MARRYING FARMER CO-OPERATION AND CONTRACT FARMING FOR AGRICULTURAL SERVICE PROVISION IN SUB-SAHARAN AFRICA

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Keywords*: contract farming, outgrower, smallholder, cooperative, agribusiness, agro-enterprise, market linkages, inputs supply.*

Abstract*: Some of the lessons of contract farming and farmer co-operation can improve smallholder access to new market opportunities and services required to support production intensification. Co-operation often works best where farmer groups are contractually linked to input and output markets. However, there are some constraints to the development of contract farming schemes, not least the risk that farmers will default, and the high costs of supervision. Ways of improving the performance of co-operation and contract farming are explored, as well as the scope for linkages between them based on experience in Africa. To conclude, lessons in providing direct and indirect support for smallholders and market linkages supporting the further development of the contract farming and co-operation approaches, and other means of providing improved services, are discussed.*

I. Introduction

One of Africa's main development challenges is the delivery of agricultural services (markets, inputs, financing and other support) to smallholder farmers. Economic liberalisation and institutional reform have reduced and redefined the role of the state in service provision and the onus is now on the emerging private sector to provide production and marketing services. Better services are needed to increase production or arrest declining production of traditional smallholder crops and, where appropriate, to enable diversification into more profitable, high-value cash crops.

Over the last five years, NRI has carried out research in eight African countries to assess the viability of two approaches to improving agricultural service provision:

a) contract farming, otherwise known as outgrower schemes and;
b) co-operation through formal co-operatives, farmer associations or groups, which are henceforth referred to collectively as Farmer-Controlled Enterprises (FCEs).

Contract farming refers to a range of initiatives taken by private agri-business companies to secure access to smallholder produce. Companies provide services to farmers and in return receive access to some or all of the farmers' produce. Schemes typically involve the provision of inputs (seed,

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[1] Natural Resources Institute (NRI) see Resources section IV. A version of this paper first appeared in ODI Natural Resources Perspectives No.48 of Nov 99. Peer review: Steven Jaffee, World Bank and Kees Van DerMeer, World Bank.

fertilisers, and pesticides) on credit, often with extension advice, but may also include a range of other services such as ploughing and crop spraying. The repayment of any loans and the costs of providing these services are recouped when the produce is sold.

FCEs must be distinguished from the State-controlled co-operatives of the past. These failed to respond adequately to their members, performed poorly and were widely discredited, but now they are gradually being disbanded or transformed into independent, member-run institutions, in line with internationally accepted principles. FCEs can reap benefits for members by achieving economies of scale for a range of activities, for instance by bulking up in output marketing or storage.

Contract farming and farmer co-operation are not mutually exclusive. When dealing with agri-business, the negotiating strength of an FCE is greater than that of individuals. Agri-business may also favour working with FCEs, since group liability for credit enables it to reduce lending risks while the scale economies involved may reduce transaction costs.

II. Key Principles

Contract farming

Research into contract farming included a desk review and field-work in Zambia, Zimbabwe and Uganda, covering a range of commodity sectors, particularly cotton, tobacco and high value horticulture for export. Contract farming has a vital role to play in provision of agricultural services to smallholders, but there are two main problem areas which result in high costs and often undermine viability, i.e. contract default and the scale of farmer operations.

Contract default

Past concerns about unfair contracts which gave farmers unfavourable terms, have increasingly been resolved by the loss of prescribed regional monopsonies, often run by parastatals. A company may still break a contract with a farmer, for example by failing to deliver inputs and services at the correct time, refusing to receive produce or arbitrarily raising quality standards. When such things happen, the farmer is generally in a weak position. However the development of competitive output markets has shifted the balance of risk toward agri-business, and the latter now has a strong incentive to maintain good relations with smallholders, since this helps secure future access to their produce. The key challenge for agribusiness is how to overcome the problem of farmers defaulting on contracts.

Farmers sometimes break contracts either on account of production failure or because they have sold the produce to competing buyers and fail to repay credits. The absence of effective legal systems, the lack of collateral held by smallholders, and weak insurance sectors, create considerable risk for companies entering into contracts. The problem of deliberate default has been exacerbated by failed development programmes where credits have not been recovered, fostering a perception among some farmers that the penalties are minimal. The probability of default is greater with staple commodities and other crops for which there are many buyers. The term “strategic default”[2] has been coined to describe this phenomenon.

However, agri-business is now actively innovating to reduce farmer default, and has developed a number of mechanisms for this purpose (see Box 1). Such innovations have invariably been applied

[2] see Poulton *et al.*, 1998, for a discussion of strategic default

with relatively high value cash-crops. By contrast little progress has been made in developing sustainable outgrower arrangements with staple food-crops. This does not bode well for stand-alone outgrower schemes involving maize, though there is a growing body of evidence that food crop productivity can be increased as a spin-off of well-conceived cash-crop development[3].

BOX 1

REDUCING FARMER DEFAULT

Lending through groups. Providing inputs and services through groups of joint and severally liable smallholders has several advantages. Peer pressure within the group and intra-group monitoring can reduce the risk of default, particularly where the group has to put up some sort of joint collateral. This was the main rationale behind the use of groups by agribusiness in the Zimbabwe cotton sector. Farmers have information on the creditworthiness of community members that the contractor would probably not have, and therefore screen out potential defaulters. In addition, economies of scale can be realised in the delivery of services, thereby reducing costs. Farmers may also benefit by having a stronger hand in negotiations with companies.

Good communication and close monitoring of farmers. The need for good communication is a key lesson, since communication between agribusiness and farmers is often weak. Groups may aid communication since group members can monitor each other. Monitoring is a particularly critical issue for export horticulture involving the more developed markets, where there is a need to ensure quality and traceability of produce, and to prove due diligence throughout the chain. Additionally, good communications help foster good company-farmer relations and a sense of trust, which can contribute to the reduction of strategic default.

The range and quality of services offered. The better and broader the range of services offered, the closer the relationship between farmer and business, and the more the farmer stands to lose by breaking the relationship. Delivering timely services which respond to farmers' needs, creates incentives for farmers to honour contracts, and in the longer term will foster trust and reduce the risk of default. For example, input credit tends to be provided in-kind to prevent credit being diverted to other expenditures. However, good performance in repaying in-kind loans can lead to cash loans being offered, as has happened in the Zimbabwe cotton sector, and in some of the stronger Kenyan dairy co-operatives

Incentives for repayment, and strict treatment of defaulters. Providing incentives for repayment has had a positive effect on repayment rates in the cotton sector of Zimbabwe. This has been combined with rapid action in the case of default, involving asset seizure and group exclusion. The case of tobacco in Uganda shows that legislation can be developed and enforced which, in theory, protects both parties in the contract. The absence of legally enforceable contracts has at times led companies to take enforcement into their own hands.

[3] see Govereh *et al.*, 1999

Co-operation between buyers. This is not common, but potentially provides mutual benefits, either through agreement not to purchase from farmers under contract with other buyers, or through joint operation of the scheme. This latter approach has been taken in the Ugandan cotton sector. Sharing information on defaulters is a further activity which would ultimately benefit all companies involved in contract farming, both within and across sectors.

Scale of farmer operations

The degree to which smaller farmers stand to benefit from contract farming is an issue of concern to many donors. Whilst small farmers may in certain circumstances be very efficient, and politically attractive, the costs of supervision may be very high. They may be dispersed and difficult to reach, adding to costs of service delivery and monitoring. The small scale of production, with low volumes of inputs and outputs, results in high per unit transaction costs. This tends to result in the exclusion of the smallest farmers where these cost factors weigh more heavily. In Zimbabwe, it was estimated that in order to break even, a horticultural exporter might have to pay its smallholder suppliers less than 30% of the price per kilogram paid to commercial farmers who delivered directly to a packing plant.

Production risks of smallholder cultivation may also be higher than for larger scale production if farming is on rain-fed marginal lands. Larger farmers may have better crop management skills and greater access to extension services, reducing the risk of crop failure. The Cottco scheme in Zimbabwe does not exclude smaller farmers, but does require applicants to demonstrate their crop management skills by setting a minimum yield which farmers must achieve before being accepted onto the scheme. This will tend to exclude weaker, smaller farmers.

Despite enjoying quality advantages (because of their intensive labour input) in the production for many horticultural products in recent years, there has been a tendency to exclude smallholders from outgrower schemes in export horticulture, due partly to difficulty in ensuring quality and traceability and partly to scale factors. From an exporter's perspective, it is far easier and cheaper to audit and monitor a large production unit than dispersed farmers, thus posing an impediment to market entry for smallholders who generally lack adequate credit, inputs or technical capabilities.

However, smallholders have been involved in contract farming in large numbers. In Zimbabwe over 50,000 now participate in the cotton sector alone, and a notable export horticultural scheme involves some 3,000 farmers producing baby-corn on hand-watered micro-plots (initially 600 sq m per farmer). Importantly, smallholders may be more willing to participate as they stand to benefit greatly, and therefore have a greater incentive to honour contracts and maintain contact with the company. Unfortunately farmers may also be willing to participate if they perceive potential for strategic default. The onus is on the provider to anticipate situations in which this might arise (for instance, where a crop can be consumed on-farm or marketed locally), to put the necessary mechanisms in place to avoid it, and to make sure that farmers are aware that strategic default will not be possible.

Farmer Co-operation

Research into farmer co-operatives or FCEs identified key areas which affect their success (see Box 2).

BOX 2

FEATURES OF SUCCESSFUL FCE's

1. The range of agricultural activities undertaken

- A close match between the activity and services and the group's experience and financial capacity.
- Generally involved in relatively simple marketing, input supply and credit operations involving liaison with market intermediaries higher up the marketing chain.
- Tend to begin with a single activity.
- More complex operations, for example involving the operation of jointly owned fixed assets or processing often fail (with some significant exceptions in the case of womens' groups).
- Tend to concentrate on relatively high value produce (e.g. seed-maize, dried fruit, oil palm and cotton) rather than low-value staples.

2. Internal features

FCE structure

- Generally built upon pre-existing organisations, where members already share considerable trust and familiarity.
- Tend to have a small membership, between ten and thirty members, of relatively homogeneous characteristics.

Member control and participation

- A clear member-driven agenda, which tends to occur more in groups of small size.
- Strong democratic processes.
- Written constitutions and rules, and record keeping assist in clarifying roles and enhancing transparency.

Relationship to external agents

- Absence of political patronage.
- High degree of self-financing: successful cases were not associated with interest rate subsidies, but with viable business objectives which made subsidies unnecessary.
- External training inputs, particularly when aimed at integrating the group into the wider economy through the development of links with financial and market intermediaries.

Two types of successful FCEs have been identified:

a) The "linkage-independent" group, which can stand alone in the market, and provide smallholders with sufficient market presence to seek out independent relationships with other market intermediaries; and,

b) The "linkage-dependent" group, which has a long-term commitment to a particular company which supplies the services it needs.

Linkage-independent FCEs are able to negotiate on behalf of their members to get the most competitive deal and are quite independent of any one buyer or supplier. The advantages of this type of FCE are independence and autonomy, but it can be very demanding of the organisation, which requires considerable internal coherence and management skills. The alternative of linkage-dependency has the advantage that the commercial partner has a strong vested interest in the FCE's survival and may provide assistance and support to the group to this end. However, where the FCE is unskilled in negotiation and business relationships the greater benefits may accrue to the processor or trader than the group.

Some very serious efforts to promote sustainable FCEs have been identified as well as some weak initiatives which were likely to increase farmers' scepticism about the co-operative approach. Notable among the former were the efforts of cotton parastatals in Francophone countries in devolving input supply and procurement functions to Village Associations which operated on a linkage-dependent basis, and the efforts of some NGOs seeking to build strong grass-roots organisations. The negative findings related mainly to cases where FCEs were being formed on a large scale as part of development projects. Farmers were typically required to join a group in order to receive inputs that were donated or highly subsidised. The problem with this is that the groups attract people who are primarily interested in the subsidy, and not those who have useful experience or are committed to co-operative principles.

Many programs have promoted linkage independent FCEs, whereas better results might often have been obtained by supporting linkage-dependent groups working in outgrower relationships with traders or processors. The advantage of the outgrower relationship is that it can enhance the FCE's sustainability and give it a strong business rationale.

Lessons from contract farming and co-operation

The private sector, both in the form of FCEs and conventional companies, may play a role in providing a range of services from input supply to crop assembly and marketing to smallholder farmers. Our research suggests that contract farming and farmer co-operation approaches often work best together, with strong grass-root linkage-dependent FCEs contracting with agribusinesses which supply them with a range of services, within a linkage-dependent outgrower framework. In contrast conventional co-operative systems involve the creation of vertically-integrated national organisations based on District Unions, Regional Unions and Apex bodies. Clearly there is no universal formula, but in many if not most cases, the division of functions presented here may provide the best overall mix in terms of equity, efficiency and dynamism.

When trying to involve smallholders in contract farming schemes, companies face several obstacles and public assistance may be called for to reduce associated risks and initial costs (for example through training in literacy and numeracy or book-keeping or specific infrastructural investments). Direct support to the agribusiness or farmers may be necessary, but it is important to try to minimise donor-dependency.

The Kenyan dairy and Zimbabwean horticulture case studies suggest that there is a strong case for contracting NGOs to foster linkages between farmers and agribusiness. But this has both advantages and disadvantages. On the one hand the NGO may be a less efficient provider than an agri-business that already has staff in the field and can cover its overheads from revenue-earning activity. On the other hand it may focus on longer-term issues that the agri-business will not necessarily consider to be within its remit or its interest, for example, teaching the farmers:

(a) to bargain more effectively so they do not become excessively linkage-dependent and exercise some choice as to the business with whom they contract;
(b) about the cyclical nature of product life-cycles, and the consequent need for farmers to mobilise savings and develop their own back-stop strategies; or,
(c) to improve crop management skills, thereby making them a more attractive proposition for contracting with agribusiness.

However, the line between development and commercial objectives and outcomes has become hazy, given the increased profile of corporate social responsibility, particularly where public-private partnerships are involved. Thus business may be more motivated to address some wider social issues.

III. Best Practices: Some Methods for Bringing Better Services to Smallholders

a) Direct support to smallholder-market linkages

Promoting grass-roots co-operation to access services

In the outgrower schemes promoted by the Fresh Produce Exporters' Association of Kenya (FPEAK), farmers organise into small groups of 15-20 to obtain information, inputs, technical and quality assistance. The groups are trained in integrated crop management systems, hygiene, pesticide use and record keeping, which are key concerns of the UK market. Such primary level organisations can moreover help farmers respond to industry changes, and obtain access to finance and alternative market outlets.

A contrasting example is the NGO program, the Smallholder Agricultural Development Programme (SADP) in Malawi. SADP has followed the traditional co-operative route in promoting vertically integrated FCEs, without linkage to private sector buyers. However unlike the normal co-operative model, the primary group or club has been kept small at 10 to 30 members, along the lines research suggests to be optimal. These clubs are then organised into Group Action Committees, of ten groups each, and then these in turn send representatives to an area association committee covering a larger geographical area, which are themselves federated in a national association. In this way the movement seeks to gain maximum economies of scale in hiring transport, in dealing at the tobacco auction and in other areas. It is possible that the small primary level groups will give the movement sufficient coherence to ensure long-term survival. On the other hand the speed with which the associations have been created could render them dependent on continued donor support. The effectiveness of the approach needs to be monitored over the long term.

Facilitation by a specialised NGO

In order to communicate effectively with small farmers and be credible to companies, NGOs need to be quite specialised in facilitating linkages, and have an understanding of business as well as skills in participatory development. In that way they can do much to motivate farmers, and help Fees to develop the organisation, marketing and business skills they will need to link up with service providers.

CLUSA, the Co-operative League of the United States, and FAIDA, a Tanzanian NGO are two noteworthy exponents of this approach. CLUSA has about 15 years experience in Africa, supporting the development of a large number of FCEs in Niger, Mali, Cape Verde, Mozambique and Zambia. Using a bottom-up approach, it encourages farmers to develop businesses of their choice, through associations and women's groups. Extensive training support is provided, particularly in functional literacy and basic business skills. Associations generally federate to gain negotiating power, and are assisted in linking up with local agribusiness and banks to gain desired services.

FAIDA acts a facilitator in (the initial stages of) contractual relationships between smallholders and agribusiness and helps deliver benefits to both parties through the provision of training in business and marketing to farmers, facilitating group formation and helping to ensure that farmers repay. FAIDA's role has been compared to that of a 'marriage broker'[4]. It helps the parties draft contracts and in some cases to develop price-setting formulae, while offering to mediate in the event of dispute.

Lessons from such NGOs are not very well disseminated, and there is a case for studying their approaches in greater detail.

b) General support to the smallholder sector

Infrastructure

In many places smallholder participation in private sector linkages is constrained by the lack of, or poor, infrastructure, such as rural roads and telecommunications. For example, supermarkets' concerns about hygiene have served to exclude many smallholders from lucrative markets and so public investment in hygienic water supplies, toilets and irrigation may therefore be critical in giving smallholders access to profitable markets.

Sub-sectoral collaboration

Through co-ordinated efforts stakeholders can mobilise attention and resources needed to address critical bottlenecks and opportunities. A sub-sectoral industry forum for collaboration has been recommended for the Kenyan dairy sector including key stakeholders such as milk processing companies, farmers' organisations, relevant government departments, research organisations, and concerned donors and NGOs.

c) Indirect Support

Development of periodic rural assembly markets

Rural assembly markets often arise spontaneously in Africa, or at the instigation of public authorities. In many cases the simplest way to develop market linkages may be to encourage the development of such markets, bringing the service providers closer to the farmers on a given "market" day. Costs are likely to be minimal. An interesting example is where a rural community in Angonia District in Mozambique, promoted by World Vision, announced a market day. The market was well attended, with large numbers of traders arriving with scales from Malawi, and became a regular feature.

The main limitation of this approach is that transactions are usually on a cash basis, so it does not (at least in the short term) give rise to the interlocking of input supply and marketing services.

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[4] Ellman, 1998

Supporting small-scale local service providers

An example of support for local service providers is the CARE Zimbabwe AgEnt Programme that assists local level input retailers to increase the availability of affordable inputs at the local level. Credit is targeted at nominated local input suppliers, typically small-scale village level retailers who are then trained in input handling, marketing, finance and book-keeping. The trained retailers order inputs from CARE, which negotiates prices and terms with regional suppliers. Current performance of the programme is encouraging. In its first year (1996/97) about Z$4 million worth of inputs were sold to farmers, and 95 percent of payments were made on time[5]. The hope is that after two years of good performance, agents will be able to graduate and deal directly with the suppliers, but in this regard the project still has to be proved.

Some private distributors have recognised the particular needs of smallholders. For example Agricura in Zimbabwe produces and distributes agro-chemicals, primarily pesticides and has tailored its operations to cater to their needs. Twenty-three depots are located around the country, and at each are based a number of Agricura representatives. Each of these representatives manages a number of co-ordinators (‘runners’) that are responsible for mobilising smallholders into groups, having recognised that dealing directly with individual smallholders is too costly, considering the small quantities of agro-chemicals demanded. Runners take orders and then organise group field days for delivery of the produce, and offer advice on extension. This is a relatively new programme, but it demonstrates how private initiative will sometimes address smallholder needs unaided.

Legislation on contracts

The development of legislation to cover contracts between smallholders and service providers may help to protect both small farmers and minimise the risks incurred by businesses. An example of this is in the tobacco sector in Uganda where an amendment to the Tobacco Law has been made to protect both tobacco companies and growers. However, if farmers do not have proper access to the legal process, this may prove to be a second best solution in terms of equity. In practice, political realities and corporate image will often provide farmers with some de facto protection, so even such second-best approaches may be better than no legal protection whatsoever.

IV. Resources

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References

Ellman, A. Smallholder cash crop Production, Processing and Marketing in Tanzania. Who benefits? *Agricultural Research and Extension Network Newsletter* 37, 1998.

Glover, David "*Contract Farming and Smallholder Outgrower Schemes in Less-Developed Countries,"* World Development 12, #11-12, 1984.

Govereh, J., Nyoro, J. and Jayne, T.S. *Smallholder commercialization, interlinked markets and food crop productivity: Cross-country evidence in East and Southern Africa*, Department of Agricultural Economics and Department of Economics, Michigan State University, May 1999.

Little, P. and M. Watts (eds), *Living Under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa*, Madison: University of Wisconsin Press. 1995

Mahove, G. The CARE Zimbabwe Agent Programme, in, *The use of purchased inputs by communal farmers in Zimbabwe: Proceedings of a workshop held at Harare*, Zimbabwe, 1-2 March 1999. Natural Resources Institute; Chatham UK. 1999

Morton, J., Coulter, J., Miheso, V., Staal, S., Kenyanjui, M., and Tallontire, A. *Internal Provision Of Agricultural Services Through Co-Operatives And Self-Help Groups In The Dairy Sector Of Kenya Charateristics of FCEs in the dairy sector*, Project for Department for International Development, Natural Resources Policy Advisory Department, Project R6117CA, Phase II. Chatham Natural Resources Institute, 1999

Poulton, N, C., Dorward, A., and Kydd, J., The Revival of Smallholder Cash Crops in Africa: Public and Private Roles in the Provision of Finance. *Journal of International Development*, 10(1), 1998.

Stringfellow, R., Coulter, J., Lucey, T., McKone, C., and Hussain, A., The provision of agricultural services through self-help in Sub-Saharan Afica. A synthesis report for Phase 1. Overseas Develoment Administration, Policy Research Programme Project R6117CA, Natural Resources Institute and Plunkett Foundation, July 1996.

Africa Rural and Urban Studies, Volume 3, Number 3, 1996 Special Issue on Contract Farming