as the private sector. Even where NGOs are fully supportive of the role of the private sector their staff often lacks the necessary business approach to enable them to advise farmers, and a programme of business management training for NGO staff is often advisable.

Provision of marketing and other services by the linking organization, such as transport, is unlikely to be sustainable. Significant subsidies usually lead to problems when farmers have to meet the full costs when external assistance ends. Unfortunately, at the first hint of problems linking organizations are often tempted to bale out farmer organizations. Grants to enable groups to carry out local market assessment, prepare business plans and strengthen skills can be considered appropriate uses of development funds but spending on packing materials (except for trial purposes), transport of farmers' produce, export certification, and on most processing equipment is unlikely to promote sustainability.

Trust seems essential for the establishment and continuation of linkages. It is boosted by perceptions of a partner's commitment to the business, such as by investing in infrastructure. Trust can also be promoted by meetings between farmers and the buyers. A willingness to exchange information also seems to be a major factor in trust development. Farmers often fail to honour contractual supply agreements, whether they are formal or

informal arrangements. Flexibility in contracts may resolve part of this problem. Farmer involvement in all stages of contract negotiation is essential. Such negotiation requires knowledge of their own costs of production and of prevailing market prices. Under contractual arrangements farmers often have to be able to synchronise production to ensure that the product is available when the agroprocessor, retailer or fast-food restaurant wants to receive it.

Farmer group formation has had mixed success but it is generally felt that groups can achieve economies of scale that overcome the high transaction costs that farmers face acting individually. They also enable farmers to access extension and inputs, improve produce quality and quantity and negotiate more effectively. Nevertheless, farmers do incur hidden costs from group activities, such as the time spent in meetings, and groups may not be totally democratic. Implementing group linkage activities appears easier when farmers are used to collaborating; for example, through church groups. Homogeneous groups seem more likely to succeed than heterogeneous ones and group size also seems related to success. There also appears to be a relationship between resources available to farmers, such as land, water and other assets, and group marketing success. Education and other skills are also important. Groups may have to carry out financial transactions but this is difficult in countries where their legal status remains to be clarified.

Financing arrangements must be considered at an early stage. Organizations seeking to develop contracts need to address how best farmers can fund their start-up and ongoing costs. Many NGOs have now moved away from direct provision of credit, preferring to involve microfinance organizations. There may be a case for NGOs to provide (unsubsidized) credit over a short period in order to demonstrate commercial viability to financial institutions.

Choice of product to grow or rear must take into account market demand but also farmer location, social structure, available infrastructure, farm size, agronomic suitability of the land, the likelihood of pests and disease, the land tenure situation, farmers' assets, capacity to establish new enterprises, access to finance and capacity to use it profitably, technological requirements and access to extension advice. Consideration of the risk that farmers would face in diversifying into new products is important. Investments that farmers have to make are often specifically related to a particular product. Technologies promoted by NGOs and others must be viable for the type of farmer they are working with, and should not increase the vulnerability of farmers to external shocks.

Sustainability of a linkage requires a willingness to be flexible. Farmers need to respond quickly to market changes. It is not yet clear whether linkage projects are replicable and up-scalable. Ways of replicating tried and trusted approaches at lower cost, in order to benefit a greater number of farmers, do not yet seem to have been developed. Realistic cost figures could promote dialogue on whether such activities can be widely replicated. Leaving farmers and their groups to look after themselves becomes easier if a clear exit strategy has been worked out. Opinions are divided on the time frame necessary to have a high chance of sustainability. Some NGOs have attempted interventions of two or three years while others believe that the process requires up to ten years. Donor funding usually means that the time of exit is set by the donor, not by the circumstances, with possibly negative consequences. Group marketing activities have a greater chance of success when attention

is not only paid to capacity building in marketing, but also to overall organizational and management skills that could help the groups operate independently.

Chapter 5 briefly considers the need for a suitable enabling environment if linkages are to be successful. The private sector must be permitted to function in a competitive way. Incentives to invest are provided by good monetary policies and by realistic taxation and tariff structures. Lack of land tenure can constrain investment and lack of secure property rights can inhibit access to loans. Other areas in which governments can provide an effective enabling environment include regulations relating to pesticide use, food standards, seed quality and provision of arrangements to certify quality and geographic origin. Reliable roads, power and water supplies are vital for perishable products, agroprocessing and export of high-value produce. Provision of market information is important as is the upgrading of marketing skills of extension officers. Agricultural research stations should ideally plan their work around the market demand for and economic feasibility of specific agricultural products, but this is rarely done.

Chapter 6 discusses some broader issues and makes some general recommendations. Given the capacity of the private sector to develop its own linkages, it may be asked whether some interventions by linking organizations are actually increasing the market available to small farmers or just replacing one group of farmers with a different group. Linkage activities presently reach only a small proportion of farmers. Donors should perhaps consider whether they should place more emphasis on activities that stand a chance of benefiting a much larger number of people, including generating employment opportunities.

With the growing interest in activities to link farmers to markets it seems essential that methods of exchanging experiences about what works and what doesn't must be found. Private-sector successes (and failures) in this area also need to be documented. At national level, government, donors, NGOs and the private sector could establish market linkage coordinating mechanisms. To date, there seems to have been little attention paid to quantifying the costs of activities to link farmers to markets and comparing these with benefits that farmers achieve.

Optimism about the ability of farmers to supply new markets, while desirable, needs to be tinged with a sense of realism. Rural societies face many problems in dealing with hard commercial realities of modern supply chains and it would be dishonest to promote linkages if it appears that farmers cannot meet the requirements of the buyers. Organizations such as NGOs are recommended to conduct a full assessment of buyers' requirements in terms of quality, quantity, timing of delivery, etc. and then make an honest assessment of the capacity of the identified farmers to meet those requirements.

1 Introduction

Agrifood systems are undergoing rapid transformation. Increasing concentration in processing, trading, marketing and retailing is being observed in all regions of the world and in all segments of production-distribution chains. The traditional way in which food is produced, without farmers having a clear idea in advance of when, to whom and at what price they are going to sell their crops, is being replaced by practices more akin to manufacturing processes, with far greater coordination between farmers, processors, retailers and others in the supply chain. Farmers increasingly produce to meet the requirements of buyers rather than relying on markets to absorb what they produce.

As incomes increase, food consumption is changing. Demand for fruits and vegetables, animal products and oil crops is growing and farmers are diversifying production to respond to this. Consumers are also becoming more demanding in terms of quality and safety and demographic and income trends are leading more affluent consumers to demand convenience foods such as frozen, pre-cut, pre-cooked and ready-to-eat items, together with assurances of product safety. Production, processing and distribution systems have been adapting to reflect this. These trends offer considerable threats for farmers, especially small, asset-poor and unorganized farmers, but, for the more efficient ones at least, may also present many opportunities.

It is against this background that donors, non-governmental organizations (NGOs) and others are recognizing that the traditional agricultural assistance projects that concentrated on building up farmers' production capabilities are no longer sufficient to ensure sustainable income growth (if, indeed, they ever were). There is now an increasing understanding that production support activities must be linked to market demand and that production activities must be looked at within the context of the whole supply chain and the linkages, or business relations, within that chain. Thus concepts such as "Linking Producers to Markets" or "Linking Farmers with Markets" are very much in vogue. However, while the underlying ideas of those working with farmers may now be more realistic, little will be achieved unless the approach adopted is also realistic. In particular, organizations must be prepared to adopt a much more commercial approach than hitherto, employing staff with a strong understanding of marketing and of the functioning of the private sector.

This paper draws lessons from experiences with linking farmers to markets, while bearing in mind that many linkages have only been in operation for a few years and it may as yet be too early to draw conclusions about what may or may not work. The main purpose is to provide practical advice to NGOs, farmer associations and others who are seeking to help farmers to improve their livelihoods. Funding agencies should also find it useful. The importance of developing appropriate input marketing channels is recognized but not considered in this paper. Emphasis is placed on how to develop sustainable linkages for farm outputs between farmers and private sector traders, exporters, retailers and agroprocessors. Many successful linkages are developed directly by the private sector

without the intervention of third parties and the private sector is increasingly paying attention to the sustainability of links with its suppliers. Thus it is hoped that the issues raised here will also assist the work of the private sector.

“Linking farmers to markets” can embrace a whole range of activities, from the very small and localized to the very large. The concept does, however, assume the development of long-term business relationships rather than support for *ad hoc* sales. This mirrors trends in developed country markets, where there has been a rapid shift from sales through open markets to direct sales that involve linkages and alliances from production to consumption. At the simplest level agricultural extension workers in developing countries can link farmers to buyers by identifying traders and arranging for them to meet with the farmers, or small-scale traders themselves can seek out new suppliers or can work with existing suppliers to develop new or improved products. At a more complex level is the work carried out by NGOs and others to identify markets for particular products and organize farmers into groups to supply those markets, or the activities of agroprocessors to secure their raw material supply from small farmers. Larger scale contract farming or outgrower programmes may involve considerable long-term investment on the part of the companies and farmers. Discussions in this paper touch on the whole range of such linkage activities but, as noted, emphasis is placed on medium-scale linkage activities involving donors and NGOs.¹

Potential advantages for farmers of improving linkages with their buyers appear numerous. In some cases the buyers are prepared to supply inputs and arrange credit for those inputs. In advanced contract farming schemes they may also provide mechanization services. Companies may provide technological and extension advice or arrange for government extension services or NGOs to do so. By linking with buyers in advance of production, farmers potentially have a more assured market and often an agreed price. Offsetting the advantages, however, is the possibility that the contract may break down, after considerable investment by the farmer, as well as the potential loss of farmer flexibility in enterprise choice. An ever-present risk is that arrangements will collapse because of a lack of trust between the parties. Furthermore, contractual arrangements can sometimes significantly impact on gender roles and resource access. Social tensions might arise when the benefits of and work involved in contracts differentially affect men and women in particular households.

Traders, processors, agrifood companies and large retailers can obtain more reliable and regular supply from formal or informal linkages and have a greater control over produce quality and safety. At the local level, small traders working with farmers to bulk-up produce can achieve scale economies and reduce costs. Purchasing from farmers in a variety of locations may also minimize production risk, especially from disease. On a larger scale, working with smallholders is also usually more politically and socially acceptable and can sometimes be more efficient than when using a company’s own farms. Offsetting these advantages are the transaction costs associated with providing extension and other support to farmers, costs that may not be borne by competitor firms who buy on the open market, and the tendency of farmers in some societies to be unreliable. A major problem is that of

¹ Ways in which extension workers can assist farmers with linkage development are discussed in Dixie, 2005 while contract farming is reviewed in Eaton and Shepherd, 2001.

extra-contractual marketing as transaction costs in working with a large number of small farmers can be high and inputs supplied to farmers may be diverted to other uses, or even sold. At a time when there is increasing attention being paid to safety issues the need to provide traceability is growing in importance for some products. In most cases traceability of smallholder production may be difficult to organize.

There are strong potential benefits of closer links between farmers and produce buyers but, as will be discussed in the following pages, also some possible costs. The recent resurgence in contract farming and in donor-led activities to link farmers to markets suggests that the balance is considered to be in favour of improved linkages, although much will depend on particular economic, social, financial, organizational and environmental circumstances and on the enabling environment that governments are able to provide.

2 Types of market linkage

Examples of market linkages are given in Annex 1. These are presented according to the ways in which farmers are linked to the buyers. The examples provided are used to draw lessons about the various approaches and their likelihood of success. Both negative and positive aspects of the different approaches are therefore considered. The main advantages and disadvantages of different types of linkage are summarized in Table 1.

Types of linkage can be categorized in various ways. Annex 1 uses the following typology:

- Farmer to domestic trader;
- Farmer to retailer;
- Linkages through a leading farmer;
- Linkages through cooperatives;
- Farmer to agroprocessor;
- Farmer to exporter;
- Contract farming.

These categories do not, of course, represent the whole range of market opportunities available to farmers. In some countries government marketing boards continue to play an important role. Purchases by government institutions, such as the military and hospitals, can be an important market and several countries implement school-lunch programmes that provide direct-sale opportunities for rural producers. Furthermore, the above categories are clearly not always mutually exclusive. Exporters can also be agroprocessors. Agroprocessors can also run contract farming operations. Retailers may buy from farmers through traders. What is characteristic of almost all of the linkages described, however, is that they form clearly identified chains and often involve close relations between the participants.

Spot markets such as wholesale markets, commodity exchanges and auctions, are not a characteristic of linked markets and are largely absent from the examples given in Annex 1. Nevertheless, it should be noted that simple activities to link farmers with traders supplying spot markets, e.g. through bulking-up production for sale, can be very effective. That there are few available case studies of such linkages is probably more a reflection of lack of information than lack of linkages. FAO has for many years advocated that extension officers should work with farmers to link them more effectively to local traders.²

Farmer to domestic trader. Traders have traditionally interacted with farmers on a one-to-one basis, either buying from them at local markets or at the farm gate. Purchases at local markets can be relatively efficient if they enable the trader to buy sufficient quantity to achieve economies of scale with subsequent transport, which is usually the main marketing cost. On the other hand, purchases at village level can often be extremely inefficient and this can contribute to the high marketing costs that often lead to allegations of exploitation

² See Dixie, 2005 for the most recent FAO publication on the topic.

of farmers by traders. Such costs can be reduced if farmers can work together to assemble all their products at one location, for purchase by one or more traders. However, an arrangement such as this rarely develops without an external catalyst. It should not be forgotten that many traders experience significant cash flow constraints and while they may well have considered the idea of working more closely with farmers, the time taken to discuss and make arrangements with them is often a transaction cost they cannot absorb. The most logical catalysts for such developments would appear to be government extension staff.

The case studies nevertheless provide three examples of where larger traders without major cash flow constraints have been able to promote production or improve produce quality without an external catalyst. In one case, from Bali, Indonesia, the trader had sufficient resources to rent land for women farmers and provide a basic research farm. This may be an extreme example, but it does illustrate that well-resourced traders can be proactive in seeking out increased supply. In Ho Chi Minh City, Viet Nam, a trader who was of sufficient size to be able to purchase through field collectors was able to make major improvements to his lettuce supply chain by focusing on quality, supplier training and collaboration throughout the chain. In Chiang Mai, Thailand, the trader maintained close relations with farmers, paying frequent visits to monitor quality and to ensure that the farmers supplied only production from their own plots. An example of a linkage between traders and mandarin farmers in Indonesia further illustrates the capacity of some traders to work closely with farmers. However, in this case the training provided by traders was made possible through the intervention of an NGO to organize the farmers to receive the training. In addition to the transaction costs involved in working closely with farmers, most traders are unlikely to have the inclination or skill to organize farmers on their own.

Farmer to retailer. Large supermarket chains will not usually want to work with individual farmers on a long-term basis. The case study from India, providing an example of where this does happen, may well represent more of a transitional arrangement. The linkages between one South African supermarket and a number of farmers is interesting but may not prove to be a replicable model elsewhere, given its dependence on the individual initiative of a supermarket owner. On the other hand, the case study from Indonesia, of a wholesale company specifically set up to supply a supermarket chain, replicates a model seen in many countries. One of the important issues highlighted by this case study is the difficulty faced by many farmers in meeting quality specifications, even when in receipt of technical assistance from the company. The example from Uganda, of supplies of potatoes to a fast-food restaurant, also stresses the steps that farmers have to be prepared to take if they are to move beyond spot market sales. In this case the farmers had to grow a new variety, change production practices to influence potato size and moisture content, stagger planting dates and grow at different altitudes in order to ensure year-round availability. It is unlikely that they could have taken these steps without the assistance of an external organization, in this case an NGO.

Linkages through a leading farmer. The case studies provide two examples of where large farmers have coordinated supply from other farmers in their areas. The coordinating role of these farmers may not be entirely altruistic; increasing quantities available for sale may open up market opportunities that would not otherwise exist. The lettuce case study

from Mindanao in the Philippines describes a value chain that involved close liaison with input suppliers, transporters and buyers. This was developed with donor assistance. As with the case of vegetable farmers in Thailand, the coordinating role of the leading farmer in Mindanao appeared to be the essential component of success and eventually led to a broadening of collaborative activities to cover a wider variety of crops. In Thailand, the chairman of the vegetable growers had to coordinate harvests to ensure that the correct quantities were supplied each day.

Linkages through cooperatives. Around the world there are notable examples of well-functioning marketing cooperatives. The very success of this relatively limited number of cooperatives is often used to justify further investment to try to replicate that success elsewhere. Unfortunately, with these honourable exceptions, the track record of cooperative development has often been disappointing. Reasons for this include the “nationalization” of cooperatives so that they become quasi-governmental bodies, often with a top-heavy hierarchical structure, and become used by politicians for political ends. Inadequate management skills, combined with a tendency to expand activities beyond the capacity of the management to manage; elite capture, even when the cooperative is nominally independent of government; and an inability to replicate the work rate, business acumen and social capital of the competing private sector are other factors. Cooperatives are often set up with donor assistance on the usually false premise that “excessive” margins within marketing channels provide the scope for farmer members to capture some of that value. Rarely is research carried out to examine this hypothesis in detail prior to donor interventions.³ As a consequence, the picture that emerges in many countries is of cooperatives struggling along with donor support, only to experience major difficulties once that support is withdrawn.

The case studies in Annex 1 have been selected to illustrate effective marketing linkage activities. But they also illustrate some of the problems that cooperatives face.⁴ In Tanzania, an NGO-supported association is successfully processing fruit juice. But two-thirds of the association’s costs are being met by the NGO and it is very unclear whether it can make the transition from project beneficiary to viable commercial enterprise. In Mali, a cooperative was established by an NGO to process and market shea butter. On completion of the project the activity, which had initially succeeded in increasing women’s incomes, appeared to be unsustainable, in part because the cooperative was unable to handle marketing functions that had always been handled by the NGO. A further example comes from Guatemala, where smallholders are members of a fresh vegetable cooperative that exports to the US and UK. The cooperative is now relatively successful but it benefited from subsidies and technical assistance for 14 years before achieving that success.

Farmer to agroprocessor. One of the challenges that processors face is that investment in buildings and equipment necessitates full utilization of that capacity. Processing is therefore not necessarily viable for crops that have a limited growing season, unless they can be stored for a considerable time. Two of the case studies in Annex 1 discuss processing of pineapple, which is a year-round crop, while others discuss processing of rice and oilseeds, which are storable crops. One study looks at processing of milk, which is available year-

³ The promotion of Cereal Banks in the Sahel region of Africa provides a good example of this.

⁴ Further examples can be found at: <http://www.fao.org/ag/ags/subjects/en/agmarket/linkages/coops.html>

Table 1: Types of farmer-market linkage

Type of linkage	Collective activity	Advantages for farmers	Disadvantages for farmers
Direct between farmers and traders	<ul style="list-style-type: none"> ➤ Farmers usually act on a one-to-one basis with traders; ➤ May work together informally to bulk-up produce to reduce costs and attract larger traders. 	<ul style="list-style-type: none"> ➤ Requires high level of trust but such trust likely to ensure long-term sustainability; ➤ Formal farmer organizations not usually needed; ➤ Traders may (rarely) provide training in production and handling. 	<ul style="list-style-type: none"> ➤ May need to accept short-term deferred payment; ➤ Limited access to high-value markets.
Direct between farmers and retailers (including restaurant chains) or their wholesalers	<ul style="list-style-type: none"> ➤ May require formal group structure, particularly when buyer does not want to deal with farmers individually. 	<ul style="list-style-type: none"> ➤ Reliable market at agreed price. 	<ul style="list-style-type: none"> ➤ Must meet variety, quality and safety specifications; ➤ Must be able to supply agreed quantities at all times. This may place farmers in conflict with social obligations; ➤ May have to accept deferred payment of up to 90 days.
Farmer to exporter	<ul style="list-style-type: none"> ➤ Often involves grouping of farmers. External technical assistance may be required. 	<ul style="list-style-type: none"> ➤ Potential high returns if quality can be achieved; ➤ Inputs, technical assistance, etc. may be supplied on credit; ➤ Exporter often provides transport and packaging. 	<ul style="list-style-type: none"> ➤ Export markets are inherently risky; ➤ Compliance with standards (e.g. organic; quality and traceability; fair trade) can be problematic, even with technical assistance.
Direct between farmers and agroprocessors	<ul style="list-style-type: none"> ➤ Farmer groups can bulk-up produce for collection by processor; ➤ Groups can facilitate supply of inputs and provision of technical assistance. 	<ul style="list-style-type: none"> ➤ May provide secure market at agreed price; ➤ Offers additional market in addition to fresh market; ➤ Inputs, technical assistance, etc. may be supplied on credit; ➤ Processor often provides transport; ➤ Potential for farmers to sell larger volumes. 	<ul style="list-style-type: none"> ➤ There may be an inadequate market for the processed products, thus jeopardizing sustainability; ➤ Must meet variety, quality and safety specifications; ➤ Open market price may be higher than that agreed with processor; ➤ Risk of delayed payments.

Type of linkage	Collective activity	Advantages for farmers	Disadvantages for farmers
Formal large-scale contract farming	<ul style="list-style-type: none"> ➤ Company may prefer to group farmers, formally or informally, for input and output marketing and extension; ➤ External assistance may be needed to support farmer groups. 	<ul style="list-style-type: none"> ➤ Inputs, technical assistance, etc. may be supplied on credit. In the case of long-gestation crops, such as oil palm, tree crops or sugar, credit is essential and may also be provided to meet subsistence expenses; ➤ Crop marketing organized by company. 	<ul style="list-style-type: none"> ➤ Companies often require external agency (e.g. bank) to finance credit provision; ➤ Frequent mistrust between farmers and companies and their employees; ➤ Contracted price lower than market price may lead to sales outside of the contract; ➤ Difficulties may be experienced if NGO withdraws.
Linkage promoted by leading farmer	<ul style="list-style-type: none"> ➤ Farmers usually function as informal group, coordinated by one or a few leading farmers. 	<ul style="list-style-type: none"> ➤ Farmers have output, and sometimes, input marketing taken care of; ➤ Greater negotiation power with larger quantities. 	<ul style="list-style-type: none"> ➤ Leading farmer may pull out of the venture; ➤ Payment may be deferred if buyers defer payment to leading farmer.
Linkages through cooperatives	<ul style="list-style-type: none"> ➤ Farmers may link directly with the cooperative or through groups. 	<ul style="list-style-type: none"> ➤ Inputs, technical assistance, etc. may be supplied on credit; ➤ Crop marketing, packaging, grading and storage and, sometimes, processing organized by cooperative; ➤ Potential for farmers to sell larger volumes. 	<ul style="list-style-type: none"> ➤ Cooperatives often depend on subsidies and external managerial assistance. Commercial activities can collapse when subsidies and assistance run out.

round, although production does fluctuate. Donor-inspired promotion of agroprocessing, now fortunately less common than in the past, often failed to take account of such seasonality issues. But mistakes continue to be made. The case study from Tanzania reports that an NGO established a new oilseed crushing facility, which was run by a company with no previous experience of the business. The venture folded after four years. Other studies highlight the importance of credit. While companies may, themselves, be able to finance farmer production of seasonal crops, they may be unable or reluctant to do so for crops of longer gestation, such as sugar (14 months) or tree crops (over 3 years). Companies therefore often seek partnership with banks, as described in the case study on sugar in Viet Nam.

Farmer to exporter. Three of the four case studies discussed in the relevant section of Annex 1 refer to cross-border exports (Myanmar - Peoples' Republic of China; Mozambique - Zimbabwe; Ecuador - Colombia). As such, they exhibit many of the characteristics of linkages between farmers and domestic traders. The studies from Myanmar and Ecuador, in particular, stress the high level of trust involved in business transactions, even if the trade extends beyond the country's borders. The case of Mozambique's exports of pineapples indicates the role that can be played by an external catalyst to identify new market potential and link farmers and traders who would not, otherwise, have made contact. Exports to more sophisticated markets than those described in these case studies can involve farmers in considerable complexity and risk. The high quality, safety and logistical standards demanded by importers (e.g. for organic certification, for EurepGAP or for the purposes of traceability) can be expensive and difficult, although not impossible, to achieve by smallholders. Farmers working on their own are unlikely to be able to develop a capacity to meet these standards. Linkages developed by commercial firms would thus appear essential for ongoing success in high-value markets, with companies providing technical training and on-farm monitoring.

Contract farming. As a form of agricultural production contract farming has been practised for many years. There are many advantages with this mode of production for companies. Linking with small farmers enables them to overcome land constraints that would be present if they attempted to produce everything themselves. It is often more efficient than plantation agriculture and certainly more politically acceptable. Offsetting this is the ever-present risk, for many crops, of extra-contractual marketing by farmers. There are also complications associated with ensuring that production is to the required standard, and in organizing the supply of inputs to farmers and the collection of outputs. In some cases contract farming companies have approached NGOs to organize farmer groups to receive inputs and collect outputs for supply to the factory. The case of a timber company in South Africa is an example of this. Other companies, such as the Transvaal Sugar Company, also in South Africa, carry out the organizing of farmers into groups themselves.

3 Identifying profitable markets

Activities to link farmers to markets adopt either the “top-down” approach, which involves identifying market demand and then seeking a group of farmers to satisfy it or the “bottom-up” approach of identifying farmers to work with and then finding markets that they could supply. Whatever approach is adopted, the availability of markets is a *sine qua non* for successful linkage development. This may appear to be a statement of the obvious but examples are already beginning to appear of activities initiated by NGOs and others that fail for lack of a reliable and sustainable market.

Markets are not enough to guarantee success. They must be capable of showing a profit for the entrepreneur who is linked to farmers and the farmers, in turn, will need to be assured of higher net incomes from entering into a new linkage than they could obtain from existing or alternative activities. At a very early stage estimates of farm profitability must be made. Such calculations should be fully costed, making realistic assumptions about production yields (i.e. using farm, not research, data) and ignoring any subsidies that the linking organization may be tempted to provide. Furthermore, it is not just sufficient to identify the market. Farmers need to be in a position to supply the market in terms of the quality required and the reliability of supply expected by the buyer. Their capacity to do this cannot be automatically assumed and will inevitably involve them in additional investments. “Linking” is thus only a small part of the task that those working with farmers have to undertake.

While there may be reservations about the applicability of some high-value export markets to small farmers, because of product safety and other requirements, it is clear that many new possibilities for market-oriented production are opening up. Most countries continue to experience high levels of urbanization, with growing urban markets being supplied by a smaller (at least in percentage terms) number of farmers. In countries with a rapidly growing middle class there are new opportunities to supply high-value food crops, with a consequent chance of higher farm profitability. Nevertheless, there is always risk attached to expansion of production or diversification into new products. Farmers need to be made aware of those risks and those working with farmers need to be able to assess how to minimize risks. In some cases linkage activities may contribute to farmer risks by promoting production beyond the absorption capacity of markets.⁵

A typical marketing paradox is that buyers, such as supermarkets and processors, complain about inadequate supply while farmers complain about lack of markets. Clearly the buyers have not been too active in seeking out new suppliers, while farmers have lacked the skills and resources to identify new markets and the ability to take advantage of identified markets through value addition activities such as grading, cleaning, sorting, packaging, bulking, and primary processing. Organizations working to link farmers to markets need to contact agrifood companies, traders, retailers and exporters and identify their product shortages. This should really be the first step of any programme to develop

⁵ This has for long been a problem associated with loans by the international financial institutions (e.g. the World Bank) for cash crop development.

linkages. To quote an expert working on a USAID project in Afghanistan: “We do nothing until we have identified a market!”⁶ Tools for carrying out market research in this context include those developed by CIAT and FAO.⁷

For many products supplied to world markets the market demand is not very great. Short-term price hikes often encourage NGOs to promote crops, only for prices to fall. Crops with a relatively short gestation period may be attractive to donors and NGOs because it is easy to show results quickly, but such crops often have limited demand and experience frequent price fluctuations. NGOs promoted vanilla development in Uganda in response to good prices caused by bad harvests in Madagascar, the major world vanilla producer. When the Madagascar harvest recovered, prices became less attractive and the NGOs investigated the potential of passion fruit, another crop subject to significant price fluctuations on world markets.

Export markets, particularly for high-value, perishable products, can be unreliable and very price competitive. Subject to guarantees regarding quality, supply, traceability, etc., and their own need to ensure diversified supply sources, buyers usually purchase on the basis of price. A company or group of farmers can lose an export market overnight if a cheaper supplier comes along or if short-term quality problems are experienced. Moreover, increasingly stringent rules, largely imposed by the private sector rather than by governments, are making it more and more difficult for small farmers to compete. Farmers, formerly required to meet only quality standards, are now expected to meet safety requirements and are in future likely to have to comply with a range of social, environmental and ethical criteria. Suppliers to industrialized countries are faced with a continuous battle to keep up with prevailing standards that may threaten their position in the market.⁸

Successful market linkage developments for products with a relatively limited demand, or even for widely traded commodities with a large demand, may lead to the “fallacy of composition” or the “adding up” effect, with market potential being affected by the “over-exuberance of market participants”.⁹ That is, while it may be profitable for, say, Kenya to promote cut flower exports it may not be profitable for Ethiopia, Uganda, Zambia, Zimbabwe and others to follow suit because there will be just too many cut flowers available. Thus, while linking farmers to markets does offer considerable potential, development organizations should not get carried away into thinking that this is the solution to all rural development problems.

Some ways of responding to market constraints include:

- *niche marketing.* Egypt supplies strawberries to Italy, and the rest of Europe, for a brief period in December to January after Italian supplies are finished. By January the fruit is imported from Morocco, by early February it is imported from Spain and by March Italian strawberries are available from Sicily. Strawberry exports from Egypt are only profitable because this niche period is available when others cannot

⁶ Neils, 2006.

⁷ see Ferris *et al.*, 2006; Shepherd, 2003.

⁸ Henson, 2007

⁹ *ibid.*

supply at a better price. This is just one example of where countries and companies have been able to match supply potential to demand. Identification of such niches is an important marketing tool and is not limited to international trade. For example, in countries with widely varying production environments, producers in one zone can take profitable advantage of the inability of farmers in other areas to supply for a particular period. An emerging constraint for international niche marketing may be the growing concern about the impact of air travel on global warming. Questions are already being asked about the continued viability or desirability of air freighting fresh produce. This concern particularly applies to seasonal produce, with the argument being made that there is no real need for consumers to have year-round access to all products, at the expense of the environment. The whole subject of “food miles” is likely to attract increasing attention in the years to come and could put at risk efforts to further develop fruit and vegetable exports.

- *organic product marketing.* While organics do offer considerable and growing potential for market development they are, to some extent, also constrained by limited market demand. Many developing countries are in a strong position to supply organic produce, due to existing production practices that involve low, or no, chemical use, but arrangements for certification can be very costly. The extent to which supply of organic products to world markets by groups of small farmers can be sustainable therefore merits further research.¹⁰ As demand for organics grows, there is evidence that it is becoming increasingly attractive for larger, commercial farms. The economies of scale of such farms, combined with their capacity in some cases to meet all of the needs of a particular buyer, may well offer small farmers major competition. NGOs should avoid providing unsustainable subsidies for short-term coverage of certification costs, unless it is clear that farmers would be in a position to meet such costs in the long run. It is not always necessary to put emphasis on export markets. Some developing country consumers are now demanding, and are prepared to pay for, organic produce, and this trend is likely to continue.

- *fair trade.* Fair trade produce was initiated by NGOs, who argued that farmers were receiving an unfair proportion of the final consumer price. A widespread reaction to low producer prices for export commodities was to seek to circumvent the main trading channels through fair trade arrangements. Often such products were initially sold through charity shops in countries of the West. Viewed globally, such fair trade arrangements cannot solve the basic problem of low commodity prices because, to the extent that they encourage production, they also stimulate output, driving international prices lower and harming all but those producers participating in the arrangements.¹¹ More recently, the concept has been used as a marketing tool by Western supermarket chains and with this has come a growing interest in the conditions (especially social and environmental) under which sourcing of commodities takes place, whether produced on estates or by small-scale farmers. Usually, the costs of compliance with social and other ethical codes are borne by

¹⁰ Gruère *et al.*, 2006.

¹¹ Westlake, 2005; The Economist, 2006.

the producer. Costs may escalate where supply chains involve producers who are dispersed over a wide geographical area and those with the capacity to bear these costs are typically larger farms or large cooperatives grouping small farmers, such as coffee growers in Central America. Compliance with fair trade rules and market linkages often involves significant NGO support and it is unclear whether groups of the neediest farmers can access such markets sustainably on their own. Indeed the very popularity of fair trade may jeopardize small farmer involvement, in that supermarket chains want to be in a position to offer the same products in all of their stores. This means that suppliers increasingly have to offer larger quantities.

- *diversifying export markets.* Some Western markets report having more supplies offered, particularly of horticultural produce, than they can possibly absorb. There is, moreover, a tendency for supermarkets to consolidate suppliers in order to facilitate chain coordination and quality control measures. Scope may exist, however, to develop sales to relatively new and expanding markets, such as Eastern Europe, the Middle East and East Asia.¹² Not only are these markets growing but, in the short term at least, their standards may be less onerous than those applied in the West.
- *brand promotion.* Farmers are responding to low commodity prices by marketing clearly identifiable brands, frequently with the assistance of donors and NGOs. Some of these may be organic or fair trade brands, but others may simply offer quality or taste attributes that require no certification. Additionally, there is increasing interest in the geographic origin of produce and the development of brands that reflect origin. Good marketing skills can develop profitable markets but marketing can be expensive and may not be viable for small farmers unless subsidized by linking organizations.
- *developing the local market.* Among development agencies and their government counterparts there tends to be an emphasis on seeking profitable markets overseas rather than domestically, despite the fact that the successful development of export markets is expensive and complex, particularly where small farmers are involved. The returns from many donor efforts to develop the capacity to supply international markets appear questionable and could be usefully evaluated. Market research is often carried out before there are clear indications that the production capacity would provide the quantities and consistency of supply required by international buyers. Successful export market development usually owes more to an active private sector working within a supportive policy and institutional environment than it does to donor intervention.

In many developing countries, on the other hand, urban high-value markets appear to offer considerable potential.¹³ Stores are often selling imported products that could be produced profitably in-country. Additionally, some projects have had success with developing markets for native varieties, such as potatoes from the Andes or millets in India.¹⁴ Even in those countries with a flourishing export sector

¹² Humphrey, 2006

¹³ Henson, 2007

¹⁴ See Devaux, *et al.*, 2006; Grùère *et al.*, 2006.

local demand for crops such as horticultural produce, staples and oilseeds, as well as livestock and dairy products, invariably outstrips export sales by a significant percentage, and there is often considerable scope for increasing sales to local markets. In Africa, demand for food products is increasing by 3-4 percent a year and this offers a more accessible and sustainable market for many smallholders than do high-value export crops.¹⁵

- *encouraging local consumption.* Allied to moves to develop local markets are efforts to promote domestic consumption. These may not appear an attractive activity for NGOs because it is difficult for them to demonstrate clearly the benefits that have been achieved. But activities that encourage, for example, the consumption of fruits and vegetables or that promote domestic alternatives to imported products can benefit a large number of farmers.¹⁶ This could be done within the framework of the WHO/FAO Fruit and Vegetable Initiative,¹⁷ or through school-lunch programmes.
- *adding value.* There is considerable scope for adding value to agricultural production. On international markets, for example, the growing demand for “convenience” foods has created a market for pre-cut salads and fruits. On domestic markets of developing countries scope exists for producing dairy products from milk, flours from grains and root crops, juices and jams from fruits, etc., or simply from cleaning or grading products. However, some caution must be exercised. Small-scale enterprises frequently fail. One study in Brazil found that one half of new agroprocessing ventures failed within a few years.¹⁸ Adding value to products at farm level can require significant investment and, without guaranteed returns, this can increase the level of risk faced by farmers.¹⁹ The growth of supermarkets in most regions may also pose some threats, as supermarket chains frequently want to deal with companies that can offer a wide range of products.²⁰ NGOs and others sometimes approach agroprocessing from a supply-led rather than market-led perspective. That is, they decide to promote processing because of an abundance of raw material rather than because of a clearly identified market for the processed products. A further error is to induce farmers to become agroprocessing entrepreneurs. Lacking capital, education and management skills, it is almost impossible for small farmers to successfully manage such ventures.

Many smaller countries have relatively few or even no sizeable agroprocessors. While those companies that do exist may presently have surplus capacity, that capacity, and thus their ability to absorb additional production, is usually limited. Promotion of small and medium enterprises (SMEs) is seen by governments and donors as one way to encourage competition and increase value addition but this may be constrained by a variety of factors, such as the lack of a risk-taking culture, lack of entrepreneurial skills, credit constraints, high cost of imported processing equipment and packaging materials, poor infrastructure and low demand. The case

¹⁵ Hazell, 2006.

¹⁶ Technoserve, 2004

¹⁷ <http://www.who.int/dietphysicalactivity/fruit/en/index.html>

¹⁸ Da Silva, personal communication.

¹⁹ Barham, 2006.

²⁰ Reardon and Timmer, 2006.

of oilseeds in Tanzania, described in Annex 1, indicates the danger faced when NGOs try to promote agroprocessing by working with a “start-up” company.

4 Factors affecting the success of linkages

Introduction

This chapter draws on the experience of FAO and many others in order to identify those factors which are most likely to lead to successful linkages of farmers to more commercial market opportunities. While many of the points discussed appear just as valid for linkages developed directly by the private sector, emphasis is put on linkage activities carried out by NGOs, and by donors working through NGOs, consulting firms and other agencies. The following issues are addressed:

- Farmers can face significant problems in moving from *ad hoc* sales to becoming more market-oriented. Linking organizations need to be aware of these and consider ways of addressing them;
- The private sector must play a crucial role. There is a need to overcome the suspicion of the private sector that exists in development organizations working in developing countries;
- Related to this, the NGO or other organization must have a clear capacity to develop commercial linkages. Training of NGO staff to undertake these relatively new activities will frequently be required;
- Subsidies and direct provision of services, such as transport to market, are generally incompatible with commercially sustainable ventures. Past interventions by NGOs and donors have often relied heavily on subsidies but there is scant evidence that this leads to sustainability;
- Business relations inevitably depend on the existence of mutual trust between the parties involved and linkage activities have to pay attention to the development of such trust;
- While organization of farmers into groups is not always essential and some groups, such as cooperatives, have a poor track record, there are strong theoretical advantages to group activities. There is some limited evidence regarding the types of group that have the best chance of success;
- Contracts between farmers and buyers can be either written or oral. Contract negotiation is an important skill for farmers to develop;
- Finance is an essential component of most linkage activities. Where this cannot be provided by the buyer, linkages to suitable financial institutions need to be developed;
- Linking organizations need to address sustainability from the outset;
- Similarly, the relatively small number of farmers who are presently benefiting from linkage activities dictates that ways in which a greater number of farmers can benefit need to be addressed.

Initiating linkages

The first step with all linkage development is to identify the type of linkage required and the level of external support that may be necessary. It is important to balance the level of support offered with the amount of assistance really required. Linkages can be jeopardised both by too little and too much support. Simple steps by farmers to improve linkages with traders by bulking up produce may require no more than someone to make the initial suggestion and act as the honest broker. An extension worker may be able to carry out this role. At a slightly more complex level, linkages with an urban retailer, restaurant or processor may be something that a local NGO or a farmer association could develop. More sophisticated linkages may require support from several agencies and many activities do involve a multiplicity of facilitators. The donor or donors provide technical inputs; several NGOs may work with farmers in different areas; another agency may do market studies and/or work with processors; a microfinance institution may be involved, and government agencies will almost certainly play a role. In some projects up to twelve partners have taken part. While agency specialization can provide significant advantages there are risks if the success of a venture depends on the continued involvement of all parties and one or two decide to withdraw prematurely. Having multiple partners also increases the potential for conflicts and may lead to a lack of focus.

The choice of product to promote must, of course, be based on market demand. But market demand is not in itself sufficient to make the product suitable for all farmers. The choice must take into account farmer location, education levels, social structure, available infrastructure, farm size, agronomic suitability of the land, the likelihood of pests and disease, the land tenure situation, farmers' assets, capacity to establish new enterprises, access to finance and capacity to use that finance profitably, technological requirements and access to extension advice. It also needs to take into account the capacity of farmers to adapt to new systems. Even apparently simple activities, such as grading produce where no grading has been done in the past, can present problems.

From the farmers' perspective, the lack of or inadequate access to production or post-harvest technology; the lack of or limited access to market information and intelligence on prices and alternative buyers and farmers' own limited negotiating or bargaining skills can be considered as constraints to initiating linkages. In planning linkages, business models need to be kept as simple as possible and worst-case scenarios also need to be reviewed from the outset. If, for example, produce is sold on consignment there is the possibility that farmers will not cover their costs, with the likelihood that the linkage will break down unless farmers fully understand the circumstances. Rejection of produce on quality grounds is a common cause of friction in contractual arrangements.

Producing for the market certainly requires a completely different approach to the occasional sale of subsistence surpluses and it is important to confirm from the outset that farmers will be able to meet buyer requirements. Farmers need to supply on a consistent and reliable basis. Processing factories have a commitment to their buyers to supply the finished products and so require a reliable supply of raw materials. Supermarkets, whether local or overseas, need to have a full range of produce available for their customers at all times. There is strong evidence that small-scale farmers face difficulties in providing

consistent supply, even before they are required to meet sophisticated safety standards and good commercial practices. Farmers wishing to supply supermarkets or agroprocessors must accept that the traditional religious or social obligations of some societies, which in the past may have led to the suspension of most on-farm operations for a couple of weeks, cannot now stand in the way of a commitment to supply supermarkets 365 days of the year and processing companies when required by the buyers. Farmers must also accept that a percentage of their produce may be found to be of unacceptable quality and that they will have to make arrangements to dispose of it through other channels (if they exist) at lower prices, or even to throw it away.

Farmers tend, for very sound reasons, to be risk averse but supplying processors or retailers successfully often requires a willingness to make risky investments in production and post-harvest equipment, to plant new crops or varieties, to follow approved crop rotation practices and, in the long run, to concentrate on just a few crops. In many cases the investments are asset-specific and it requires considerable trust on the part of the farmer to make such investments or to take on the required debt. Technologies promoted by NGOs and others need to be viable for the type of farmer they are working with, and should not excessively increase the vulnerability of farmers to external shocks.

Studies of farmer-to-market linkages often talk of the need to promote entrepreneurial capabilities of farmers. This does raise the question of whether someone can be taught to be an entrepreneur or whether such capacity building can only assist those who already have an entrepreneurial instinct to become better managers. It may be unrealistic to expect people living in rural areas to suddenly become entrepreneurs. However, some linkage projects, particularly those with a “pro-poor” orientation, try to go beyond the immediate goal of improving rural incomes to that of enabling rural producers to become “chain owners”. This may call for farmers to become involved in a range of value-adding activities, including produce preparation and processing, storage, transport and, sometimes, retail sale. While direct sale to consumers in urban areas by peri-urban producers should often be encouraged, it is questionable whether vertical integration of this type should be promoted for most farmers and highly debatable whether (1) most farmers have now or are likely to have the capacity to manage the entire chain and (2) even if they could, such a move would be really profitable for them.

Working with the private sector

Although several international NGOs have developed a strong commercial focus, some donor- and NGO-driven projects, while following policies that implicitly recognize the essential role of the private sector, do not necessarily translate these policies into sound practices. There remains a residual hostility to the private sector. This can lead the linking organizations to seek to establish alternative marketing channels. Examples of where such alternative channels have proved to be sustainable are difficult to find. Despite the perceived exploitative nature of commercial intermediaries, farmer groups or cooperatives have always found it difficult to carry out marketing efficiently in competition with the private sector. Traders often have informal credit linkages with farmers and bypassing the trader means not only finding new marketing channels but also identifying new credit sources. Existing social capital between farmers and traders provides a powerful incentive

for trying to build on that relationship rather than attempting to destroy it. Many traders have the capacity to work with farmers in a low-cost and culturally appropriate manner in order to advise on quality issues, to increase supply and to reduce transactions costs.²¹ Annex 1 highlights several examples of where traders have worked with farmers to upgrade their skills, both directly and with assistance from NGOs.

As also shown by the case studies in Annex 1, the private sector can be the major driver for sustainable linkages and often develops commercial linkages without the involvement of a third party. Indeed, farmer organizations promoted by the private sector may be more efficient than those promoted by NGOs.²² However, for a company this may require going beyond pure commerce and entering into development. It may necessitate establishment of a research department, extension service, field trials and farmer training. An interesting project to help farmers to integrate more efficiently into existing marketing channels was implemented in Latin America by FAO. Carried out in four countries (Brazil, Chile, Mexico, Peru), the objectives of the project were to train farmers in order to help them to identify better the stakeholders and their roles in the agrifood chains, to upgrade their negotiation skills and to prepare them for business roundtables to establish partnerships.²³

Suspicion of intermediaries should not blind governments, donors and NGOs to the fact that small traders are often just as poor as the farmers they serve and just as worthy of support to improve supply chain linkages. There is already much collaboration between traders, either informally or on a formal basis through their associations,²⁴ and there appears to be scope for further such collaboration. A recent study of small-scale milk traders in Kenya identified harassment by officials as being a major reason for the traders deciding to carry out group activities. An unintended, but beneficial, side effect of this collaboration was that grouped traders were able to access training. This had positive results as traders working in groups were found to have higher incomes than ungrouped traders.²⁵ One problem with trader collaboration is that while working together to achieve economies of scale, identify markets and reduce risk can make a lot of sense for traders, it does open them up to allegations of cartel-like behaviour.

Capacity of the linking organization is vital

While some international NGOs and other development organizations have made the transition from a production-led approach to more of a market-led orientation, many continue to lack the necessary business approach to enable them to advise farmers. NGOs, themselves, usually acknowledge this fact. At an FAO workshop for NGOs in Eastern and Southern Africa many participants highlighted the fact that they required further institutional development and training before they could work well to link the private sector with rural communities. At a similar FAO workshop for NGOs in Southeast Asia, participants noted that while international NGOs have some understanding of marketing

²¹ Wheatley *et al.*, 2003.

²² Hellin *et al.*, 2006.

²³ Piñones *et al.* 2006.

²⁴ Shepherd, 2005.

²⁵ Sinja *et al.*, 2006.

issues, the local NGOs who are their partners at field level rarely do. Difficulty of attracting staff with the right commercial orientation was also highlighted.

Areas identified by NGOs for training have included management, contract negotiation, market research, supply chain analysis, use of basic business documentation, such as delivery and consignment notes, and farm enterprise decision tools, such as crop budgets. Linking organizations therefore need to assess their own skill levels in agro-enterprise development and that of their partners and identify their training requirements. Understanding the way the private sector functions and the problems it faces is essential if NGOs and others are to link farmers to the private sector. Ideally, NGO staff involved in such work should have prior private sector experience, as it is not easy to train people to appreciate the way the commercial sector functions. That said, it has to be recognized that in many countries there are relatively few people with the requisite commercial skills who would also be able to meet the other employment criteria of NGOs.

Avoiding direct service provision and subsidies

As previously noted, with a background working on relief programmes it has taken time for some NGOs to appreciate that long-term commercial success is not achieved by doing almost everything for farmers, as might apply to a relief programme, but by facilitating farmers to do things for themselves and to enable them to link up with appropriate service providers. Direct service provision, such as providing transport to move farmers' produce to market, distributing inputs and providing credit can achieve short-term benefits for farmers but will offer no long-term sustainability and, by undermining existing commercial services or providing no incentive for them to set up, may well result in farmers being worse off when the project ends. Moreover, it is not easy to make the transfer from subsidized direct service provision to commercial services. A problem of this nature was experienced by a USAID coffee-development project in Haiti. The programme initially faced confusion between the origin of the federation of farmer associations as a subsidized development project and the need for its role to become that of a going concern. In addition, its non-commercial pricing structure had not encouraged quality control or efficient cost management as farmers had perceived no link between coffee quality and financial reward.²⁶

There is a clear understanding among many of those now seeking to promote improved linkages that there should be no significant subsidies to farmers. Linking organizations should be viewed by farmers as agencies for improving their marketing linkages through group action and not as sources of handouts. Projects that involve subsidized assistance usually lead to problems when farmers have to meet the full costs after external support has been withdrawn. Farmers should not be encouraged to take free inputs if they are capable of entering into a profitable business arrangement and linkages should not be promoted if they cannot be profitable for farmers. Where subsidies are applied, ownership of an activity by farmers is generally weak as subsidies tend to reduce responsibility and reward failure. Linking organizations should, instead, develop a business plan that can enable farmers to buy inputs on commercial credit terms. In most cases free provision of equipment for small-scale agroprocessing should also be avoided as this

²⁶ Dunnington, 2006.

creates a false impression of the profitability of a venture, jeopardizes sustainability and may encourage a misallocation of productive resources.

Enterprise development is inherently risky, as evidenced by the high number of failures among private-sector start ups. Farmer groups therefore need assistance to make decisions about whether to accept a risk or not. Use of external resources can legitimately be considered for facilitating this process of business development. Grants to enable groups to carry out local market assessment, prepare business plans, experiment on a particular product, and strengthen skills in areas such as group management, bookkeeping and postharvest handling are usually effective uses of development funds.

Although the private sector would be the first to criticize NGOs who provide hand-outs to farmers, companies are also not immune from taking advantage of “incentives” when offered. Loans by the international financial institutions are often targeted at providing subsidized assistance to specified sectors by, for example, allocating funds for lending to outgrowers at favourable rates or by establishing research facilities targeted at a particular crop. Such efforts are often counterproductive,²⁷ as they encourage company resources to be allocated in order to take advantage of the subsidy rather than because the activity is inherently profitable.

Mutual trust is essential

Trust has been an essential ingredient of business dealings since people started to trade with each other. A significant proportion of agricultural marketing transactions between farmers and traders is based on trust: traders trust farmers to repay loans while farmers trust traders to pay for the products they sell to them, deferred payment being a common practice.²⁸ Several of the case studies reported in Annex 1 stress the importance of mutual trust in the establishment and continuation of linkages. This seems to have been achieved most easily through those linkages involving relatively small private-sector operators. Interestingly, several of these trust-based linkages involve cross-border trade. Arrangements between farmers and buyers may be carried out with only a verbal contract. In the Myanmar case farmers consign produce to the Chinese border and trust both the border trader to remit the funds and the truck driver to deliver them safely.

In contrast to more traditional relationships, relatively new linkages are usually characterised by transactions between parties who are more remote from each other and have had little or no prior contact. Lacking the underpinning of trust with social capital, neither party has a strong social incentive to honour an agreement. While there may be compelling economic reasons to honour contractual arrangements, i.e. that it is in the best economic interests of both partners, these may be less apparent to farmers than the social obligations of traditional systems. Moreover, in many countries farmers have in the past benefited from government handouts and from agricultural credit that they felt under no obligation to repay. In some cases such arrangements continue. This does not create the right framework for farmers to appreciate the need to honour commercial commitments.

²⁷ Minot and Ngigi, 2004.

²⁸ Shepherd, 2004.

How, then, can suspicion between parties to new transactions be overcome? The case study from the Malawian paprika industry (Annex 1) provides one approach, with the company arranging for local farmers to be elected by their peers as Field Assistants with, *inter alia*, responsibility for monitoring the contract. A similar arrangement has been reported in Thailand.²⁹ Confidence that problems can be resolved by independent arbitration may also improve relationships and the development of industry associations with membership drawn from farmer and company representatives may be useful for this purpose. Evidence from some studies suggests that prompt cash payments by companies may do much to avoid mistrust. Trust is also boosted by perceptions of a partner's commitment to the business. If a company invests in plant facilities, warehouses, etc., it tends to be seen as committed to a long-term presence and thus becomes more "trustworthy".

Trust can also be promoted by meetings between farmers and the buyers. The description of Ugandan potato farmers in Annex 1 notes that marketing arrangements were boosted by a visit of the fast-food restaurant manager to the farms. A programme in Peru, also working with potato farmers, organized meetings for those farmers at a supermarket, a wholesale market and a potato processing plant.³⁰

"Side-selling", "pole vaulting" and "extra-contractual marketing" are all terms used to describe the failure of farmers to honour contractual agreements, whether they are formal contracts where the sponsoring company has made up-front investments in farm inputs and, perhaps, other cash advances, or informal arrangements to supply agroprocessors. A related issue to that of side-selling is where farmers seek to take advantage of contracted prices that are higher than market prices by buying crops from other farmers for resale to the company. Inevitably these crops are not produced to the required specifications. Faced by such problems the tendency is often for companies to lose interest in developing sustainable relationships with farmers; only the larger companies have the time and resources to try to work with farmers and their groups to address problems.

From the perspective of a farmer who has limited income-earning opportunities and is usually in urgent need of cash, side-selling for higher prices than those agreed with the contractor may appear to make sense. It is difficult for the farmer to overcome this "jackpot" mentality and to understand the potential benefits of establishing a long-term arrangement with a reliable buyer, if that buyer is paying what appear to be low prices. Considerable work is therefore required of extension workers and other service providers to develop trust between the various parties. Contracts should always have flexibility for renegotiation if prices or costs change too much.

Group formation, structure and legislation

Notwithstanding the fact that farmer group formation has had a mixed success to date, with the resources required to achieve success reducing prospects for replication, it is generally felt by linking organizations that development of groups is necessary to enable farmers to make the transition from a production to a market orientation. Farmers can

²⁹ Cadilhon, J., personal communication.

³⁰ Devaux *et al.*, 2006.

access extension and inputs more easily, improve produce quality, increase quantity and achieve economies of scale, and increase bargaining power with buyers. From the point of view of a company, provision of credit and inputs through groups can reinforce peer pressure and can discourage non-compliance with contractual obligations. Working through groups can also reduce the costs associated with supplying inputs, collecting outputs, providing extension advice and negotiating contracts. Nevertheless, it should be noted that several of the successful direct linkages between the private sector and farmers reported in Annex 1 have been initiated by the private sector without group formation.

Market-oriented collective action has potential when it overcomes the high transaction costs that would be faced by farmers acting individually. While awareness of the potential benefits of such collective action often exists among farmers, this awareness is often not sufficient to overcome their suspicions about working with each other. Implementing group linkage activities is thus easier when farmers are used to collaborating. Previous experience with group actions, such as Savings and Loans Clubs, appears to be positively related to group marketing success. Sharing other activities engenders trust between members. In Indonesia, for example, NGOs assisting farmers to market mandarins have been able to build on informal social or church groups and on the fact that many farmers operate informal groups for mutual assistance during harvest.³¹

The approach of organizing farmers into groups has the best chance of success when farmers perceive that obvious economic benefits are derived from group activities. A clear indication of potential benefits should be a precondition for such work to begin. For this reason actions need to be taken to develop the economic performance of a group, through both production intensification and marketing improvement, at the same time as work is underway on its institutional and organizational aspects.³² These benefits must be sustainable and not derived from the fact that membership of a group entitles the farmer to subsidized assistance from the NGO or donor. Furthermore, NGOs should see group development as an essential component of the development of a market-oriented approach among farmers and not just as a convenient vehicle for delivering inputs and carrying out activities.

The presence of leadership and management skills appears vital for the success of groups. Without such skills a group may have little chance of long-term success. There is some evidence for this conclusion. In Tanzania, for example, a study found that strong leaders able to carry out contract farming negotiations were more critical to success than group cohesiveness.³³ In Mali, producer organizations were established in conjunction with rice irrigation schemes. One estimate suggested that by 2005 only two percent of the organizations were working correctly. This was attributed to serious governance and management problems.³⁴ However, it is not clear how NGOs and others promoting collective action would be able to assess in advance the availability of leadership and other skills among farmers.

³¹ Wei *et al.*, 2003.

³² One approach may be to develop a short-term crop to demonstrate immediate economic benefits at the same time as developing crops with a longer gestation period.

³³ Barhan, 2006.

³⁴ Coulter, 2006.

There also appears to be a strong relationship between resources available to farmers, such as land, water and other assets, and group success. Collective access to markets for the poorest farmers who lack education, numeric skills, etc. is improbable and thus some form of targeting is required to ensure that farmers have the minimum qualities for successful intervention. Linking organizations are often faced with a basic contradiction. They want to work with poor farmers who have the potential to supply markets. But poor farmers usually lack crops with market potential and have poor market access because of road conditions and other constraints.³⁵

Linking organizations use a whole gamut of terms to refer to the groups they organize. Commodity interest groups, district farmer networks, producer organizations and farmer associations are some of the terms used in just one workshop. However, whatever the group is called the group development process should be bottom up and groups should be member owned and democratically operated. Groups will almost certainly require a set of rules and regulations, or by-laws, to govern their operations, although it is often difficult to get commitment of farmers to follow agreed rules and enforce compliance with them. Commitment to groups seems to be positively related to initial start-up capital and to the level of membership fees,³⁶ but is also likely to be directly related to whether farmers perceive that the benefits of compliance outweigh the costs. There is a need to achieve a balance between building up group assets and ensuring that farmers do not become disgruntled because they receive inadequate returns.

It is important that, from the outset, groups have a business orientation. Farmer groups that do not handle money but solely organize farmers to carry out activities on a group basis (e.g. assembling produce in one place to meet a trader or combining orders for inputs) may have the best chance of long-term sustainability, because there is less possibility that one of the group members will run off with the assets. However, significant expansion of an enterprise requires that groups should be able to carry out financial transactions. For example, the farmers' group in Uganda that developed linkages to supply potatoes to a fast-food restaurant had to open a bank account, as payment was by post-dated cheque. Groups will often have to register for taxation purposes and be in a position to provide consignment notes and official invoices. In many countries the legal status of farmer groups remains to be clarified and thus they are unable to carry out financial transactions. In Kenya, for example, producer marketing groups are required to register as self-help groups and therefore lack legal status as business enterprises.³⁷ In Colombia, groups have tended to register as non-profit businesses in order to take advantage of low registration fees and tax incentives but such an organizational structure may become an obstacle to long-term development.³⁸ In some other countries there have been moves to force farmer groups or associations to be registered as cooperatives, despite the fact that there appears to be a preference among groups to have the status of limited liability companies. There is often confusion about the exact legal status of cooperatives and how best groups can register as such. In general, hierarchical cooperative structures would appear to represent an unnecessary distraction for farmer groups.

³⁵ Barham, 2006.

³⁶ Shiferaw *et al.*, 2006.

³⁷ Shiferaw *et al.*, 2006.

³⁸ González *et al.*, 2006.

Heterogeneous groups seem less likely to succeed than homogeneous ones. Group activities seem to work best when all members share benefits equally. Rich and poor farmers do not always combine well because the more affluent are likely to benefit more. However, this depends on the culture of the particular society. Groups may fail because of a lack of coherence with pre-existing hierarchical structures.³⁹ The make-up of groups also needs to take into account gender roles within the supply chain. For example, where women carry out primary processing and men take charge of marketing there may be a need to establish two separate groups. There is some evidence that small groups tend to work better than large ones, and that larger groups have more need of external support. Where a large number of farmers are involved they should perhaps be divided into smaller groups of around 20-30 people. Evidence suggests that this enhances group cohesion and sustainability.⁴⁰ However, the challenge is really to determine an effective group size that is big enough to exploit economies of scale and market potential without causing conflicts and where the benefits achieved by individual farmers outweigh the costs of compliance with collective rules and norms.⁴¹ With very small groups, producer associations or cooperatives there is a distinct danger that small volumes and low margins will necessitate ongoing subsidies to cover operating costs and, therefore, that such models will not prove to be replicable.⁴²

It must be recognized that farmers incur hidden costs as well as potential benefits from group activities. These need to be borne in mind when planning group formation and the potential costs should be explained in advance to farmers. Such costs include loss of freedom to market produce when and to whom they want. Additionally, there is the opportunity cost of time spent in meetings and in communication with other group members, as well as the costs of ensuring that officers and members of the group comply with its by-laws.⁴³

Capture of groups by elites can be a problem. In some cases the elites establish groups themselves in order to take advantage of free or subsidized assistance on offer from donors or governments, as was the case with a recent World Bank loan to Zambia where resources were allocated to groups to build community stores but few, if any, of the stores ended up being used for the intended purposes.⁴⁴ Cooperatives or groups established by donors or NGOs have been hijacked by politicians or “big men”.⁴⁵ Even without elite capture, groups may often be formed solely to take advantage of subsidies, as noted in the case of maize farmers in Mexico.⁴⁶

The capacity of farmers to manage business-oriented groups successfully, or to employ qualified personnel to do this, remains problematic and there are many experiences to suggest that this is likely to be the major hurdle to overcome. Where there are doubts about the ability of farmers, even with training, to manage their own groups it is almost certainly better to consider alternative approaches. Integrating farmers more efficiently into

³⁹ Coulter, 2006.

⁴⁰ Stringfellow *et al.*, 1997.

⁴¹ Shiferaw *et al.*, 2006.

⁴² Hellin *et al.*, 2006.

⁴³ Coulter, 2006.

⁴⁴ Shepherd, field observations

⁴⁵ Coulter, 2006.

⁴⁶ Hellin *et al.*, 2006.

existing local marketing channels, rather than trying to bypass those channels, is one approach.

Contract negotiation and contract specifications

One key factor affecting sustainability of market linkages is risk management and the question of who bears the risk under contractual arrangements. Mitigating risk is one of the most important motivations for contracting, while perception of who bears the risk is an important factor affecting the sustainability of contractual relations. Some risk sources can be known *a priori* and their sharing among the parties can be negotiated, but many sources of risk cannot be foreseen or fully covered by contracts. Strategies are needed to cope with unexpected events that otherwise could undermine the contractual relationship and jeopardize the livelihoods of the contracting parties. For example, in the case of known risks, or even in the case of so called *force majeure* events, insurance mechanisms might be developed. For circumstances that cannot be foreseen, flexible contract arrangements with the potential for renegotiation are desirable.⁴⁷ In some cases contracts are seen just as tangible proof of business rules that are based primarily on trust and information transparency.⁴⁸ However, arbitration mechanisms also need to be put in place to resolve disputes.

Basic guidelines on contract specification are provided in the contract farming literature.⁴⁹ A “rules of thumb” checklist for contract design, based on lessons from contracting in Danish agriculture, has been introduced.⁵⁰ Many of the problems and sources of risk could be addressed through more innovative and appropriate contract specifications. Many contracts are unsuitable when first developed and are improved through trial and error over a period of several years. Systematic attention is needed to identify appropriate contract specifications for different needs and circumstances. There would appear to be a related need for capacity building in contract negotiation and compliance. Successful contract negotiation requires that farmers are not only good negotiators but also that they have sound background information to enable them to negotiate. This includes knowledge of their own costs of production, which requires record keeping and gross margin analysis skills, and of prevailing market prices and how to convert these to farmgate prices.

Expectations, from both sides, must be realistic, which is not always the case. Everybody must understand the terms of a contract. Farmers can face significant difficulties with this and an important role for NGOs and others is therefore to make sure that the contract is understood. Farmers also need to have a good appreciation of the risks that the contractor faces and an understanding of the implication of those risks for themselves. Activities must be clearly specified with a time schedule. Under contractual arrangements farmers have to be able to synchronise production to ensure that the product is available when the agroprocessor, retailer or fast-food restaurant wants to receive it. This often requires the ability to work to strict planting schedules that specify planting material availability, planting dates, amounts to be planted, harvest date and expected yield.

⁴⁷ Da Silva, 2005.

⁴⁸ Cadilhon *et al.*, 2006.

⁴⁹ see, e.g., Eaton and Shepherd, 2001.

⁵⁰ Bogetof and Olesen, 2002.

Financing

Limited access to financial services is a major problem for farmers and certainly affects their ability to take advantage of market-oriented production opportunities. A study of producer marketing groups in Kenya found that lack of credit was *the* major constraint to group success.⁵¹ Several NGOs see an important component of an exit strategy to be the development of the capacity of farmers to save part of the income generated by market-oriented production. They have thus encouraged farmer groups to develop savings schemes and to link to microfinance organizations. Saving is one way to effectively cushion against risk.

The availability of suitable financing arrangements must be considered at an early stage. Companies seeking to develop contract farming arrangements with farmers, for example, need to address how best those farmers can fund their start-up and ongoing costs. In the case of some tree crops, such as oil palm, the investment can be considerable and there is no production for several years. Ways of meeting start-up costs, in particular, need to be carefully planned. In practice, large-scale investments tend to be financed by governments and international financial institutions and few companies make large up-front investments in contracted farmers.

Financing arrangements for market linkages are many and varied. In traditional systems traders may advance money to farmers. The situation also works in reverse with farmers often having to accept deferred payment, a practice that continues under more modern systems as supermarkets may delay payment for up to 90 days.⁵² Contract farming companies will often provide inputs and mechanization services on credit, particularly when they are confident that the product will be delivered to them. Where extra-contractual marketing is a significant possibility such credit arrangements are more problematic. Tripartite arrangements involving farmers, the company and a bank are also often used.⁵³ As noted in Annex 1, a sugar development in Viet Nam worked with the Viet Nam Bank for Agriculture and Rural Development, which disbursed money through joint liability groups. Other tripartite arrangements can involve input suppliers. In India, a supermarket chain linked its farmer suppliers with input dealers who agreed to supply the farmers on credit, and was planning to turn this tripartite arrangement into a quadripartite arrangement with the involvement of a bank. In Ghana, a rice development project involved credit provision by both an input supplier and the Agricultural Development Bank.

The provision of credit and savings facilities requires specialist skills. Therefore, wherever there is an option the linking organization must try to link farmers to an experienced financial institution. Passing loan funds through farmer associations is not recommended due to the difficulties such associations face in enforcing loan compliance among their own members. However, banks are often reluctant to work with small farmers and only become interested when farmers demonstrate commercial success, as indicated by the case study in Annex 1 of South African supermarket linkages. While there may be a case to provide (unsubsidized) credit over a short period in order to demonstrate

⁵¹ Shiferaw *et al.*, 2006.

⁵² Shepherd, 2004.

⁵³ Hollinger, 2004.

commercial viability, NGOs have now generally moved away from direct provision of credit to farmers, preferring to involve microfinance organizations, banks, inputs suppliers or agribusinesses. For example, the Kenya Rural Enterprise Program (KREP) manages the loan credit component of Technoserve's banana development project.⁵⁴ Unfortunately, in many rural areas there are few or no specialized financial institutions prepared to lend to small farmers. Although the microfinance industry is trying to fill this gap, only a handful of organizations is showing signs of success on a large scale. The Consultative Group to Assist the Poor (CGAP) has identified features of microfinance organizations that were successful in providing financial services in rural areas. It concluded that repayment should be assessed on the basis of the borrower's capacity to repay, not only on the use to which the loan would be put; that savings facilities should also be provided; and that loan terms and conditions of repayment should be adjusted to reflect cyclical income flows.⁵⁵

Sustainability of external interventions and exit strategies

The jury is still out on whether linkage projects are sustainable, replicable and up-scalable. While such projects make every effort to identify and quantify the benefits to farmers, few provide accurate information on the costs of the assistance provided. Realistic cost figures would facilitate a more meaningful assessment of the returns from such activities and promote dialogue on whether linkages can be widely replicated. Studies of farmers that have benefited from now-completed project activities are required to enable an assessment of whether linkages are sustainable in the long term.

There is a continuing idealism about small farmer empowerment and participatory community level development. However, even market-oriented farmers can face difficulties in successfully entering more sophisticated markets and the task for small farmers living in remote areas, with limited skills and an inability to raise finance may be almost impossible. Studies carried out in Kenya, for example, have shown that both marketing success and group performance seem to improve with proximity to markets.⁵⁶ There may thus be a case, at least in the short run, to concentrate on the better-endowed farmers.

It is important to involve national, regional and local public authorities from the outset of any linkage activities. Consultation at the beginning and on an ongoing basis can avoid misunderstandings and can also identify expertise and resources that may be able to assist. There is also a need to learn from past mistakes and to be flexible. The entrepreneur marketing fresh-sliced pineapples from Ghana to Europe, described in Annex 1, now has a very different business to that he envisaged when he moved to Ghana. A characteristic of entrepreneurs is a willingness to be flexible and to take a trial and error approach. NGOs, other service providers and the farmers they work with are likely to be less flexible. Indeed, some NGOs may have their hands tied by inflexible implementation agreements reached with donors. However, both domestic and export markets change constantly in response to the activities of competitors, to government policies, to climatic influences on production and to tariff and non-tariff barriers. Farmers need to be in a position to respond quickly to such changes.

⁵⁴ Kibugu, 2005.

⁵⁵ see CGAP, 2005.

⁵⁶ Shiferaw *et al.*, 2006.

Projects may be most sustainable when they limit intervention to a number of core activities. Some have recognized the need for such a core-competency approach. As described in Annex 1 a cooperative (MALI) in NW Tanzania carried out fruit juice processing, distribution and marketing, with fruit being supplied by the cooperative's members. However, a Tanzanian consulting firm, originally employed to investigate the potential for product diversification, recommended that MALI should change its focus from that of doing everything to concentrating on its core activity of fruit juice processing. MALI was advised to outsource distribution and marketing to wholesalers who were able to offer retailers a broad range of products, which MALI could not do.⁵⁷

It is important to ensure that services, such as extension, being provided by the NGO can in the long term be taken over on a commercial basis by local organizations. Clearly, development projects need to reinforce the competence of local organizations. However, acknowledged weaknesses of this approach are that in many countries local service providers cannot be expected to have the range of skills necessary to meet all eventualities, and the overall demand for such services may be small, so limiting the viability of commercial services.

Leaving farmers and their groups or associations to look after themselves becomes easier if a clear exit strategy has been worked out from the beginning. An exit strategy should ensure that the NGO or other agency does not become directly involved in marketing or processing of produce but, instead, facilitates linkages between farmers and those able to provide such services. Otherwise, as already noted, the withdrawal of NGO services would inevitably result in a collapse of market linkages. Opinions are divided on the time frame necessary to have a high chance of sustainability. Some NGOs have attempted two- or three- year interventions while others believe that the process requires ten years. Even after long-term assistance, some observers believe that groups will continue to require "repairs and maintenance", involving leadership training and technical back-up, for many more years.⁵⁸ The nature of donor and NGO funding makes this difficult to organize. Such funding usually means that the time of exit is set by the donor, not by the circumstances, with inevitable negative consequences. While successful market linkages can, probably, be introduced over two or three years, institutional development may take longer. Groups, or at least their leaders, require business training, such as an ability to budget and do bookkeeping, in order to ensure financial sustainability, and regular audits need to be carried out.⁵⁹

Group activities in marketing have a greater chance of success when attention is not only paid to capacity building in areas directly related to marketing, such as researching markets and negotiating with buyers, but also to overall organizational and management skills, such as basic problem-solving and conflict-resolution skills, that could help the groups operate independently.⁶⁰ The problem with such an approach is one of cost: limited financial and human resources are available to work with farmer groups and the more time and money devoted to one group means that less is available for other farmers.

⁵⁷ Ringo and Uliwa, 2005.

⁵⁸ Catacutan *et al.*, 2006.

⁵⁹ see Ferris *et al.*, 2006 for suggestions regarding an exit strategy over a 5-10 year time frame.

⁶⁰ Bingen *et al.* 2003.

Governments, donors and NGOs tend to have a “pro-poor” growth orientation. This can often sit uneasily with hard commercial realities. Business development is not and cannot become synonymous with social policy and sustainability almost always requires that commercial requirements override some equity concerns. Businesses are likely to be more confident about linking with farmers if some have a demonstrated capacity to produce commercially. At the same time, care does have to be taken that linking farmers to markets does not exacerbate pre-existing wealth or sex inequalities. For example, NGOs may see the best chances of demonstrating short-term success as coming from working with richer farmers who already have a market orientation. Competition between NGOs to work in villages with known dynamic leaders has already been observed.

Scaling up

A relatively small number of farmers is presently being assisted by NGO- and donor-led activities to link farmers to markets. The project approach may have a good chance of success for those fortunate beneficiaries but it is still having little impact on the great mass of farmers. As an example, despite the well-documented growth of the supermarket sector in Central America, less than five percent of horticultural producers in Honduras and El Salvador are presently organized into producer associations to supply those supermarkets. This is attributed, in part, to the fact that organizational models presently employed by linking organizations are too costly in terms of time and financial resources to be successfully replicated. Many existing organizations rely on subsidies to continue functioning. If such subsidies were providing market access for a large number of farmers there may be a case for continuing support. However, where this is not the case, as in this example, alternative use of resources should perhaps be identified.⁶¹

Ways of replicating tried and trusted approaches at lower cost, in order to benefit a greater number of farmers, do not yet seem to have been developed and need to be considered as a matter of some urgency. Of course, a precondition for this to happen is the availability of adequate markets. Project scaling up should proceed from some initial point of success. Replication should only begin after at least one enterprise cycle (i.e. from production to successful sale) has been profitable on a sustainable basis, i.e. without external inputs from the linking organization. Linking organizations should be aware that what works well in one situation will not necessarily be a success in another, even in a neighbouring area. It is not enough to duplicate an activity. The dynamics of the target community need to be understood, and project activities adapted accordingly.⁶²

The project approach may divert attention from the need for a more wide-ranging analysis of the factors affecting the ability of more farmers to develop a market orientation. The policy, demand, institutional and infrastructural issues considered in this paper will have to be addressed if upscaling through replication outside of a project context is to be possible. Training of extension staff to become more market oriented can assist in getting the message to a greater number of beneficiaries.

⁶¹ Lundy *et al.*, 2006.

⁶² Louw *et al.*, 2006.

5 The enabling environment

Although the private sector should be responsible for organizing production, processing and marketing of agricultural products, the government must play a vital role in guiding and facilitating this development. Governments can improve efficiency by providing an appropriate macro-economic framework as well as necessary public goods, such as roads, and suitable policy and legal environments. One of the biggest challenges to tackle is how to develop policies, institutions and services to foster value chain development outside the context of interventions such as those discussed in this paper.

The policy environment

Governments should concentrate on developing an environment that can enable the private sector to function in a competitive way. Incentives to invest are provided by good monetary policies, which can lead to low interest rates and stable exchange rates. Attention may also need to be paid to existing taxation and tariff structures that may discourage investment. Unfortunately, governments often seek to move beyond facilitation towards direction, by taking over decisions about areas in which investments are made. The choice of target enterprise is often made in association with the international financial institutions. Loans for new or existing industries tend to distort competitive advantage, with investments being made in some sectors and in some chain actors on the basis of political rather than economic criteria. This acts as a disincentive for purely commercial investment and, if misguided investments promote market surpluses, can also increase the risks that both the “beneficiaries” and other farmers face.

Service provision by governments can also undermine commercial service providers. As an example, some governments continue to involve themselves in input supply in competition with the private sector, despite the theoretical liberalization of the input sector in most countries.⁶³ Also, there is talk about reintroducing agricultural development banks, thus minimizing any incentive commercial financial institutions may have for developing loan products suitable for farmers. Provision of services by governments is best justified for demonstration purposes when there is clear example of market failure, i.e. in the, possibly rare, cases when viable economic activities are not being carried out. Even here, governments would first need to assure themselves that market failure was not due to failings in the enabling environment.

Policy must be consistent, particularly where sizeable investments are made on the basis of policy changes. Mozambique reduced export taxes on raw cashews, leading to a surge in exports of raw nuts and hard times for domestic processors. From 2001 the policy was changed, giving renewed encouragement to processors and the establishment of village-based primary processing with donor and NGO support. Considerable progress has

⁶³ Kelly and Crawford, 2007.

been made but this could be jeopardized if there were further changes in the export tax policy.

Legal and regulatory framework

There are many legal issues that governments should address in order to promote agribusiness development. Specific to market linkage activities is the need to clarify legislation relating to farmer groups and cooperatives. In particular, some more advanced groups,⁶⁴ as noted earlier, feel the need to have a similar status to limited liability companies. Given that the concept of farmer groups as business entities is a relatively new one, many countries have yet to develop appropriate legislation. Contract farming companies entering into agreement with cooperatives also have to be sure that the cooperative is on a sound legal footing. Of broader concern is the question of laws of contract and the ability to enforce agreements in the courts of law. Unfortunately, it is at this point that legal arrangements often break down; court procedures are universally slow and even if a judgement is eventually obtained there are usually problems in enforcing it and inflation may have eroded the sum claimed. Furthermore, contract laws are of limited utility for businesses seeking to obtain repayment of loans from farmers who have practised extra-contractual marketing, given the small sums involved. Conversely, small farmers will never have the means to bear the costs of fighting large companies in court. The use of third-party arbitration, e.g. by industry associations, may be one way of addressing this problem.

Companies are unlikely to invest in countries where there is general political uncertainty. An environment where corruption is prevalent is not conducive to investment in any sector, and particularly in agriculture, which even in the best policy environment is always fraught with risk.

An important area to address for all economic development in rural areas is land tenure. Traditional land tenure systems in many countries provide little incentive for farmers to invest in the improvements necessary to fully exploit market opportunities. Such improvements can include irrigation equipment, soil improvement and infrastructure required to comply with international standards such as EurepGAP. Planting of tree crops is particularly constrained when farmers have no security of tenure. Lack of secure property rights also makes it difficult to obtain loans for inputs, as these usually require collateral. Where irrigation is required a related issue is that of water rights and the management of water allocation.

Other areas in which governments can contribute to providing an effective enabling environment include introducing regulations relating to pesticide use, food standards, seed quality and provision of arrangements to certify quality, geographic origin, etc. While anti-trust legislation is desirable, governments should avoid the temptation to over-regulate. The emphasis should be on enabling successful market linkages rather than on trying to control those involved in production and marketing.

⁶⁴ a distinction needs to be made between groups established to develop trading relationships with buyers and groups organized by contract farming companies to facilitate delivery of inputs and extension and collection of the crop. The latter type of group does not usually require legal status.

Infrastructure

Most studies identify the lack of suitable infrastructure as a major constraint to linkage development. The role of governments should be to develop infrastructure. Clearly this is a truism and an easy recommendation to make. In reality, governments in most developing countries have extremely limited resources and many claims on those resources. Given these resource constraints, funds earmarked for agriculture should be used to develop rural infrastructure and support services, rather than for politically inspired subsidies that are unlikely to have long-term development impact.

Reliable power and water supplies are vital for agroprocessing and export of fresh produce. Good feeder roads are particularly important for perishable crops for export and for crops that require processing soon after harvest, such as tea, sugar and oil palm. In the past, government provision of communications infrastructure was considered to be vital but with the rapid expansion of mobile phone services the government's role is moving from being one of service provider to service facilitator (i.e. by promoting competition and not imposing unnecessary restrictions on the private sector provision of mobile phone networks).

In many countries the absence or inadequacy of rural markets raises transaction costs and prevents small farmers from accessing markets and traders from accessing suppliers. Governments should review the adequacy and availability of rural market infrastructure, particularly assembly markets, and plan for improvements as necessary.

The institutional environment

Farmers lack knowledge of markets, both in terms of current prices and in terms of likely future market developments. They are not, therefore, in a good position to evaluate proposals put to them by NGOs and others and not well-equipped to negotiate effectively with buyers. Governments and donors have for many years tried to establish market information services but these have often suffered from problems of both sustainability and data accuracy. Moreover, such services usually address only basic agricultural commodities and may be ill-equipped to provide information on export markets or on markets for processed products.

The quality of agricultural extension services available is often a major weakness. Individual companies are sometimes not in a position to internalize the cost of providing the necessary extension to farmers, particularly where they are in direct competition with other companies who do not provide such services. At the same time, governments often lack resources to provide extension. The way in which such services could be provided, possibly through some form of public-private partnership, is a policy issue that needs to be addressed. Where extension services do function, field-level officers can play an important role in promoting linkages between farmers and traders or agribusinesses. The strengthening of marketing skills of extension staff would therefore appear to be a priority area for intervention.

Research and development activities are not always coordinated with agro-industry policies. Agricultural research stations rarely, if ever, plan their work programmes around the market demand for and economic feasibility of specific agricultural products. Closer links between agricultural research stations and the private sector are required.

Increasing attention is being paid to the possibility of establishing inter-professional commodity or industry associations, which can provide a focal point for discussions about individual industries and can play an important role in supporting farm-to-market linkages. Such associations should draw their membership from all relevant sectors of an industry. Possible activities can include contract monitoring, registration and arbitration; taking steps to reduce extra-contractual marketing; provision of a forum for discussions involving companies, governments, farmers, etc.; identification of research and development requirements; domestic or export market promotion; and, most importantly, policy liaison with government as a first port of call for the government when problems relating to the industry are encountered. Such associations can be self-regulating but may also be established by governments. An example of the latter is the Sugar Board of Tanzania which has membership drawn from both sugar millers and outgrowers and arbitrates on behalf of all. Relationships between outgrowers and millers are said to have improved considerably now that there is an effective mechanism to resolve issues related to breach of contract and allegations of inaccurate grading and weighing. In South Africa, the South African Sugar Association is also responsible for setting the price paid to outgrowers.

6 Discussion and recommendations

Discussion

Every few years a new development concept comes along. Not wishing to be left behind and be seen to be out of date, donors, NGOs and other development organizations rush to adopt the new wisdom. Often they later rush to drop it just as quickly. Support for the prevailing development approach is sometimes fairly uncritical and can lead to a wide range of misguided interventions. The present emphasis in developing countries on the, often vaguely defined, “value chain” approach and associated activities to link farmers to that chain could, perhaps, be seen in the same light. There is, indeed, a danger that this approach will quickly lose popularity if initial efforts to provide more of a market orientation to farmers do not bear fruit. It is hoped that this paper can play an important role by highlighting the problems that have been experienced to date and by indicating areas that must be addressed when working with farmers.

The linking farmers to markets approach does, however, appear to offer a greater possibility of success than some previous development enthusiasms. By emphasizing a market orientation the approach acknowledges that farm-level development must be related to what people want to buy. A precondition for farmer growth is the existence of a market. While there are, of course, many past examples of mistaken private sector investments, in general no company would consider producing products that people did not want.⁶⁵ Yet in the field of small farmer development emphasis has often been placed on maximizing production, with almost no reference to how that production was to be sold. Emphasizing the “market” under the new approach can overcome these past weaknesses. More importantly, perhaps, it ensures a central role for the private sector, which moves from being a passive buyer of farmers’ surplus produce to an active partner in ensuring that farmers comply with market requirements.

This paper has concentrated on development initiatives where external organizations have assisted farmers and the private sector to link together. It has already been noted that there are many examples of where the private sector has actively sought to link with farmers on its own, without using the services of intermediaries. With the exception of large-scale contract farming activities, however, relatively few private sector linkages get written about in a way that attracts the attention of the development community. One question that merits consideration is whether, given the undoubted capacity of the private sector to develop its own linkages, interventions by NGOs and others are actually increasing the market available to small farmers. If all that linking organizations are doing is replacing one set of farmers supplying a buyer with another set of farmers then they are just benefiting the farmers chosen as beneficiaries of their interventions at the expense of others. If that is the case it would appear more efficient to work with the private sector to explore ways in which linkages with existing suppliers could be improved, such as through

⁶⁵ or could not be persuaded to want.

group activities, rather than to identify a whole new set of farmers who conform to preconceived notions of “target beneficiaries”. There are examples of where an NGO takes on responsibility for organizing farmers into groups on behalf of a contract farming company, as described in Annex 1 in the case of a South African timber factory. External partners can not only organize groups but can also provide training to enable farmers to understand better the production and delivery requirements of companies and to appreciate why these requirements must be met.

Identification of particular categories of farmers to benefit from donor or NGO assistance, e.g. under the “Making Markets Work for the Poor” paradigm, may sound desirable in theory but may be less feasible in practice. The dilemma is that conditions for successful linkages tend to work against the poorest. As noted in Chapter 4, there is already a body of research that suggests that poor and often remote farmers, with limited land, limited on-farm investment and financial resources and low education levels are not well-equipped to exploit the new market orientation. Education levels, leadership and management skills, proximity to markets, and prior investment in irrigation have all been found to be linked to market success. If the approach of “linking farmers to markets” is to be successful its proponents need to accept commercial realities and not prioritize the poverty reduction goal at the expense of business sustainability.⁶⁶ In most cases the poorest farmers will not be able to link to integrated value chains involving a coordinated relationship between farmer and buyer and those involved in linking the two parties need to recognize this if they want to ensure sustainable linkages. That is not, of course, to argue that poorer farmers should be neglected. Although traditional marketing channels will certainly have to become more sophisticated if they are to compete with modern chains, they will continue to offer considerable market opportunities, and there is much that donors and governments can do to facilitate their operations.

To achieve more than just the substitution of groups of farmer suppliers with others, NGOs and other organizations need to look closely at the markets they identify for intervention. World prices for many commodities have until recently been at low levels. Support to farmers to increase world production levels is difficult to justify, even if individual groups of low-cost or high-quality producers may well benefit from such support. World trade in horticultural produce continues to rise but markets for fresh produce remain very competitive and are increasingly subject to government and private quality standards. Overall, developing countries export less than ten percent of fruit and five percent of vegetables produced by them, although there are notable exceptions. Greater prospects appear for processed products, if problems of tariff escalation⁶⁷ can be overcome. In recent years the share of processed foods as a percentage of agricultural exports by Least Developed Countries has been increasing but this same trend has not applied to primary commodities, such as the beverage crops.⁶⁸ However, smaller agroprocessors, with whom small farmers are often linked, have to compete with larger manufacturers that can benefit from significant economies of scale. Many processing activities have reached a level of scale and automation that offers limited scope for smaller enterprises to compete.

⁶⁶ Humphrey, 2006.

⁶⁷ the tendency for tariffs to be raised as the degree of processing built into products increases.

⁶⁸ Wilkinson and Rocha, 2006.

As discussed in Chapter 3, there is often a seemingly irrational enthusiasm for promoting some export markets, which may already be oversupplied, at the expense of developing markets within a country. Seen from a global perspective, rather than the perspective of individual groups of farmers, small farmer development may be best served by working to promote local market development. Opportunities exist to promote increased consumption of agricultural products, particularly as incomes grow. The meat and dairy sectors offer particularly good prospects at a time of rising incomes but many developing countries also have extremely low levels of fruit and vegetable consumption at present. There also appears to be some scope for domestic agro-industries to compete with imports from developed country suppliers although, as noted earlier, this may be constrained by supermarket procurement practices and by the very real difficulties that small-scale processors face in competing with larger companies.

Initiatives by donors and NGOs to link farmers to markets presently reach only a very small proportion of farmers. It is valid to ask whether spending limited resources in this way is justifiable. From the perspective of both donors and NGOs it is useful to be able to report that, “*our activities in country x have linked y thousand farmers to markets, leading to a per capita income increase of those farmers of z hundred dollars per year*”. Indeed, some donors demand precisely that form of reporting. But measurement of achievement in this way promotes a short-term time horizon, with the obligation to achieve measurable “success” overriding the need for sustainable long-term development. At the first hint of problems the organization working at field level is tempted to bale out farmer organizations.⁶⁹ It is not very difficult to increase farmer incomes if inputs are provided free of charge and if the NGO or consulting firm provides free transport for produce, or even buys that produce. But it is certain that in such circumstances the benefits will not be there one year after completion of the external intervention. Indeed, farmers may be worse off if project activities have jeopardized the viability of input and output traders who were previously working with the chosen farmers.

Given the relatively small number of farmers able to benefit from direct intervention by donors and their field agents, it becomes relevant to ask why some farmers are chosen and not others. Reasons for farmer selection are many and varied: in some cases it may simply be because the location is convenient; in others because the donor has a predetermined profile of the types of farmer it wishes to benefit. In some cases agronomic factors may play a role because the donor has decided to concentrate activities on a particular crop rather than particular groups of farmers. Whatever the reason a development approach that provides benefits to farmers just because they were lucky enough to be chosen may not be the best tactic. Development should not be a lottery. Instead, donors should investigate whether there is any potential adverse impact of their activities on non-participating farmers. They should consider whether they should place more emphasis on activities that stand a chance of benefiting a much larger number of people, including activities that can provide employment opportunities. There is, for example, some evidence that employment on large-scale farms producing for export contributes more to poverty reduction than does export production by smallholders.⁷⁰

⁶⁹ Berdegué, 2001.

⁷⁰ Humphrey, 2006.

Broader activities that donors should consider include assisting governments to develop an appropriate enabling environment for agribusiness and, within that, for the private sector to develop linkages with farmers; and strengthening extension services so that extension officers bring more of a market orientation to their work. Support with compliance with export standards is also required. An environment for business development involves the provision of suitable infrastructure, the guaranteeing of property rights, clear law and a well-functioning legal system, and the absence of corruption. A stable macro-economic environment is necessary to attract investors. Specific agriculture-related components of an enabling environment include the provision of policies, institutions and services relating to export quality control, contract negotiation and compliance, market information and intelligence, market-oriented research and product innovation, and promotion of public-private partnerships. A major issue is to review the scope of work of ministries of agriculture. Few have mandates that involve authority over agribusiness development, with the consequence that agricultural ministries have little impact on the development of appropriate enabling environments. Mechanisms are needed to strengthen linkages among agencies responsible for agribusiness development and donors could usefully assist with this.

In the same way that emphasis on the poorest farmers may not be the best approach, the enthusiasm for working with existing farmer organizations, such as cooperatives or producer associations, or establishing new farmer groups may not always lead to the most appropriate way of operating. Successful groups require management, leadership and entrepreneurial skills, which farmers may not possess. There are strong reasons why farmers should work together in order to improve production and product quality and achieve economies of scale in input supply and output marketing. Indeed, achieving economies of scale is frequently a precondition for a successful market linkage. Nevertheless, groups should not be promoted as a blind act of faith without a detailed examination of the supply chain, an assessment of the weaknesses of that chain, a detailed consideration of how group formation could address those weaknesses and a full economic examination of the economic benefits of collective marketing. In particular, the use of groups to try to take over the role of existing marketing intermediaries seems problematic, with little evidence that it is ever successful. Groups seem most relevant when farmers wish to supply demanding urban (e.g. hotels or supermarkets) or export markets but the case for collective action seems less clear for bulk commodities such as staples.

Given the difficulties that have been noted with organizing farmers into groups it needs to be asked whether there are not alternative forms of farmer organization that might achieve similar benefits at lower cost.⁷¹ The use of farmer leaders is one approach that has been tried by donors, particularly USAID, with some success and has also been developed independently by entrepreneurial farmers and the private sector. As already stressed in this paper, more could also be done to strengthen informal group linkages between farmers and traditional traders.

⁷¹ Hellin *et al.*, 2006.

Recommendations

The main broad issues arising from the paper are highlighted below but this section is not intended to be a comprehensive list of all recommendations and not intended as a substitute for a review of the factors that may improve the likelihood of success with linkage activities, which are discussed in detail in Chapter 4. A Check-List of issues to consider when developing linkages is given in Annex 2.

1. **Coordination, communication and collaboration must be improved.** There is a wealth of experience in the areas of linking farmers to markets and associated activities such as group formation. Unfortunately there appears to be a limited availability of information to enable donors, NGOs and others to learn from that experience. Researchers carry out detailed studies of individual linkage activities but their research may go no further than journal articles read, or workshops attended, only by other researchers. There appears to be limited collaboration between NGOs and others involved in linkage activities and NGOs have no international forum for the exchange of information. With the growing interest in activities to link farmers to markets it seems essential that low-cost methods of exchanging experiences must be found and NGOs should consider how best to exchange experiences at international level in order to avoid constant reinventing of the wheel. At national level, government, donors and NGOs should establish market linkage coordinating mechanisms to facilitate the exchange of information and avoid competition for the chance to work with promising market outlets and potentially viable farmers.
2. **Awareness of linkages developed by the private sector is essential.** While much has been written about market linkage activities promoted by various external partners, there is comparatively little information concerning linkages developed directly by the private sector. Private-sector successes (and failures) in this area need to be documented, the reasons for success or failure understood, and the potential role of external partners in helping to avoid future failures addressed.
3. **A chain approach is required.** In the same way that past efforts to promote production were doomed to failure, efforts to organize farmers into marketing groups will have little impact if the rest of the supply chain is not functioning well. NGOs and others seeking to help farmers need to be able to identify chain constraints faced both by farmers and the marketing system and to advise governments on ways of resolving them. Such constraints could include inadequate policy, poor infrastructure, insufficient capital, and bureaucratic problems.
4. **A realistic approach to markets is needed.** There have been undoubted successes with the linkage of small farmers to export, organic and fair trade markets. However, little is known about the returns from such markets when measured against the costs of the support provided by external agencies. Standards imposed by both the private sector and governments, certification requirements, and the growing need for traceability all impose high costs that are difficult for small farmers to absorb. Even before these new developments, exporting was a difficult and risky business and best undertaken by private companies with the necessary skills and resources, rather than by small groups of farmers. Those aiming to link farmers to export markets should

examine closely the costs⁷² and benefits of export development and consider, in particular, the likely sustainability and replicability of activities after donor support is withdrawn.

5. **Domestic markets should be given proper consideration.** Domestic and, in some cases, regional markets, whether agroprocessors, retail stores, fast-food chains, hotels or institutions, can offer significant potential to smaller farmers, normally without the complications that are involved with accessing the most sophisticated export markets. Much can be achieved by bringing together buyers who lack supply with farmers who are able to produce. NGOs, donors and governments are recommended to explore domestic market potential before examining more risky export markets. They could also consider supporting promotional activities to develop local demand for products farmers are able to produce.
6. **Work with, not against, the private sector.** The longstanding hostility to the “middleman” on the part of some NGOs and many from the development and donor communities must be overcome if market linkages are to work. As noted in this paper, successful linkages require trust between all parties and such trust cannot be achieved if linking organization employees are conveying a message to farmers that their private-sector partners are not to be trusted. Similarly, NGOs and others should resist the tendency to try to set up farmer-controlled marketing organizations to compete with the private sector. NGOs and others need to improve communication with the private sector in order to obtain a fuller understanding of how private companies and individuals work, the constraints they face and the costs they encounter in doing business.
7. **Training of NGO staff is essential.** NGOs and others cannot approach linkage activities without having staff qualified to do this work. This applies to international NGOs as well as the smaller organizations that work at local level in many countries. Linking farmers to markets requires sets of skills that NGO staff may not have needed in the past and the transition to a greater market orientation cannot be achieved without developing those skills. International NGOs both need to train their own staff and develop training programmes for staff of their local counterpart organizations. They could also consider offering training support to staff of traditional agricultural extension services.
8. **Avoid the temptation to subsidize unduly.** When donors, NGOs and others recruit expensive international, or even national, expertise to support relatively small groups of farmers, this already represents a considerable subsidy. However, there is often a temptation to introduce further subsidies even though activities based on subsidies rarely prove sustainable and can provide unfair competition for farmers not benefiting from project interventions. When to employ subsidies is clearly a complex question and not easily resolved. Organizations are recommended to carry out detailed and realistic cost-benefit calculations and only provide subsidies when the underlying venture is clearly profitable on a sustainable basis and would generate sufficient surplus to enable subsidized components to be replaced on a commercial basis when required.
9. **Emphasize the development of trust between all parties.** Farmers must trust each other if they are to carry out even simple collective activities. The existence of such trust between farmers cannot be taken as given and in some societies this may

⁷² in one southern African country, a support programme to enable farmers to achieve EurepGAP certification apparently trained ten farmers at a cost of US\$50 000 per farmer! (A. Sergeant, personal communication). Moreover, Humphrey, 2006 suggests that certification is a necessary but far from sufficient condition to access export markets for fresh produce.

jeopardize efforts to link them to markets. In relationships between buyers and farmers there is much that can go wrong. In some formal contract farming relationships clear written contracts can help to minimize, but certainly not avoid, misunderstandings and suspicions. In all relationships, issues relating to pricing, payment terms and conditions, product quality and packaging, and delivery arrangements can cause problems. These are best addressed by trying to maximize the level of trust between the parties and by ensuring that all parties fully understand the terms of the agreement. Linking organizations are recommended to maximize the amount of contact between farmers and buyers. Farmers should not be kept remote from the buyer, with the NGO doing all of the negotiation. Ideally, farmers should be involved in identifying buyers and in making initial business contacts. Thereafter, organizations should aim for frequent contacts between farmers and buyers.

10. **Be aware that collective action is not always essential.** As noted in the Discussion above, there is strong theoretical and some practical evidence that group activities are beneficial. However, this may not always be the case. Selling of staples to local markets may yield few returns from formal collective marketing activities, although farmers may benefit from informal activities to bulk up products. Farmer organizations and groups must be seen as a means to an end, not as an end in themselves. Linking organizations are recommended to conduct detailed analyses of the socio-economic situation of the farmers and detailed studies of the relevant supply chains before deciding on whether or not to organize farmers into groups.
11. **Develop appropriate institutions.** Governments should address the need for institutions that can support agribusiness development. Coordination of support services through an agribusiness promotion organization may be desirable. Areas that should be addressed include market information, agricultural extension, export quality certification and other quality control measures, agricultural research support and farm management and agribusiness training.⁷³
12. **Governments need to consult to ensure the right enabling environment.** As already noted, activities to link farmers to markets can achieve little if the enabling environment provided by the government is unsupportive of commercial development. Governments are recommended to organize regular consultations with the private sector and with linking organizations in order to identify and address concerns about policy and the legal and institutional frameworks. Formal mechanisms for such consultations, such as interprofessional commodity associations, should be promoted.
13. **Financing requirements must be addressed.** NGOs and other organizations are often tempted to provide credit directly to farmers. They may even provide that credit “in-kind”, so bypassing commercial input dealers. While such input supply arrangements are valid for companies contracting with farmers, particularly if farmers have no alternative market outlet for their produce, credit arrangements by NGOs can lead to problems of sustainability. The provision of credit requires specialist skills and linking organizations are recommended to link farmers to an experienced financial institution (bank or microfinance organization) wherever possible.
14. **Do not ignore the problems farmers are likely to face.** A blindly optimistic approach to the ability of farmers to supply new markets can lead to significant pitfalls.

⁷³ Graduate-level agribusiness training materials are available from FAO at: <http://www.fao.org/ag/ags/subjects/en/agmarket/textbooks.html>

Optimism, while desirable, needs to be tinged with a sense of realism. Traditional rural societies face many problems in dealing with hard commercial realities of modern supply chains and it would be dishonest to promote linkages if it appears that farmers cannot meet the requirements of the buyers. Organizations are recommended to conduct a full assessment of buyers' requirements in terms of quality, quantity, timing of delivery, etc. and then make an assessment of the capacity of the identified farmers to meet those requirements. Where farmer skills and resources and societal norms would appear to conflict with the ability of a particular group of farmers to meet commercial requirements the NGO should identify alternative products for the farmers or identify alternative farmers to supply the market demand. Linking organizations must be aware of farmer concerns about risk, and avoid taking action to significantly increase that risk.

15. **All efforts must be directed towards ensuring sustainability of interventions.** Development efforts have frequently failed because of insufficient attention to sustainability. Problems with excessive support to farmers through subsidies have frequently been noted in this paper but insufficient support to farmers can also jeopardize sustainability. This occurs particularly when external agencies withdraw their technical and advisory support before the farmer groups are able to work on their own. Unfortunately NGOs often have no alternative but to withdraw because their funding agency limits support to a short period. Donors, NGOs and others are recommended at the outset to carry out a realistic assessment of the time required to develop sustainable operations, based on experiences with similar linkages, and to budget to ensure funding for the necessary period. More flexible and creative approaches to project funding would be desirable so that linking organizations are not forced to withdraw too early. As a general rule, development activities always take longer than expected.
16. **Ways of scaling up must be considered.** As noted in the Discussion above, it is clear that linkage activities involve only a relatively small number of farmers. On the assumption that markets are available to be exploited by developing country farmers the question then arises as to how other farmers can be involved, given the high costs of existing linkage activities. Ways of replicating existing approaches at lower cost and without the need for international donor and NGO support need to be investigated. But existing approaches may not be the best way of reaching large numbers of farmers. It is recommended that donors give more attention to a general strengthening of the ability of all farmers to adopt a market orientation. Policy, infrastructural, institutional and capacity-building support to enable governments to assist all farmers is still very much required.
17. **Analyse costs and benefits.** To date, there seems to have been little attention paid to quantifying the costs of activities to link farmers to markets and comparing these with benefits that farmers achieve, particularly after withdrawal of donor and NGO support. Donors are recommended to carry out detailed evaluations of project costs and evaluate whether this is, indeed, the most appropriate form of support to improve marketing by farmers.

Annex 1

Examples of market linkages

Introduction

This Annex describes the case studies that were referred to in Chapter 2. The examples of farm-to-market linkages⁷⁴ fall into the following categories:

- Farmer to domestic trader;
- Farmer to retailer;
- Linkages through a leading farmer;
- Linkages through cooperatives;
- Farmer to agroprocessor;
- Farmer to exporter;
- Contract farming.

Farmer to domestic trader

➤ with an external catalyst

- The Keprok Soe variety of mandarin is much in demand in Indonesia. However, it only grows well in West Timor province. Because it is a premium variety there is an incentive for traders to play an active role in improved linkage development, something that is not often witnessed. Working with farmer groups formed by NGOs, traders conduct workshops for farmers, covering areas such as fruit fly control, organic farming principles and postharvest handling to meet market requirements. One company taught farmers how to make wooden boxes and provided grading guidelines and definitions of maturity levels. Traders have also initiated actions to address farmers' cash shortages, including advancing working capital. Benefits for traders include not only reliable, high-quality supply but also the fact that the linkages with farmers represent a high barrier to entry for other traders.⁷⁵ This example illustrates the capacity of some traders to work closely with farmers on production, post-harvest and marketing issues. However, such linkages would be difficult to achieve without the intervention of an NGO as most traders are unlikely to have the resources, time, inclination or skill to organize farmers on their own.

➤ developed by the participants themselves

- A trader in Ho Chi Minh City wholesale market specializes in butterhead lettuce. By improving linkages with farmers and encouraging them to produce safer and higher quality vegetables he has increased returns for farmers, reduced losses and improved his own profit margins. The trader collaborates with several collectors who are

⁷⁴ additional case studies can be found at <http://www.fao.org/ag/ags/subjects/en/agmarket/linkages/index.html>. Further contributions to that site are invited.

⁷⁵ Wei *et al.*, 2003.

responsible for training farmers in how to grow, harvest and pack the lettuce. The trader coordinates their activities and places orders five days in advance thus enabling the collectors to look for the required quality, unlike other traders who order only on the same day. The trader finances the collectors who, in turn, extend loans to the farmers. This case suggests that traditional traders can help to improve the fruit and vegetable supply chain through a focus on quality, supplier training, specific investments, collaboration and joint planning.⁷⁶

- A professional vegetable supplier in Chiang Mai, Thailand specializes in chemical residue-free (CRF) vegetables. He assembles produce, such as lettuce, cos lettuce, cabbage and cucumber, from 40 farmers and delivers the produce to three buyers in Bangkok. Supply is based on mutual trust and there is no written contract. The supplier conducts residue tests 20 days prior to harvesting. To prevent growers from delivering non-members' vegetables, he visits their plots before harvest to estimate production and observe chemical applications. He is responsible for quality inspection, grading, dressing, and packaging. The buyers do not provide him with exact product standards or grades, except for head lettuce. Payments are made seven to 15 days after delivery.⁷⁷
- One hundred female farmers are working with a company in Bali, Indonesia, which markets produce under the "Bali Fresh" brand. It was seeking additional, reliable and safe supply for the hotel, restaurant and supermarket sectors, and also for export. The company initially approached a few women living in a relatively poor area of Bali to identify their interest in farming. Land was rented for the women and also for a company nursery which tests varieties and growing methods and provides the farmers with seedlings which, because of its specialized facilities, are of higher quality than those the farmers can produce themselves. After harvest the produce of each farmer (some farmers work in groups) is weighed and registered. It is then packed and transported to the company where washing, grading and packing take place. The company employs extension and marketing staff in the production areas. Marketing staff monitor crop growth and try to ensure continuity of supply to meet the needs of the market. Since starting this partnership without external involvement the company has been successful in attracting support for the women from various aid agencies. Such support has been used to establish a revolving fund for input payment, and provide literacy and bookkeeping courses. Female farmers now earn over twice the minimum wage. Traders who lack suitable supply can be proactive in seeking new supply sources even, as in this case, from people who had little or no farming experience.⁷⁸

Farmer to retailer

➤ direct sales by farmers

- A supermarket chain in India, Foodworld, has developed supply relationships with one hundred small-scale farmers. Working with such farmers is necessary because land tenure rules prevent farm consolidation; the farmers have an average holding of two hectares. The chain does not have contractual relationships. For the time being Foodworld has agreed to purchase everything its farmers produce, although if quality

⁷⁶ Cadilhon *et al.*, 2005.

⁷⁷ Wiboonpongse and Sriboonchitta, 2004.

⁷⁸ Serhalawan, R., personal communication.

considerations begin to override quantity requirements this may not last. Prices are set on a daily basis with reference to the prevailing wholesale market price. Farmers deliver to a consolidation centre which is located at a distance of up to 300 km from the stores. The company negotiates on behalf of the farmers for loans from seed and fertilizer companies and also ensures that the correct varieties are supplied. At present the chain plays no role in loan repayment although it would cease buying from farmers who failed to pay back their loans (this has yet to happen). Discussions were under way with banks (end of 2004) to set up a quadripartite arrangement, whereby the banks would finance the inputs supplied to farmers and Foodworld would repay the banks out of the farmers' earnings.⁷⁹

➤ **through a trader**

- The Bimandiri company in Indonesia was established in 1994, and by 1998 it was supplying four supermarket chains. In 2000 the company decided to become a dedicated wholesale supplier only to Carrefour, which had ten stores in Indonesia by early 2005. Initially, Bimandiri purchased from local traders and individual farmers, but the decision to work solely with Carrefour led to moves to develop a sustainable procurement system, which involved encouraging farmers to work in groups and developing partnership arrangements with those groups. The company works with farmers' groups on the basis of agreed quantities. Prices are either fixed in advance or related to returns within a floor-ceiling price range. Problems faced include the level of commitment of farmers, seasonality of production and price volatility. Also, at times, Carrefour is unable to fully absorb the supply, resulting in Bimandiri having to make sales to traditional markets at a loss. Indicative of the problems faced in dealing with asset-poor farmers is the fact that of the one hundred members of a farmers' group near Yogyakarta approached by Bimandiri to grow watermelons, only half were considered suitable to grow the crop.⁸⁰

➤ **with external catalyst**

- A fast-food outlet in Uganda's capital, Kampala, was worried about its supply of potatoes for French fries. The company was seriously considering importing frozen French fries. With support from an NGO some farmers in the southwest of Uganda decided that a linkage to the fast-food restaurant was the most attractive option. To meet the needs of the restaurant the farmers started to grow a new variety and changed their production practices to influence the size and moisture content of the potatoes. The restaurant wanted potatoes all year round. This meant that the farmers had to work as a group to stagger their planting dates. They also had to grow potatoes at different altitudes. Payment by cheque by the company meant that the group had to open a bank account. Relationships between the buyer and the farmer took off when the manager of the restaurant visited the village. Trust is achieved by maximizing interaction and communication between all parties and the meeting was a starting point in building trust and strong personal ties between the producers and the buyer.⁸¹

⁷⁹ Radhakrishnan, 2005.

⁸⁰ Sandredo, 2006; Natawidjaja and Reardon, 2006.

⁸¹ Kaganzi *et al.*, 2006.

➤ **organized by a supermarket**

- A supermarket in South Africa has placed great emphasis on procuring fresh vegetables from the surrounding area. This has not only benefited local farmers but has also made sound business sense. The store is able to offer fresher produce than competitors who source through centralized distribution centres and the involvement with the local community has led to a significant increase in the store's sales. In addition to providing a market for the farmers' produce, the retailer provides the 27 farmers with interest-free production loans upon presentation and approval of business plans. Repayment is deducted at the time of produce delivery. Its staff makes frequent farm visits and provide training in product quality standards. Some problems have, however, been experienced, most notably difficulties farmers face in coordinating deliveries so that quantities supplied are constant. Banks were initially reluctant to support this initiative but the success of the arrangement is leading to a rethink of their ideas of "bankable" farmers.⁸²

Linkages through a leading farmer

- All farmers on the island of Mindanao in the Philippines used to sell their produce either on local markets or through traditional marketing channels that involved village collectors and wholesalers in Mindanao and wholesalers and retailers in the major cities of Cebu and Manila. With support from a USAID project, a new approach was developed, involving "clusters" of farmers who supply markets directly. The Bukidnon "lettuce cluster" involved five farms in northern Mindanao. A market for lettuce was identified with fast-food companies. Marketing activities were coordinated by the largest of the five farms, which accounted for 44 percent of production. Coordination involved: (1) contacting each grower to get confirmation of weekly supply and matching any individual shortfalls with production by others in the cluster; (2) checking the pre-cooling and packing area and the supply of plastic crates; (3) transmitting weekly receipts reports and payments to the other growers and discussing identified quality problems; and (4) liaising with the crate supplier, transporters and input suppliers. Individual farmers' crates were colour-coded for traceability. Information about each shipment was faxed in advance to the cluster's agent in Manila who received the shipment at the buyer's premises, monitored the weights, identified any quality problems and reported back to Bukidnon. The agent also arranged bank transfers of payments to growers. The cluster provided a model of an integrated approach that involved close liaison with input suppliers, transporters and buyers, and the coordinating role of the leading farmer appeared to be the essential component of its success, which subsequently enabled the farmers to expand their collaborative activities into a wider range of vegetables.⁸³
- The In-Net-Vegetable Growers' (INVG) group, in Chiang Mai Province, Thailand, consists of 72 members from eight villages, who together produce kale, cabbage, bean and broccoli. Members of the group pay no membership fees, but each buys a share of 120 baht (US\$3.50) which is used as initial funding and operating capital, mainly to

⁸² Louw *et al.*, 2006

⁸³ based on the work of Flordeliza Lantican.

provide loans for inputs. The INVG group has invested in water pumps and tube irrigation. The group supplies two supermarkets in Chiang Mai, as well as two wet (fresh produce) markets and a university shop. The INVG farmers deliver vegetables to their chairman, who acts as the buyer and has supplied the supermarket chain for more than 15 years without a written contract. Since sales are on a sale-or-return basis, the INVG chairman must carefully determine the right quantity to deliver each day to avoid losses. Fruit is inspected piece by piece for quality and freshness, leading to high rejection rates. Each member's code is included on bag labels for traceability. Payment is made every 45 days. The disadvantage is that the vegetables need to be sold within a day. The case provides an interesting example of where a leading farmer, trusted by the others, has taken on the role of trader, to the benefit of all group members.⁸⁴

Linkages through cooperatives

➤ directly with the private sector

- The first company in China to export organic vegetables to Japan uses an integrated organic ecology system, which was introduced in 1993. The company does not sign contracts directly with farmers but through village vegetable cooperatives formed by the village committee and the leading vegetable farmers. The company provides fertilizer in advance and the farmers pay for the fertilizer when they sell their vegetables. Producers are selected on the following criteria: soil structure; quality of irrigation water; surrounding environment; education and capability of farmers; and capability of the cooperative's leadership. The company holds a village conference to discuss organic vegetable production and outline the contract. It establishes farmer schools on organic crop cultivation and has two Japanese experts to monitor and provide training, together with Chinese staff. Leaders of the cooperative are usually the village leaders, who can ensure village support. The company now has 25 farmer cooperatives that are certified as organic crop producers.⁸⁵

➤ with an external catalyst

- A Belgian NGO, ACT, established the Muleba Association for Agriculture and Local Industries (MALI) in northwest Tanzania to improve productivity at farm level. However, the success of this initial venture led to surplus fruit, encouraging the NGO to develop a fruit juice processing factory. Production of around 1500 crates of juice a month has been achieved but the plant has the capacity to double this. The NGOs assisting the project have never felt comfortable with supporting the processing side of activities and are looking for an exit strategy to enable them to concentrate on their core production extension activities. However, they are presently meeting two-thirds of MALI's processing, distribution and marketing costs and it is unclear at this time whether MALI can make the transition from development project beneficiary to viable commercial enterprise.⁸⁶
- In Mali the NGO SNV supported women's groups to improve the processing and marketing of shea butter. Forty community groups were organized, embracing 1500 women. SNV provided storage facilities and equipment for each group and provided

⁸⁴ Wiboonpongse and Sriboonchitta, 2004.

⁸⁵ Chen *et al.*, 2005.

⁸⁶ Ringo and Uliwa, 2005.

training in production of improved quality butter. Sales were made through a cooperative union developed by the project. Initially the activities were successful and women's incomes increased but on completion of the project the intervention appeared to be unsustainable. This was because of the limited time frame (four years) and the fact that the NGO had been directly involved in running the marketing side of activities without developing a capacity in the cooperative union to take over this activity.⁸⁷

- Members of the Unión Cuatro Pinos in Guatemala are small-scale farmers. There are local collection centres, overseen by a manager and two or three assistants in each of the eight communities that participate in the cooperative. Members preselect, weigh and store their produce at the collection centres and the amounts received are registered. The cooperative headquarters has a central collection centre and a plant for postharvest operations, including prefreezing, grading, cleaning and storage. Exports of fresh vegetables are made to the US and the UK. The main export products are green beans, zucchini squash, artichokes, pimento peppers, tree tomatoes and snow peas. The cooperative makes production contracts with its members during the distribution of seeds, which it controls. For the first 14 years the cooperative received a non-reimbursable seed fund and technical assistance from a Swiss group.⁸⁸

Farmer to agroprocessor

➤ with an external catalyst

- Having identified lack of reliable oilseed supply as a problem faced by crushers in Tanzania, Faida MaLi, a Tanzanian NGO, ended up linking farmers to a start-up crusher because existing oilseed crushing companies had no capacity to support farmers. One hundred and eighty farmers were organized into three transitional farmer groups. The NGO assisted with contract negotiations and both farmers and the company paid a percentage to the NGO. The company financed production costs, with farmers contributing 40 percent of those costs to a group savings account. However, problems were encountered with the seed used, with the weather and with cheaper imports. This led the company to pull out after four years. The company, with other business activities, was not really committed to the oilseeds industry when faced with problems.⁸⁹
- In Mozambique, the CASCA project to revitalise the cashew industry is a multi-agency venture involving SNV, HIVOS, Technoserve, two Mozambican NGOs (one providing farmer training and the other microfinance); a medium-scale private cashew processing factory and the national cashew promotion institute (INCAJU). Technoserve provides technical assistance to the development of small-scale processing units which sell to the larger factory for further processing, grading and packaging.⁹⁰

⁸⁷ Conilh de Beyssac, 2005.

⁸⁸ Santacoloma and Riveros, 2004.

⁸⁹ Ndanshay, 2005.

⁹⁰ Wijnoud, D. 2005(b).

➤ **initiated by the agroprocessor**

- An entrepreneur visiting Ghana identified the potential to export fresh-sliced pineapples to Europe. Because of the peeling and slicing in Ghana the entrepreneur could utilize much of the 35 percent of the pineapples that were rejected for fresh export in whole form. The initial venture ran into difficulties because of side selling and because farmers argued that as their pineapples were being exported they should receive the full export price. It was clear that the entrepreneur could not run his processing facilities profitably by relying solely on smallholder supply. He therefore established his own farm and now supplements supply from outgrowers on a contractual basis. These outgrowers receive training by working at the entrepreneur's pineapple shoot-farm. They work four days a week at the shoot-farm and receive one-day a week of practical training. Support to the outgrower programme is provided by the Dutch NGO Cordaid. After one year the farmers return to their own farms for one day a week and grow pineapples on a contract basis. After three years they can set up as full-time farmers on their own.⁹¹
- Also in Ghana, a company processes fresh, chilled pineapple, mango, watermelon, passionfruit and papaya for export. Linkages between farmers and the company were established through visits and meetings and further strengthened with the introduction of EurepGAP certification. The company has taken on the technical and financial responsibility of certification for all its suppliers. Those who are EurepGAP-certified are obliged to sell to the company because of the investment it makes in obtaining certification. The company sources from some 135 suppliers, including 77 small-scale producers of pineapple who have recently been certified as organic and fair trade. Transactions are with individual farmers. Fruits are delivered either to the factory or collected at the farmgate and are paid for two weeks after delivery. The company does not provide credit to farmers nor link them to any financial agents, but does offer inputs and equipment on hire purchase without interest. Farmers receive free technical training and advice from company staff to ensure that produce meets safety and quality requirements. Training in EurepGAP standards and certification of farmers, as well as prompt payment and competitive prices, has ensured regular supplies from producers. Improvement in road infrastructure has enhanced access to farms by company trucks, which reduces the burden on farmers to transport produce to the processing plant.⁹²
- In Malawi, a Dutch-owned company promoted paprika production. Farmers were grouped into clubs of 20-25 and they elected chairman, treasurer and secretary. Company-employed extension agents provided technical support to farmers and also to government and NGO staff. The company offered a minimum guaranteed US dollar price before farmers started sowing each year. Production monitoring determined where the company would set up buying depots or collection centres each year. Problems encountered included traders who bought from farmers by telling them that the company was not going to buy and fraudulent activities of the company's staff who would purchase paprika as Grade B, deliver to the company as Grade A and pocket the difference. Farmer credit default was also common. To address these problems the company appointed prominent farmers as Field

⁹¹ de Heijer, 2005.

⁹² Dannson *et al.* 2005

Assistants, working below the extension officer. These Assistants were elected by their peers and looked after 300-500 farmers each. They were not paid but received a bonus according to how much paprika their farmers delivered to the company. Also, the company computerized all records; each farmer now receives a computer print-out with records of sales, thus reducing the possibility of fraud. Computerization has also enabled the company to more efficiently manage procurement, control transport costs and confirm that women farmers have a far higher average production than men!⁹³

- In Kenya, a private dairy has developed strong relationships with its suppliers. Farmers are organized and registered through a formal supply contract, which indicates how much milk each farmer will deliver daily. These arrangements are an important planning tool for the dairy, determining capacity utilization and ensuring optimal use of its transport fleet. Farmers are normally grouped into collection centres, which collect milk and supply inputs. At each centre raw milk is entered into each farmer's account, after it has been tested for quality. The firm then transports the milk to the processing plant. The dairy provides extension services, artificial insemination and veterinary drugs, as well as animal feeds. All these services are provided to farmers on credit, which is then deducted from milk proceeds. With an assured market and an agreed price for milk, farmers enjoy a relatively low-risk environment. They are thus able to engage in dairy production with a clear idea of their expected revenue and also have guarantees of input price and quality.⁹⁴

➤ **initiated by the government**

- In Viet Nam a joint venture between a state-owned company and an international consortium operates a sugar factory in the North Central Coast region. Most of the growers in the region were subsistence farmers and therefore lacked resources to invest in the new crop. Credit was thus an indispensable component since it takes about 14 months between planting and harvesting of the first sugar crop. The project focused on the disbursement of working capital to growers in the form of short-term loans. As an initial investment the company covered expenses for a total of 2 000 hectares, providing either cash subsidies or free seeds and fertilizer. Since credit distribution to a large number of clients was very expensive and time-consuming, it was decided to form joint-liability groups, each consisting of about 50 members, governed by a board. To reduce handling costs, starting capital was disbursed to the groups from the district office of the Viet Nam Bank for Agriculture and Rural Development (VBARD). Each group was responsible for disbursement to the members who shared liability for credit and repayments. Also, savings were mandatory. Loans or starting capital from VBARD's district branches to the groups were repaid, in instalments, over four years. The credit programme was considered the essential ingredient for the success of the project.⁹⁵
- The Afife Rice Irrigation Project was established by the Ghanaian Government in 1982 and is managed by the Ghana Irrigation Development Authority (GIDA). In all, about 880 ha of land is cultivated by 800 farmers who are organized into five cooperatives. An umbrella cooperative was formed in 1996 with a steering committee made up of two representatives of each cooperative, together with GIDA

⁹³ Donker, 2005.

⁹⁴ Wambua, 2002.

⁹⁵ Boselie and Van de Kop, 2004.

management. Since the formation of the umbrella cooperative, GIDA has facilitated the establishment of linkages between the society and other agribusiness enterprises. To ensure prompt and bulk supply of inputs, the society purchases fertilizers and herbicides on credit from an agrochemical company, with repayment made after harvest. The Agricultural Development Bank (ADB) also provides loans and in some years procures fertilizers for the farmers on credit. In 2001 GIDA facilitated links between the society and a rice processing and marketing company. Farmers receive loans from the ADB, and deliver the equivalent of the loan in paddy to the company, which is financed by the same bank. Farmers then have the option of selling any surplus paddy to the company or finding other outlets. The price of paddy is agreed between the cooperatives and the processing company at planting. Cooperative members now see farming as a business and there is wide participation in regular meetings. Relations with suppliers and marketing outlets are good thanks to timely delivery of inputs and prompt payment of farmers for their produce.⁹⁶

Farmer to exporter

➤ with an external catalyst

- In Nampula, Mozambique a trader buys oilseeds from farmers for onward sale to exporters. He works through farmer associations, such as those set up by CARE, and provides credit in the form of fertilizer and as cash for the associations to purchase the crop. No repayment problems were reported. While credit arrangements involving mutual trust appear to work well in this case, there have been examples involving cash crops in the same area where trader-farmer credit arrangements had not worked.⁹⁷
- Working in central Mozambique, the Netherlands Development Organization, SNV, carried out a programme of development of the pineapple industry. Production was already widespread and farmers were already working in associations but marketing was poorly developed. In addition to carrying out training programmes for the associations and investigating the potential for pineapple processing, SNV identified a trader in the neighbouring province of Manica who was exporting pineapples to Zimbabwe. The trader agreed to sign a long-term contract to buy 3-7 tons a week at a fixed price. He also agreed to provide training on production technologies.⁹⁸

➤ developed by the participants themselves

- Cassava is grown in marginal areas of Ecuador where other crops do not grow. Aid agencies have largely abandoned the zones where cassava is produced and processed and the dynamics of the cassava industry have thus developed spontaneously through partnership between farmers, traders and processors in order to meet market demand in neighbouring Colombia. An important factor in the success of these business linkages is the generation of mutual trust through the fulfilment of verbal agreements. Farmers make verbal agreements with the starch factories and deliver their production. Sometimes the factories pay farmers in cash at the moment of sale, and at others the producer must wait until the processor sells the starch. Colombian intermediaries go to the area with their own transport, contact agents familiar with

⁹⁶ Dannson, 2002.

⁹⁷ Shepherd, field visit.

⁹⁸ Wijnoud, 2005(a).

the zone and negotiate with the different starch factories. Verbal agreements are made and in many cases the intermediary pays an advance, either in money or raw materials, before the cassava is processed. This agreement is made before the starch is processed, which enables the processor to plan production.⁹⁹

- Jujube growers in Myanmar's Mandalay Division sell their fruit mainly in Muse Town, 300 km away on the Myanmar-China border. The Muse market was first tapped by traders in mango and watermelon. The growers usually ship their fruit to intermediaries in Muse using their own trucks or hired vehicles. The fruit is transported in consignments ranging up to 500 boxes, across mountain roads and through security and taxation checkpoints. In Muse, the drivers deliver to intermediaries, who contact Chinese buyers and negotiate prices. The drivers usually bring the sales revenue back to the growers with a voucher signed by intermediaries (if the sales value is high, the intermediaries send money to their suppliers through a private bank, and pay bank charges).¹⁰⁰

Contract farming

➤ with support from an NGO

- A company in South Africa produces pulp. It is supplied in part by contracted timber growers, including some 7 000 small-scale contract farmers incorporated in a "Project Grow" programme, which aims at converting rural subsistence farmers into emerging commercial operations. Management of Project Grow is contracted to Lima, a rural development NGO. All contracted suppliers are required to enter into a timber purchasing agreement that specifies the commencement and duration of the relationship, the total tonnage to be delivered to the mill during the period of the contract and the annual tonnage. It also specifies the price that the company will pay for the tree species to be delivered or, alternatively, an annual price. The company provides, via the management NGO, an initial interest-free loan for planting, maintaining and weeding the timber, and providing seedlings. Lima's six extension officers and eight field assistants visit the small-scale growers frequently to provide assistance with weed control and the preparation of fire breaks. Contractors assist the growers with the planning and harvesting of their plots. The project generates considerable revenue for local communities, with an estimate of 50 percent of turnover retained within the community as a result of payments to local contractors, 42 percent retained by the grower and 8 percent refunded as loan repayments. However, the high level of company support to the growers has resulted in a high cost to the company. The withdrawal of its support could result in the abandonment of the project, since the smallholders appear unlikely to organize themselves through a farmers' association.¹⁰¹

➤ organized by the company itself

- Transvaal Sugar Limited has the capacity to produce 350 000 metric tons of sugar annually from its two factories. Sugarcane is supplied by company estates and a range of contracted large, medium and small-scale growers. Small-scale growers

⁹⁹ Santacoloma and Riveros, 2004.

¹⁰⁰ Kyaw Myint, personal communication.

¹⁰¹ Kirsten and Sartorius, 2002.

include more than one thousand farmers belonging to thirty-two different supplier groups. The average farm size of these growers is 6.8 hectares. The contractual arrangement between outgrowers and the company is controlled by a cane delivery agreement, which specifies conditions and obligations that bind the parties over long periods of time. The price paid to outgrowers is determined by the South African Sugar Association. As smallholders incur higher levels of start-up costs and transaction costs in all phases of the growing operation, they receive company assistance in financing, training, land preparation, the installation and maintenance of irrigation equipment, planting, weeding and fertilizing. Small-scale growers also require higher levels of company inputs to guide and co-ordinate harvesting and delivery transactions. Grower performance, analysed between 1998 and 2001, indicates that smallholder production efficiency matched that of the company estates.¹⁰²

¹⁰² *ibid.*

Annex 2

Check-list of issues to address when developing linkages

Markets

- What products are undersupplied on local markets that could perhaps be supplied by farmers in the area?
- Alternatively, what markets exist for products that target farmers do or could produce?
- What are the risks associated with the identified markets?
 - Low commodity prices?
 - Limited demand?
 - Rapid price fluctuations?
 - Competition from other existing or potential suppliers?
 - High marketing costs that may make supply uncompetitive?
 - Quality and certification standards that may be difficult to meet?
- Are the identified markets presently being supplied and, if so, would the proposed linkage affect the livelihoods of other farmers by removing their market opportunities or by leading to oversupply and lower prices?
- For export markets, are farmers able to supply when demanded by the market and in sufficient quantity for exporters to sustain linkage arrangements?

Production

- Do the farmers have the necessary assets to carry out production of the crop/livestock (e.g. irrigation, farm power, tools and equipment)?
- Is the location suitable for the planned production? What production risks are there (drought; disease; etc.) for new products and how do those risks compare with existing risks faced by farmers?
- What existing extension support is available to farmers?
- Are farmers' education and skill levels suited for the planned production? Have they demonstrated a past capacity to adapt to new activities?
- What farm management skills do farmers have? Do any keep farm records?
- What is the land tenure situation? Is this conducive to the investments required from farmers to produce the planned product? If not, have alternative products been considered?
- Have government agricultural research services carried out research on the planned products? If not, could these services be persuaded to assist with such research?
- Is existing research based on farm-level research or research farm results? If the latter, what adjustments need to be made to make them realistic for the environment of the target farmers?
- Using realistic assumptions, what is the likely cost of production that farmers would face?
- What input suppliers and mechanization services are available locally? Do these carry, or would they agree to carry, the necessary inputs for the products envisaged?

If no suitable suppliers or services are available what arrangements need to be made to ensure that they become available on a sustainable basis?

- Has the individual or company identified as a potential buyer expressed an interest in supplying necessary inputs or extension support to prospective farmers?
- If the planned linkage requires following detailed production specifications of the buyer, do the farmers have the capacity and inclination to do this?
- If the planned linkage requires capital investment by farmers, do the likely returns justify such investments? Is finance available (see below)?
- Are the planned products compatible with the ability of farmers to supply, from a social or religious standpoint? If not, have alternative, less demanding, products been considered?

Group formation

- Is group formation essential to link with the identified market? If not, what are the advantages of working in groups (e.g. overcoming high individual transaction costs) and are these offset by costs (including time costs) that farmers may incur?
- Have alternatives to group formation been considered, such as the “leading farmer” approach?
- Does the planned linkage require formal groups with a legal entity or would informal activities, such as bulking up produce for sale to traders, suffice?
- What have been the experiences in the country/region/province with collective farmer activities? Which type of farmer organization appears to work best?
- What, if any, collective activities do the target farmers presently carry out? What have been the experiences with this?
- Have discussions been held with farmers about forming a group or groups? If so, what has been the initial reaction to the idea?
- What is the social structure of the area and does this lend itself to successful collaborative activities? Would there be a possibility of elite capture?
- Would different types of groups be necessary to ensure homogeneity, such as male and female groups or groups organized according to roles in the supply chain?
- What size should the groups be? What structure should they have (officers, decision-making, etc.)? Is there a possibility of federating with other groups/associations and what would be the advantages of this?
- Have bylaws for the group been developed and are they fully understood and accepted by all farmers?
- Are there farmers who demonstrate leadership and/or management skills? If not, does the proposed activity justify recruitment by the group of a full-time manager?
- What training will farmers require in group dynamics?
- What training would group officers require in business management, marketing, accountancy, etc. and how will this be provided?
- What existing legislation is there relating to farmer groups and is it appropriate to the type of group envisaged?
- Would the group be legally entitled to operate a bank account, if required?

Marketing, processing and contracts

- Has a detailed analysis of the supply chain been carried out and have proposed linkage activities been based on that analysis?

- What are the conditions of purchase of the buyers in relation to quality, safety, quantity, packaging, transport and delivery, and pricing and payment?
- Do farmers have the capacity to meet these conditions? If yes, what training do they nevertheless require? Are they able to make necessary investments?
- Does the location of the farmers present difficulties in supplying the market?
- Are farmers likely to fully understand the purchase conditions, particularly in relation to pricing and quality aspects? If not, what steps must be taken to ensure they develop an understanding?
- What would be the likelihood of side-selling (extra-contractual marketing) for the envisaged crops? What steps can be taken to minimize the possibility of this?
- Is a written contract necessary or will a verbal contract be sufficient? Who will draft the contract and what steps can be taken to maximize the involvement of farmers in this process and to ensure that they fully understand the conditions of the contract?
- Does the contract allow for renegotiation in situations of *force majeure*?
- What costs would farmers incur in meeting buyer conditions and would deduction of these costs from the expected price result in returns that would be profitable for them? Would these returns be higher than their existing returns and would they justify any increase in risks faced?
- What transport arrangements would be used? Is commercial transport available or, if not, what steps are necessary to ensure that commercial transport will be available? Is the available transport suitable for the planned products?
- What arrangements can be made for farmers and buyers to meet, for buyers to visit farms and for farmers to see how their products are marketed and used?
- Is any external certification required for the envisaged market? What costs would farmers face in meeting required standards and how would the cost of certification itself be covered?
- How long has the potential buyer been in operation and what, if any, risks are associated with the business, such as competition from overseas suppliers?
- Does development of the market for farmers require any support to processors? How can this be done with minimal subsidy to ensure sustainability? Prior to a decision to provide support, has detailed market and business research been carried out to assess the long-term viability of the company?
- Do other actors in the supply chain, such as traders, require technical or commercial loan support in order to make planned linkages more efficient?

Enabling environment

- Is the macro-economic environment suitable for the sustainable operation of exporting and agro-processing operations?
- Do the legal and the judicial systems safeguard property rights and is there a workable contract law?
- If the answer to the above questions is no, what market linkage activities could be introduced that would not be jeopardised by the absence of a suitable environment?
- Is the available infrastructure (roads, electricity, water, communications, stores, port and airport facilities) suitable for planned marketing and/or processing activities?
- What sources of market information and other advice on marketing are available?

Financing

- Is there a bank or other financial institution in the area?
- Have any of the financial institutions expressed an interest in working with small farmers, possibly through a tripartite or quadripartite arrangement with the planned buyers and/or input suppliers?
- Do those financial institutions have experience in lending to small farmers on a sustainable basis and do they offer loan products compatible with farmers' cyclical cash flow? If not, would they be prepared to do so? Is any insurance against price or production risks available?
- What are the collateral requirements of the financial institutions? Are these acceptable to farmers? If not, can alternatives be explored?
- Do any financial institutions in the area offer savings facilities for small-scale depositors? Are money transfer facilities available that could facilitate payment by the buyer?
- If buyers have undertaken to supply inputs, would they be prepared to do this on credit, with repayment at the time of product delivery?

Sustainability and replicability

- What steps have been taken to consult with national, regional and local authorities to ensure that they are fully supportive of the planned linkages?
- Have decisions about any subsidies that may be given been taken with full regard for the implication of such subsidies for sustainability?
- Have detailed cost analyses been conducted to ensure that proposed linkages will be profitable at forecast prices and production levels and has a sensitivity analysis for different prices and production been conducted?
- Has flexibility been built into project implementation?
- Is the term of the project fixed by the donor or can this be varied according to progress?
- Has it been ensured that where commercial services (transport, banking, etc.) are available they are used and that the project does not attempt to set up parallel services?
- Has all necessary training been carried out?
- Are the demands that the linkage places on the time of the farmers realistic? Could the linkage create or exacerbate sex or wealth inequalities?
- Is the linkage developed specific to the area, or could it offer a model for developments elsewhere? If the latter, what steps can be taken to bring people's attention to the success?

The linking organization

- Are employees comfortable working with the private sector? Do they understand the way the private sector functions and the ways in which it can most efficiently link with farmers?
- What training of staff is required in areas such as business management and market research? What training is necessary so that staff can, in turn, train farmers?

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Approaches to linking producers to markets

This Occasional Paper examines experiences of linking farmers to markets, in order to reach some tentative conclusions regarding success factors. It mainly considers examples of linkages promoted by outside organizations such as NGOs. Issues discussed include the choice of markets, the capacity of the linking organizations, and the relationship between the private sector, NGOs and farmers. Linking farmers to new markets invariably involves farmers organizing into formal or informal groups. Experiences with group organization are reviewed, as is the question of finance. Problems faced by farmers in maintaining linkages are examined and sustainability and scaling-up of linkage activities considered. A check-list of issues to address when planning market linkages is provided as an annex. The paper also considers the enabling environment that governments must provide if linking farmers to markets is to prove successful.

The paper is aimed at staff of NGOs, both those working at the policy level and in the field; at donor organizations and the projects they support; and at ministry of agriculture policymakers and extension services. It should also be useful for private sector companies seeking to develop linkages with small farmers.