

**INCREASING THE INVOLVEMENT OF
SMALLHOLDERS IN HIGH-VALUE HORTICULTURE,
LESSONS FROM ZIMBABWE.**

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Report with policy recommendations on the strategy for involving
smallholders in export horticulture in Zimbabwe

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Contents

| | |
|--|----|
| Acknowledgements | 3 |
| Executive Summary | 4 |
| 1. Introduction | 6 |
| 2. Findings of previous literature | 6 |
| 3. Zimbabwe and horticultural exports | 9 |
| 4. Demand from supermarkets | 14 |
| 5. Local issues relating to the development of outgrower schemes in Zimbabwe | 16 |
| 6. The wider political context | 21 |
| 7. Policy conclusions | 22 |
| References | 26 |
| Appendices | |
| 1. Hortico Case Study | 29 |
| 2. Harare Workshop | 36 |
| 3. London Workshop | 41 |

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Executive Summary

1. Exports of horticultural produce from Zimbabwe have increased dramatically in recent years and the production of high value horticultural export crops presents an unrivalled opportunity for many smallholder farmers. However smallholder farmers in Southern Africa have not been fully integrated into this success, partly because of the high risk often faced by those seeking to organise out-grower schemes. Many exporters are reluctant to work with smallholders because of diversion of produce to competing buyers and the failure of farmers to repay their creditors, sometimes known as “strategic default”.
2. This report describes a dialogue with the Zimbabwean horticultural industry, and particularly with the exporter Hortico, which together with Selbys, is one of two horticultural exporters sourcing substantial quantities from smallholders. The aim was to identify and test new approaches that would reduce the risks inherent in such schemes, thereby accelerating their development.
3. Smallholder production of some horticultural crops offers decisive advantages to exporters in terms of quality, care of crops and availability of labour. Smallholder plots may be dispersed over a range of soil types and microclimates offering some insurance against production risks. Smallholders may reap many benefits from contractual arrangements with commercial exporters who are a source of inputs and advice and, in the context of globalisation, are one of few opportunities for intensification and diversification of production. However, some observers advocate caution lest farmers enter into agreements that they do not understand or where the company fails to uphold its obligations.
4. The procedures required of exporters by their main market, northern supermarkets, to demonstrate that they meet quality and food safety standards have served to erect another barrier to the inclusion of smallholders. Their dispersion and low level of education make it difficult to implement such procedures.
5. The case of Hortico suggests that these barriers can be overcome if the exporter takes on the role of “benign dictator”, setting up a strict supervisory system and assuming responsibility for rigid enforcement of standards. However, the system involves high overhead costs. The case of Selbys suggests there may be scope for reducing these costs by getting experienced groups of farmers to gradually assume more functions themselves.
6. Hortico’s approach is beneficial to smallholders and has potential to bring about a major shift from commercial to smallholder supply. Local monopsony has proved beneficial to the early development of the industry, by minimising strategic default and side-selling. In the long-term, a more competitive system is likely to come about as the example of innovating exporters causes more exporters to start working with smallholders. Public policy should encourage this trend.

7. Policy recommendations are directed at government, agribusiness, supermarkets and others, with a view to:
 - Accelerating the existing trend towards the involvement of smallholders
 - Helping smallholders maximise the benefits they derive from the industry.
8. The most important measure is the “development of trust” and this depends principally on the exporter, which will need to provide strong support and supervision, and fulfil all its engagements. This role can also be reinforced by professional “facilitators”, which may be trade associations, NGOs or individuals funded either by donors or by agribusiness itself.
9. Donors and Governments might also accelerate the involvement of smallholders and increase their returns, through assistance with small-scale investments, for example in covered lined wells, sprinkler irrigation and toilet facilities, and by developing access roads. To a large degree such investments can be regarded as public goods and legitimate objects for public support.
10. At the same time a set of quality guidelines should be developed to allow exporters sourcing from smallholders to meet European requirements and in particular meet the requirements of the UK Food Safety Act. Care should also be exercised to ensure that the application of ethical trade guidelines do not result in the exclusion of smallholders, on the grounds of their using family labour or other criteria.

1. Introduction

Production of horticultural products for sale in export markets offers potential benefits to smallholder farmers. However recent experience of development projects and research (Stringfellow *et al.*, 1997) and shows that due to widespread institutional failure, smallholder farmers in Southern Africa were not fully enjoying the fruits of market liberalisation, as regards the opportunities which had been opened up in the area of high value crops, particularly horticultural export crops. One of the root causes is the high risk often faced by those seeking to organise out-grower schemes, particularly diversion of produce to competing buyers and the failure of farmers to repay their creditors. In the current research project, the authors entered into a dialogue with the Zimbabwean horticultural industry, and particularly with the exporter Hortico, with a view to identifying and testing new approaches, which would reduce the risks inherent in such schemes, and thereby accelerating their development.

This dialogue continued over a period of sixteen months, providing a range of insights on policy and practical issues affecting the development of export horticulture in Zimbabwe. Two workshops, one in Harare and one in London, allowed a range of stakeholders to discuss options for integrating smallholders into export horticulture on a wider scale and the support that would be required of different actors. The purpose of this paper is to make these insights more widely known for the benefit of those seeking to increase smallholder involvement in high-value export crops in Africa.

2. Findings of previous literature

The literature on contract farming provides a useful starting point for considering issues raised by the links, or absence of links, between smallholders and exporters in the horticultural industry. A generally accepted definition of contract farming is 'arrangements between a grower and a firm ...in which non-transferrable contracts specify one or more conditions of marketing and production' (Little and Watts 1994: 4, following Glover and Kusterer 1990). The term outgrower scheme is also frequently used, but it is sometimes reserved for schemes with significant public sector input, e.g. where farmers are contracted to supply a state-owned processing mill (Glover and Kusterer, 1990). There is not one form of contract farming relationship, rather a 'constellation of institutional and production relations' (Little and Watts 1994: 6), that is contracts may be negotiated, changed, and subsequently replaced by a different mode.

In the academic literature, there have until recently been three broad schools of thought on contracting. The first we call the "mutual benefits" school, and this emphasises the advantages to both parties and the close interdependence between farmer and firm (for example Glover and Kusterer, 1990: 2). This school tends to focus on the techno-economic characteristics of horticulture. In direct contrast is the "food first" school, most active in the 1970s and 1980s, that alleged that commercial agriculture seriously damaged domestic food production (George, 1976, Dinham and Hines, 1983). However these arguments have been largely eclipsed by a pragmatic

recognition of the limitations of co-operative or State-led alternatives¹. Finally there is the “globalisation” perspective as illustrated by Little and Watts (1994), who cast a fairly critical eye over commercial relations between smallholders and the commercial sector, but recognise them as a relatively permanent fixture in the context of globalising markets.

There has been renewed interest in contract farming schemes mainly as a result of liberalisation, with an emphasis on export-led growth. Donors and international finance institutions are particularly interested in expanding agricultural exports, particularly the so-called ‘non-traditional exports’ (Little and Dolan 1998).² On the demand side, a second reason for interest is the sourcing strategies of supermarkets, with UK supermarkets being amongst the leaders. There is increased demand for ‘exotics’ and, in fresh produce overall, supermarkets aim to offer a year-round supply and are turning to African suppliers to meet their requirements (see section 4).

Smallholders see a number of advantages in contract farming. Indeed, in some regions of Zimbabwe they have been keen to forge a relationship with the main exporters (see below). Commercial companies are seen as a source of inputs and advice, especially when state extension services and inputs supplies have disappeared. Moreover, as pointed out by Stringfellow (1995), links to commercial companies offer one of few opportunities for intensification and diversification of production. In some cases contract farming is associated with irrigation schemes, a major attraction where water shortage is one of the main constraints to expanded production. However, one must be mindful of the myriad of problems associated with contracts, particularly when smallholder farmers do not comprehend the liabilities involved. Crops may be rejected by the exporter, leaving the farmer with a crop for which there is no market locally, or quality and price procedures may be abused by companies to free themselves from contracts (Little and Dolan, 1998, p.14; Watts, 1994, p.63). Unsold crops leave farmers with debts to the company.

There are many reasons why agribusiness should expand its sourcing from larger commercial farmers to small-scale farmers. Analysts emphasise the techno-economic characteristics of many horticultural products which confer cost advantages to peasant farmers able to use the ‘free’ labour of household members, and sometimes criticise this as a form of ‘self-exploitation’ by peasants. They also note the benefits to business in smallholders bearing all production risks, an attractive option compared to the heavy sunk costs and risks in estate production. Others counter this apparent unfairness by noting that in return contracting transfers marketing risks to the company. The globalisation perspective recognises the potential for advantages on both sides, but points out that contracting with smallholders may be a temporary phenomenon in the development of the horticulture industry (Jaffee 1994, Watts 1994).

¹ In Southern and Eastern-Africa, some State-led schemes of the 70s and 80s achieved major increases in smallholder maize yields (see Jayne and Jones, 1997), but we know of no successful schemes with high value crops. For a review of the performance of co-operatives in Africa, see Stringfellow *et al.*, 1997.

² Little and Dolan discuss the symbolic value of a commodity earning the label ‘NTX’. Many traditional agricultural exports had earned bad reputation for inefficiency whereas the NTX are seen as vibrant and lucrative.

A central part of many contracting schemes is the provision to farmers of loans to buy inputs, or supply of the inputs package itself, in return for a commitment to market the outputs through the same company. These loans are recovered by deductions from the crop payment. Many companies have faced significant difficulties in recovering these loans or collecting crops: farmers simply do not repay or crops are sold to outside parties.³

A key issue is the failure on the part of farmers to repay loans for inputs, and related to this side-selling to outside parties. This practice has been dubbed 'strategic default' in a study by Wye College that uses New Institutional Economics (NIE) theory (Poulton et al 1998, Dorward et al 1998). The study sees strategic default as a logical choice by farmers, which can be related to a long history of tactical resistance to outsiders by peasants, e.g. diversion of fertiliser to food crops, adulteration of produce (Watts 1994: 66). Farmers are fairly confident that few will repay, and seeing that past failure to repay has not been punished, draw the logical conclusion that they need not repay either. In Zimbabwe, strategic default on the part of smallholders has been a major deterrent to the further expansion of contracting with smallholders (see Section 5).

The Wye study finds the problem to be much more serious in Sub-Saharan Africa than in Asia, because of different institutions governing access to land, low access to finance overall, particularly in rural areas, and recent experience of loans being treated as gifts (Poulton et al 1998, p.16). By contrast, in the cases considered by Glover and Kusterer (1990), mostly in the Americas, default was a less common problem than insufficient quality or quantity of contracted crops. Nevertheless, the problem has been significant in Guatemala, notwithstanding this country's outstanding successes in smallholder export horticulture. Fox *et al.* (1994) report a number of agribusiness firms experiencing difficulties in enforcing contracts, usually because farmers would break them if spot prices at harvest exceeded contract prices⁴. For their part, some farmers complained that buyers were applying higher standards when there was abundant supply.

Other problems have affected dealings between agribusiness and smallholders, for example, transport and logistical problems, poor quality and technical growing capabilities (Chollet, 1997; Olivine, *pers com*). The experience of disastrous outgrower schemes involving smallholders, often led by donors or government, has particularly influenced some exporting companies. And finally an important question with regard to the development impact of smallholder schemes is the return to the farmers. These issues will be considered in relation to the Zimbabwean experience later in the paper.

In contrast to earlier works of the critical school, the Wye study provides a theoretical justification for outgrower schemes, by asserting that a system of interlocking transactions, i.e. connections being made between input supply and

³ Jaffee (1994) gives numerous examples of where this has occurred in the horticulture industry in Kenya. Cases were reported by a variety of key informants during field work in Zimbabwe in 1997/8.

⁴ One firm claimed that 40% of farmers were in arrears, several mentioned arrears in the 2-4% range, and others treated such cases as isolated problems.

output marketing, reduces problems of asymmetric information.⁵ Interlocking is interpreted in terms of NIE as a response to ‘problems of information in environments characterised by high climatic and other risk, where smallholders do not generally have assets that can act as collateral to support borrowing’ (ibid: p. 17).

Many studies have advocated the use of smaller groups to present a united negotiating front to commercial companies (Watts et al, 1994; Chollet, 1997). The first phase of this present study questioned the sustainability of many types of farmer groups, but found that small groups which contracted directly with agribusiness stood the best chance of survival (Stringfellow et al, 1996).

Communication between agribusiness and farmers is often a key problem and working through groups may help (see Porter and Philipps-Howard, 1997). In order to help solve misunderstandings, and more serious questions of exploitation, Ellman (1998) suggests that an NGO act as a facilitator in (the initial stages of) contractual relationships between smallholders and agribusiness. Basing his prescription on the experience of the Tanzanian NGO Faida, he suggests that an NGO can help 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 . Whilst the Faida model may be peculiar to Tanzania, there are many advantages to such a three-cornered arrangement, as will be discussed amongst the policy recommendations later.

It is a truism that side selling and strategic default are likely to happen where there is open competition among buyers. Some companies have sought to ensure that they control the market for certain products in certain regions (Jaffee 1994), or government has prescribed regional monopsonies, as in the case of the Mozambican cotton industry. However, this considerably weakens the bargaining position of farmer. Participatory monitoring schemes involving representatives of growers and buyers may be an option here (Porter and Phillips-Howard, 1997, p 235).

Contract farming offers both opportunities and hazards, since today’s exotic product attracting premium prices may be tomorrow’s common commodity, like banana and pineapple (Little and Dolan 1998, p. 4). The opportunity to farmers may be short term, and farmers therefore need to be able to use the experience to deal effectively with future changes in their external environment, and particularly in the market.

3. Zimbabwe and horticultural exports

In Zimbabwe, agriculture accounts for only 14.3% of the GDP, but it provides employment and livelihoods for 70% of the population, including most of the poorest inhabitants. The smallholder farming sector comprises of 1.2 million farming units in communal lands (of which the population is 5.6 million), 56,800 resettlement farms (426,000 population) and 8,500 small scale commercial farms. Despite this, these farms account for less than 15% of total marketed output. At the other end of the

⁵ Examples include information sharing by traders, third party guarantors and referees, channelling loans through village leaders (Poulton et al, 1998, p.30).

scale, 4,000 large-scale farms comprise 33.4% of the land area and account for the remaining 85% of remaining marketed output.

At a time when structural adjustment and market liberalisation led to a relative decline in staple grain crops (Jayne and Jones, 1997), export horticulture has become a major growth industry. The estimated value of such exports by air alone (including freight cost to destination) has risen from US\$ 3.5 million in 1985/86 to US\$ 110.8 million in 1997/98, and is forecast to reach US\$ 142.7 million in 1998/89 (values are in CIF terms).

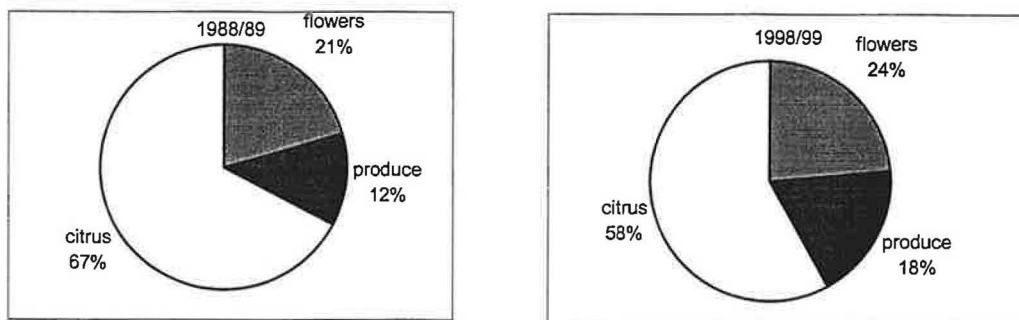


Figure 1. Zimbabwe's Horticultural Exports
Source: HPC

Zimbabwe's Horticultural Promotion Council (HPC) classifies horticultural exports as flowers, citrus fruits, and "produce", with the latter including exotic and out-of-season vegetables and fruit exported to Europe. In this paper, we are principally concerned with exports of "produce", as this includes those crops most likely to be cultivated by smallholders. Air-freighted exports of these crops have grown from US\$1.2 million (396 tonnes) in 1985/86 to a forecast US\$ 42.7 million (14,232 tonnes) for 1998/99.

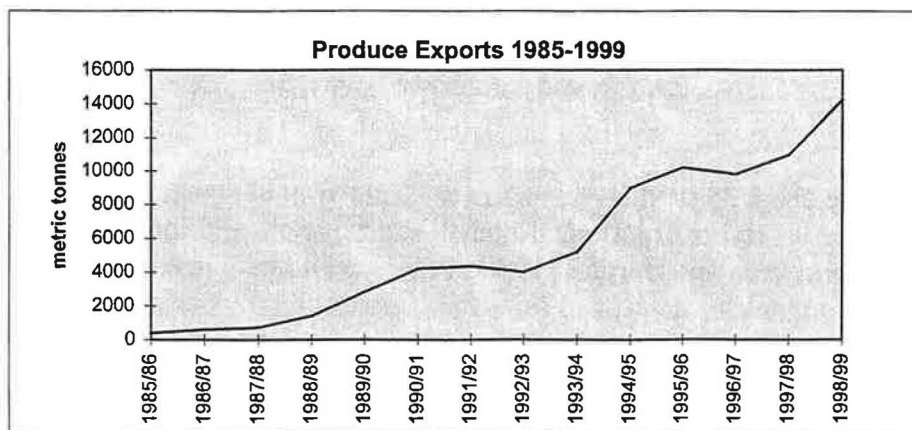


Figure 2 Exports of Produce from Zimbabwe
Source: HPC

The European Union accounts for approximately 90% of these exports by volume, the main market being the UK, which took 63% of all shipments between July and October 1998, followed by the Netherlands with 22%. There is no up-to-date breakdown of produce exports by crop, and the latest available data dates from 1995 and shows signs of under-recording.

| | 1991 | 1992 | 1993 | 1994 | 1995 |
|-----------------|-------|-------|-------|-------|-------|
| Mange-tout | 2,029 | 1,387 | 1,159 | 1,309 | 1,844 |
| Sugar-snap peas | 0 | 266 | 372 | 286 | 349 |
| Runner beans | 0 | 211 | 77 | 211* | 218 |
| Fine beans | 354 | 86 | 40 | 73 | 278 |
| French beans | 0 | 0 | 0 | ... | 76 |
| Chillies | 932 | 22 | 51 | 294 | 301 |
| Baby corn | 12 | 25 | 27 | 88 | 232 |
| Sweet corn | 115 | 95 | 50 | 13 | 31 |
| Courgettes | 70 | 76 | 79 | 33 | 0 |
| Cherry tomatoes | 128 | 144 | 46 | 28 | 6 |
| Potatoes | 0 | 47 | 13 | ... | 1,067 |
| Sweet potatoes | 0 | 0 | 0 | ... | 222 |
| Asparagus | 1 | 4 | 12 | 4 | 50 |
| Onions | 0 | 40 | 2 | ... | 110 |
| Other | 78 | 38 | 94 | ... | 163 |
| Total | 3,719 | 2,441 | 2,022 | 2,339 | 4,947 |

* Probably includes some French beans
Source: HPC, using data collated by Ministry of Agriculture from airway bills

According to these figures, total exports in 1995 were 4,947 tonnes, but the true total is estimated to be around 7,500 tonnes, i.e. 75% of total produce exports of around 10,000 tonnes.

Based on proprietary market research data, trade sources indicate that the world market for baby corn has been growing at an average of 15% per annum, with Europe accounting for the bulk of that growth. The United Kingdom is by far the largest market in Europe. Thailand is the world's largest exporter, but African exporters including Kenya, Zambia and Zimbabwe have made inroads over the last decade.

There are about 35 produce exporters in Zimbabwe, of which five can be considered major vegetable exporters: Mitchell and Mitchell, Gordons Country Fresh, Selbys, Interfresh and Hortico. Most of these are white-owned medium sized, limited liability companies developed from Zimbabwean family businesses. They supply the export trade mostly with produce from their own farms or from commercial farmers. Only three exporters (Hortico, Selbys and Shona Products) procure through smallholders. The volume from smallholders is quite small, in the region of 4-5% (*pers. comm.*, HPC 1998). There are some indigenous entrepreneurs, for example Horti-Pack, which began by supplying Selbys but has managed to penetrate the South African market.

On the side of the exporting companies, there are stark differences of opinion about the wisdom of involving smallholders in production. Some have practically ignored smallholders, seeing smallholder schemes as a bad risk, lacking the necessary discipline and being unacceptable to their supermarket clients on account of problems with traceability. Three companies, Hortico, Selbys and Shona Products, procure a significant proportion of their supplies from smallholders, believing that for certain crops they have a comparative advantage over commercial farmers, regarding quality and cost of production.

Table 2 shows net incomes and monetary costs for a variety of horticultural crops for smallholders and commercial farmers, prior to the major devaluation in 1998. Smallholders are assumed only to bear costs of seed, fertiliser, agro-chemicals and packing materials, while family labour is assumed to have no monetary cost. Commercial growers, by contrast, are assumed to also pay for irrigation, fuel for mechanised cultivation and transport, and labour. Notably the crops which are most cultivated by smallholders are those where “commercial costs” are relatively high, e.g. baby corn (103%) and mange-tout (77%).

| Crop | Income | smallholder costs | net income for smallholders | commercial farmer additional costs | net income commercial farmers | ratio of commercial costs to smallholder costs |
|------------|---------|-------------------|-----------------------------|------------------------------------|-------------------------------|--|
| Carrots | 100,000 | 18,400 | 81,600 | 11,340 | 70,260 | 0.62 |
| Mange-tout | 60,000 | 15,720 | 44,280 | 12,110 | 32,170 | 0.77 |
| Cabbage | 45,000 | 11,000 | 34,000 | 7,400 | 26,600 | 0.67 |
| Potatoes | 50,000 | 22,000 | 28,000 | 8,200 | 19,800 | 0.37 |
| Onion | 60,000 | 31,750 | 28,250 | 10,460 | 17,790 | 0.33 |
| Baby-corn | 24,200 | 7,350 | 16,850 | 7,520 | 9,330 | 1.02 |

Source: Horticultural Promotion Council and Farmers' Research Trust

Due to falling prices on the international market, baby corn has become less attractive to commercial farmers, especially as tobacco prices have risen and cultivation of baby corn has fallen. Supplies have however been maintained by involving larger numbers of small farmers for whom the crop is still profitable at lower prices.

Hortico and Selbys have pursued different approaches in involving small farmers. Hortico promotes small-scale production by individual farmers producing on micro-plots of several hundred square metres, using watering cans, and under intense supervision (see Box 1). By January 1999, 3,000 farmers were involved in the scheme, which Hortico considers to be on course for financial success. The recovery rate on advances to farmers was an impressive 98%, and this was attributed to the intense technical advice before and during production, allowing the farmers to obtain good yields.

Selbys works closely with large irrigation projects, purchasing through three

groups established as part of EU and GTZ technical assistance programmes based on resettled irrigation farms. Selbys provides seed and technical advice and collects produce from each centre. Supervision is not so close as with Hortico, and is based on leaflets which growers can use to grow crops and the group has to organise and schedule plantings. Two of the three groups are considered successful by Selbys, but there have been problems due to both lack of trust and loyalty between buyers and smallholders.

Box 1: Hortico And Smallholders⁶

The company exports a variety of horticultural produce including runner beans, babycorn, sweetcorn, mange-tout peas, sugar snaps, fine beans, baby carrots, salad onions and asparagus. However, only babycorn (and to a lesser extent mange-tout) are sourced from smallholders. 98% of exports are shipped to Europe by refrigerated air transport, and 90% of this is sold to the UK, fresh, packed and labelled, primarily for supermarkets. Hortico has developed a system for sourcing from smallholders, derived from a contract-farming model pioneered in Kenya, and is implementing it through its subsidiary, Hortico Agrisystems.

Agrisystems deals exclusively with small-scale growers in communal land areas within Mashonaland East, and is expected to cover the costs of its activities by taking a margin for services. In January 1997, the company was working with 40 smallholder growers but by October 1998, the number had grown to 1,700, and by January 1999, to 3,000.

Agrisystems works through 19 regional centres, each supplied by 50-250 smallholders and employing on average four persons. A contract binds each farmer to selling his or her produce to Agrisystems, at a guaranteed price determined at the beginning of each crop cycle. The amount to be grown by each farmer is restricted so that sufficient care is taken of the crop, and to ensure that the farmer is not over-dependent upon the company and grows other crops for own consumption and local sales. Growers are advised to grow standardised plots of several hundred square feet⁷. Agrisystems maintains strict control over production and provides all necessary technical support and inputs, except for labour and irrigation, and does all spraying. By closely controlling the growing process and providing extended supervision and agronomic assistance, the company ensures that the crop meets all the required hygiene and quality standards.

A Hortico lorry collects graded produce every second day and transports it to the central pack-house. This enables a continuous supply of produce and reduces the risk of produce being sold elsewhere⁸. Grading of produce is undertaken locally in front of the farmer. On average 1-2 % of the crop is rejected. The farmer is paid according to accepted produce even if a further rejection (approximately 20%) is made at the central pack-house. By October 1998, Hortico was obtaining 2 tonnes of baby corn from smallholders per week, 50% of their total supplies, with average yields of one tonne per ha, though yields of over 2 tonnes per ha have been achieved. One hundred farmers had also started supplying mange-tout with favourable results. The company is planning to increase the number of smallholders to 4,600, production to 7 tonnes per week.

⁶ More detail of the Hortico scheme is given in Appendix 1.

⁷ Initially the standard was 600 sq m for baby corn and 300 sq m for mange-tout

⁸ Side trading is a well known problem of smallholder outgrower schemes.

A large part of Hortico's success in working with smallholders may be attributed to the high degree of control that it exercises over production and harvesting. Indeed, smallholder schemes appear to work best when major, established exporters take on the role of "benign dictator", organising smallholders and assuming responsibility for a rigid enforcement of standards. A similar approach is employed by Homegrown in Kenya. However in contrast to Hortico, Homegrown sources produce from smallholder farmers on plots of up to 50 hectares. More functions are carried out by the farmers themselves, but Homegrown still maintains very tight control with a view to supplying safe, good quality food to UK customers. Key measures include: strict record-keeping and traceability, training on correct pesticide measurement and application, inspection and monitoring of chemical stores, and the provision of grading facilities as well as a charcoal cooler to ensure temperature-controlled conditions throughout the supply chain

There have also been public sector and donor-funded initiatives in this field. On the whole they have proved unsuccessful, as is noted in more detail below. A major EU programme had proved unsustainable despite having operated in the country for 10 years between 1987 and 1997. Initial activities included free services to farmers for transport, ploughing and tillage as well as produce storage and grading. Many of the facilities and equipment from the project, including tractors are now unrepaired or have been leased to commercial companies (including Hortico which now runs the chilling and storage facility at Murewa).

4. Demand from the supermarkets

The leading market for horticultural produce from sub-Saharan Africa is the European supermarkets. They dominate European retail markets, and are becoming increasingly significant in fresh fruit and vegetables, a trend in which the UK is leading. In the UK, four supermarkets (Tesco, Sainsburys, ASDA and Safeway) account for 67% of the UK food market (Fresh Produce Journal, 15-5-1998). Food retailing is similarly concentrated in the Netherlands, but less dominant elsewhere in Europe (Cross, 1994, p. 141).

UK supermarkets invariably buy exotic produce from UK-based importers. Increasingly they import directly, but this mainly applies to high volume products such as apples and potatoes (FPJ, 11-9-98). The wholesale trade is gradually losing ground to supermarkets in fresh produce, and while important for certain ethnic lines, is only a minor player in exotic vegetables such as mange-tout, green beans and baby-corn.

The size of the UK retail market for fresh produce is expanding. According to a Key Note 1998 Market Report on fruit and vegetables (cited in FPJ, 29 May 1998), the market was valued at £6.06 billion in 1997, but was predicted to grow to £7.07 billion by 2001. This growth in value reflects a general trend towards higher value niche markets, including exotic vegetables consumed by high-income consumers. According to Nicholas Saphir, spokesperson for the Fresh Produce Consortium, (FPJ 29-5-98), there has been some decline in volume, but sales value has grown, led by new, more expensive products. Greater emphasis is being placed on "on higher quality, environmentally friendly products, new tastes and new colours".

Such products not only provide high growth potential but also allow the supermarkets to earn higher mark-ups than those obtainable on traditional lines. UK trade sources indicate typical retail mark-ups for fresh produce to be 25-50% on cost price, and around 33% for major items. However for exotics like baby-corn and mange-tout they are 50% or even higher.

Supermarkets are in a strong position to obtain high mark-ups because of their extraordinary market power within food marketing chains, a subject much commented upon in the media during 1998, and discussed in an Office of Fair Trading research paper which points to the existence of the potential for regional monopoly. Indeed average net margins in UK supermarkets are roughly three times higher than in France, Germany and Spain (Dobson *et al.*, 1998). Notwithstanding these observations, the interests of UK supermarkets are largely complementary to those of the producing countries. High mark-ups ensure that exotics are well presented and given ample shelf-space.

Supermarkets, particularly those in the UK, have increasingly focused upon the adoption of HACCP procedures⁹ as their main tool for ensuring food safety. These emphasise the concept of traceability of product from the farmer to the final consumer. Records need to be maintained at each stage in the process, and potential safety issues addressed at points of critical importance. The high emphasis placed on traceability derives partly from the 1990 Food Safety Act, and partly from a zealous attitude among the supermarkets, seeking to develop their reputation in this field, especially in the context of food scares in the UK.

A new scheme affecting only UK suppliers but indicative of the continuing pressure to improve quality standards, is the Assured Produce Scheme led by the National Union of Farmers, launched in 1997. The scheme creates a single set of procedures along the supply chain as regards food safety, health and safety, energy use, the environment, pollution and specific crop management protocols. The purpose is to reassure consumers that food is safe but at the same time affordable and profitable to the producer.

The adoption of HACCP has important consequences for small producers. Although research suggests that smallholder food production is no less safe, there is considerable and to some degree understandable, scepticism among supermarkets about packers' ability to effectively control the quality of produce from large numbers of dispersed smallholders¹⁰. Meanwhile, the additional administrative and monitoring costs associated with HACCP dissuade many exporters from considering smallholder out-grower schemes. Over all, phytosanitary measures and quality standards are potentially high barriers to entry for new entrants to the export trade, and for smallholder suppliers, as are the requirements for high cosmetic appearance

Since a well publicised Christian Aid report criticising supermarkets for

⁹ Hazard Analysis Critical Control Points.

¹⁰ The concern was summed up by one observer who asked: "Would you wish to eat vegetables grown on a plot watered by dirty watering can from a shallow pond adjacent to which cattle are penned every night and around which children defecate on their way to the field to help pick the corn without washing their hands?"

turning a blind eye to the welfare of workers overseas producing goods for their shelves, the issue of social justice has now come to the fore (Christian Aid, 1997). In the last year the major retailers have been working towards codes of practice for suppliers on ethical trading, with particular attention to social welfare and working conditions. Discussion is still taking place on appropriate criteria for the different types of product, and methods of auditing.¹¹

From the above discussion, it can be seen that UK demand is being driven by competition between an oligopsony of supermarket chains, competition which focuses largely on non-price factors. They seek to position themselves up-market, cultivating an irreproachable image for quality, to broaden their product range and develop fast-growing high margin lines (such as exotic vegetables) making a higher than normal contribution to corporate profit. They also wish to project an image as ethical traders, but so far the inclusion or exclusion of smallholders from their supply chains has not figured as an ethical issue within codes of conduct. Indeed due to their concerns over quality, they are often discouraging their suppliers from working with smallholders.

The main buyers have adopted rigid systems, dubbed “painting by numbers” (Malins, 1999) which call for procedures and records from all producers regardless of their circumstances. This approach has created unnecessary hurdles for smallholders, especially where requirements are inappropriate and in some cases risible, some were likened to “showing a dry-cleaning ticket to prove that your work clothes were clean”.

5. Local issues relating to development of outgrower schemes in Zimbabwe

Strategic default and side-selling

This is the major local issue for the development of outgrower schemes in Zimbabwe. Smallholders are able to access small loans at preferential credit rates in order to purchase inputs, through a state guarantee scheme managed by the Agricultural Finance Company (AFC). Default on these loans is high, currently affecting more than 35% of borrowers (*pers. comm.*, AFC), and this and other project-related experiences discussed in Stringfellow and McKone (1996) suggest that the culture of strategic default is well established.

Other examples abound. The HPC (*pers. comm.*) reported that only 22.5% of total loans for growing paprika were repaid. There was also a less than 20% repayment rate on loans for maize production on outgrower programmes sponsored by GTZ, mainly because of side-selling (*pers. comm.*, Price Waterhouse Ltd.).

Efforts are being made to reduce default. COTPRO, the former parastatal in the cotton industry, has been particularly successful in this regard, by de-listing defaulting groups, and rewarding better groups by advising them how to increase overall yields and incomes, including growing other crops to complement production

¹¹ A framework for the harmonisation of producer codes for horticulture and floriculture in Kenya, Zimbabwe, Zambia, Uganda and Tanzania was agreed at a meeting in Harare, 10 and 11th September 1998.

and comparing their yields to those of other groups. One cotton buyer in Zimbabwe offers credit (repayable after harvest) at 10% below the official bank rate on the assumption of secured supply, assuming that the final sales price is above that of the input cost. However, very few commercial companies are willing to legally enforce their contractual rights over a smallholder in the courts. Most companies learn from experience, reluctantly accepting a relatively high initial default and gradually building up a list of reliable suppliers, either as individuals or groups.

The authors organised a workshop to discuss the organisation of outgrower schemes, involving key representatives of agribusiness, NGOs, farmer support organisations and a bank (see Appendix 2). Participants highlighted the high risks in setting up out-grower schemes, suggesting that they were unviable for some “commodity” type products, e.g. cotton and paprika, and difficult for other crops. They also indicated that financial institutions do not understand the potential or needs of outgrower schemes.

Poor transport and logistics

Organising outgrower schemes is made difficult by the poor accessibility of the producing areas and the perishability of many horticultural crops.

Smallholders lack local cold storage facilities, and where public transport is available it is often unreliable. Not surprisingly, exporters do not encourage smallholders to deliver directly to their packhouses, but collect the produce themselves or delegate this responsibility to an intermediary. Due to lack of chilled vehicles, fresh vegetables are generally sourced from less than 100 km from the packhouse. The high cost of collecting small, dispersed volumes from smallholders clearly lowers the price that exporters can pay the farmers. Such costs can be reduced by public investments in infrastructure (roads, telecommunications), and small-scale chilling devices may be used to preserve the shelf life of vegetables.

Poor Quality & technical growing capabilities

There are some clear quality and care advantages to buying from smallholders over commercial farmers. For example, smallholders protect crops more effectively as they take the time to pick off caterpillars and other pests. The output of larger plantations lacks consistency, as workers are not motivated in same way. Production on many small plots enhances continuity of supply through geographically dispersed microclimates, poses fewer problems of disease, and allows for inter-cropping, which increases protection against wind damage. Hortico’s smallholders are also growing in frost-free areas and have fewer costs compared to commercial farmers, partly because of the use of unpaid family labour, see below.

Despite their comparative advantage with horticultural crops requiring high labour inputs and careful attention, smallholders are unfamiliar with many export crops and have to overcome a number of quality and technical barriers resulting from the importing countries requirements and procedures. Lack of experience is compounded in many areas by the dwindling extension services offered by Government. Hortico Agrisystems and Selbys’ experience is that these problems can be overcome. Agrisystems has achieved this over two years, by providing intensive

supervision, advice and spraying services, and running decentralised collection centres (see Box 1 above).

Smallholders have enjoyed particular success with babycorn, which has the following advantages over other crops: (a) growing conditions are similar to the traditional maize crop; (b) it requires few chemical inputs, given that seeds are pre-treated, and; (c) there is a fair margin for picking error, due to relatively slow growth near harvest (notwithstanding strict length and size specification). The introduction of mange-tout peas has been slower since insufficient quantities of Class A crop is produced for either the grower or the exporter to earn satisfactory returns. Considerable additional technical work is therefore required to ensure a satisfactory product. Hortico's progress so far indicates that these efforts are gradually paying off.

Irrigation problems

Rainfed production is generally unacceptable for most export horticulture. However, Zimbabwe, as many other African countries, suffers from the effects of highly variable rainfall. Water shortage is smallholders' main constraint to horticultural production, and in a survey in Mashonaland East it was cited by more than half of respondents (Turner and Chivinge, 1998, p.48). Boreholes and pump-fed irrigation schemes provide opportunities but commonly suffer from mechanical breakdown. Hence whilst there are theoretical volume advantages in working with the large irrigation schemes, some produce exporters prefer working with the smaller gravity-fed irrigation schemes. Furthermore smallholders serviced through boreholes are often dispersed.

There is widespread agreement amongst development practitioners and commercial enterprises in Zimbabwe that many government and donor-led outgrower schemes have been disastrous. An example, the Negomo irrigation scheme financed through the German aid programme illustrates some typical problems (Box 2).

Box 2: The Negomo Dam

The Negomo dam was built in 1995 and an on-going project with the aim of developing a model which could be replicated on other irrigation schemes involving resettled communal farmers began in 1996.

Nearly three hundred farmers, each with 1.2 hectares, are involved and are provided with extension advice, training and equipment (including three tractors an office block, a housing complex, a fertiliser and chemical store, a garage, a produce cooling room and a training facility, with plans for a packhouse in the future). The farmers are grouped into twelve farmer committees, the chairs of which Farmers have also been provided with 0.7 hectares each of citrus on a four year loan. Other supplied crops include passion fruits. Initially services were provided free but with the intention that charges would be gradually introduced.

However, the organisers anticipate problems in introducing charges and expect few of the loans to be repaid and the project staff have little idea at the present time as to who will own the equipment and facilities at the end of the project, whenever that may be.

Part of the problem is that the management of irrigation schemes tends to be inflexible, and is therefore not reliable or responsive enough to deal with the needs of marketing horticultural crops. With formal irrigation schemes it is necessary to deal with smallholders through existing committee structures, which one commentator likened to “a large estate run by a committee rather than by an individual manager”. It proves difficult to reward individual farmers for their performance, and vital decisions (for example to fix a broken pump) are sometimes much delayed. In this regard it is interesting to note that Hortico has chosen to concentrate the bulk of its efforts on smallholders outside irrigation schemes. In doing this the company penalises itself in terms of the small volume of output that each farmer supplies, and consequently the high supervisory overheads involved, but it gains through much better control over the timeliness and quality of production.

The marketing dimension of many schemes has been problematic, or even an after-thought. More success has been encountered with smaller scale irrigation schemes, particularly those using low-technology trickle irrigation. A more successful example of an irrigation scheme is the Howard irrigation scheme funded by Danida in 1990. This was a small-scale scheme involving 18 farmers each with one hectare. Half the money for the installation of pumps was paid for by the farmers themselves, and direct labour was also provided by the farmers. The farmers were provided with extension advice and they secured a market with a local boarding school.

Returns to farmers

Farmers’ interest in export markets is stimulated by the generally higher prices paid, and the fact that international markets are less subject to periodical gluts which can drive down prices to uneconomical levels. Table 2 (see section 3) provides information on returns to alternative crops. It should be noted exotic vegetables can be cultivated up to three times a year, and can potentially provide a regular and dependable source of household income.

Due to a series of intervening costs and mark-ups, farmers only derive a small percentage of the final price paid by consumers in UK supermarkets; Harris-Pascal *et al.* (1998) indicate that commercial growers of mange-tout peas get around 11.9% (see Table 3). The supermarket gets by far the largest share (45.9%), but this includes 13.5% for losses from unsold stock. There are also stock losses at the importer level. If the consumer spend is discounted by the value of such losses at both the importer and supermarket level, then the grower can be seen to receive significantly more than 11.9%.

| | One tonne export lot of mangetout from Zimbabwe | | Export of fresh vegetables form Kenya |
|---------------------------------|---|------------------|---------------------------------------|
| Stage | Price per tonne (£) | % of final price | % of final price |
| Producer | 630 | 11.9 | 14.1 |
| Exporter | 291 | 5.5 | |
| Packaging | 274 | 5.2 | 13.1 |
| Air freight and handling | 1,036 | 19.6 | 21.2 |
| TOTAL CIF from Africa | 2,230 | 42.2 | 48.4 |
| Importer charges and commission | 624 | 11.8 | 6.1 |
| Supermarket | | | |
| Stockout | 714 | 13.5 | |
| Other costs | 285 | 5.4 | 45.5 |
| Mark-up | 1,487 | 27.0 | |
| Total price | 5,281 | 100 | 100 |

From Harris-Pascal et al (1998, p.11)

Hortico pays Hortico Agrisystems prices similar to those which it pays commercial farmers who deliver directly to its packing plants. The smallholders supplying Agrisystems inevitably get a smaller share of the final consumer price than do commercial farmers, due to the cost of supervisory and procurement systems which Agrisystems has established¹². Based on information from trade sources, we estimate that in order to break even a company like Hortico Agrisystems may have to pay its smallholder suppliers less than 30% of the price per kg paid to commercial farmers who deliver directly to the packing plant. The difference is mainly accounted by the intervening costs, including general and administrative expenses, transport and capital costs (including interest and depreciation).

This example graphically illustrates why other companies have been slow to follow Hortico's example of working with smallholders working on micro-plots. It also shows that it is important to find ways of increasing smallholder revenue. How can this be achieved?

Cost saving probably offers the best way of improving returns to smallholders. In particular Hortico might gradually delegate to smallholders some of the local supervisory and management functions, much as cotton companies in Francophone Africa have delegated to Village Associations¹³. Given the quality and traceability

¹² The share received by smallholders has also varied due to the effect of frequent devaluation of the Zimbabwe dollar.

¹³ Presently the direct cost of the baby corn to Agrisystems, including inputs and transport, is about 44% of the sale price to the parent company, Hortico. There may be scope for reducing the indirect cost burden.

issues involved, this will be much more difficult with export horticulture. Nonetheless, it is possible to envisage a situation where small and experienced groups of farmers are accredited to carry out certain functions for themselves. Unlike the typically 100-strong Village Associations of Francophone countries, the groups would need to be small (around 10 members) and have a high level of internal coherence, like some of the more successful farmers' groups identified in our earlier research (Stringfellow *et al.*, 1997). To institute such arrangements, HACCP systems need to be implemented with flexibility and imagination; this in turn depends upon the supermarkets' willingness to sanction innovative approaches to quality management, which are well adapted to smallholder requirements.

In Kenya, the exporters' trade association, Fresh Produce Exporters' Association of Kenya (FPEAK), is currently promoting the organisation of primary level groups of 15 to 20 farmers, and this might serve as a model for Zimbabwe. The groups seek to turn their membership into a single economic unit (like a commercial farm), with whom the exporter can deal directly. They currently assist their members with inputs, integrated crop management systems, hygiene, pesticide uses and record keeping. In the future they might take on additional financing and marketing functions.

Donors might also contribute to increasing returns to smallholders through assistance with small-scale investments, for example in water supplies, sprinkler irrigation and toilet facilities. Relatively small investments at this level may do much to increase smallholders' competitive position *vis a vis* commercial farmers, and make it easier for the exporter to control water quality in line with trade requirements. Such support should only be provided where the farmer has a profitable market outlet allowing for maintenance and replacement of the assets concerned.

Selbys treats its smallholder irrigation scheme suppliers in the same way as commercial farms and pays them on the same basis. This reflects the fact that Selbys is working with large groups of farmers and not with individuals, provides less supervision, and therefore bears a much lower level of overheads per kilo of vegetables procured. Selbys claims that its costs are nonetheless higher than with commercial farms, and that they are consequently cross-subsidising smallholders at the expense of the commercial farms.

A particular problem affecting farmers' returns from export horticulture is that companies generally wish to pay them by cheque. Even in areas where there are banks, few farmers have bank accounts, and they often find they need to cash their cheques at a discount with local traders (Chollet, 1997).

6. The wider political context

The wider political context creates problems and challenges for the organisation of successful export horticulture, at three different levels:

- at the local level, there is often limited trust between agribusiness and farmers, or their representatives, fuelling problems of strategic default and side-selling;
- at the level of national politics, the fact that almost all agri-businesses are white-

- owned makes them a potential target for criticism, and where they have an interface with the black majority, they have a high public profile;
- both domestically and internationally, the politics of “ethical trade” creates a dilemma facing exporters who wish to include smallholders and then face accusations of encouraging poor working conditions etc.

Current ethical codes of conduct such as those promoted by COLEACP do not specifically address small holder issues as they are currently focused on working conditions on plantations as opposed to the relationships between contracted smallholders and agribusiness. This latter area tends to be the concern of “fair trade” practitioners. In the highly charged ethical arena companies such as Hortico may risk the accusations of condoning poor working conditions on smallholder farms. Moreover, the level of control exercised by Hortico has been criticised for failing to empower smallholders and as such, it did not deserve any public encouragement or support (Carlton 1997; Griffith, 1997).

Contrary to this perception, the authors find that Hortico’s scheme is unique in targeting smallholders outside irrigation schemes, and involving them in high value export horticulture. While there may be ways of improving the system from the smallholder perspective, the scheme is bringing considerable benefits to these farmers. The scheme is clearly highly controlled by Hortico itself and provides very limited scope for the smallholders to take independent initiative, but we see this as a necessary response to the demand of supermarkets, pressures for quality and traceability, and problems of strategic default and side-selling. As indicated below, there may be scope to gradually increase farmer empowerment in ways that take account of these pressures.

Carlton and Griffith went on to suggest an alternative strategy, whereby donors would support the development of an alternative co-operatively organised scheme, targeting the same European markets as well as “fair trade” outlets. Such a strategy is unlikely to work, given the poor record of large co-operative ventures in Africa (see earlier research reported by Stringfellow *et al.*, 1997), and because of difficulty in gaining acceptance in European market, particularly in the UK, given the stringent quality requirements, and supermarkets’ and importers’ tendency to work with trusted suppliers.

7. Policy conclusions

The main conclusion of this report is that Zimbabwe’s current approach to the development of export horticulture is broadly beneficial to smallholders. While the percentage of produce they currently supply is very small, the trend is upwards and there are already three agribusiness firms committed to their involvement. One firm (Hortico) is pioneering an innovative approach which, if successful, can bring about a major shift from commercial to smallholder supply. This is particularly opportune in view of Government’s policy of redistributing land in favour of communal farmers, since ready-made markets are needed to ensure that such land can be fully utilised.

We have discussed questions of equity, and conclude that the main issue in the immediate future is the degree to which smallholders are involved in the sub-sector,

that is to say the more smallholders are involved the greater the social welfare which the activity will generate. In the longer term, local monopsony power of agribusinesses may be a concern. Monopsony power has proved beneficial to the early development of the industry, by minimising strategic default and side-selling. However, in view of the unequal bargaining power of the parties involved, a more competitive system is probably desirable in the long-term. This may come about if and when other agribusiness - particularly the three large players currently tied to commercial sources of supply - copy the successful innovators, giving some smallholders the opportunity of switching allegiance.

In relation to this panorama, public policy should seek to:

- accelerate the existing trend towards the involvement of smallholders
- help smallholders maximise the benefits they derive from the industry

These are now discussed in turn.

Accelerating smallholder involvement

With regard to the first objective, steps are needed to reduce the risks faced by agribusiness. The Harare workshop identified the following steps:

- (a) develop trust between smallholders and commercial companies;
- (b) tax incentives to encourage out-grower schemes;
- (c) more innovative financing schemes, involving risk-sharing between farmers, banks and commercial companies, and;
- (d) **possibly**, subsidised loans, but only on the basis of clear and open guidelines.

We believe that “development of trust” is the most important measure, and this depends principally on the agribusiness, which will need to provide strong support and supervision, and fulfil all its engagements. This role can be reinforced by NGOs trade associations, individuals or other “facilitators”, funded either by donors or by the agribusiness itself. One reason for distrust is that smallholders do not believe they are getting a fair share of the price the agribusiness gets on international markets, or that they do not understand why prices are suddenly lowered. An example of how this might possibly be dealt with comes from Tanzania, where the NGO Faida has been contracted to design formulae establishing a transparent link between the two prices (Ellman, 1998). For similar reasons, Faida has arbitrated over disputes between the contracting parties.

A further finding of the Harare workshop was that financial institutions “do not understand the potential or needs of out-grower schemes”. Successful examples in the horticultural sector will do much to demonstrate their potential, but this can be backed up by publicly-funded workshops and training exercises for bank staff. The workshop also indicated that farmers found it difficult to manage their own money, and that this was a powerful deterrent to banks in funding such schemes. This suggests the need for educational and the promotion of savings, which might be performed by NGOs or other parties.

The UK supermarkets also have a key role to play in maximising smallholder

involvement. Two steps are suggested: firstly to introduce into the ethical trade criteria currently planned by supermarkets a judgement as to whether reasonable effort has been taken to include smallholder farmers in the supply chain; secondly, by investing resources in the search for ways to adapt HACCP and other codes of conduct to the realities of smallholder agriculture. This does not mean that standards should be relaxed - only that they should be applied in ways that are cost-effective and manageable for smallholders. A set of quality guidelines should be developed to allow exporters sourcing from smallholders to meet European requirements and in particular meet the requirements of the UK 1990 Food Safety Act. Care should also be exercised to ensure that the application ethical trade guidelines do not result in the exclusion of smallholders, on the grounds of their using family labour or other criteria.

Maximising smallholder benefits

This fundamentally involves empowering farmers to take full advantage of the new market opportunities. This includes:

- basic education in business and marketing, covering topics such as: different crop opportunities, alternative marketing chains, product life-cycles, negotiation, appraisal simple investment opportunities, and the management of funds and savings;
- assistance with the introduction of new production and irrigation techniques;
- education in good hygiene practice;
- assistance in acquiring the necessary hardware and infrastructure (e.g. covered lined wells, sprinkler irrigation systems, toilets and roads)
- organisational skills, principally focused on pragmatic co-operation among small groups of people who need to work together on a day-to-day basis, or liase with agribusiness partners. As indicated earlier, small groups directly engaged in production are likely to be more acceptable partners than committees representing large groups.

As the farmers' organisational capabilities develop, they can start comparing the offers of different agribusiness and contract accordingly on a seasonal or annual basis. This is not an invitation to strategic default, which as we saw earlier, is a major disincentive to agribusiness involving smallholders. The strength and the viability of the organisation can be measured by its ability to fulfil contracts. Strong grass roots organisations can also start exploring opportunities for taking on functions previously performed by the agribusiness.

Exporters may provide some assistance along the lines listed above, with a view to cementing stable long-term relationships with their suppliers. However, it should be noted that the assistance involves a large element of "public good", i.e. it benefits the society in general and not just the exporter. There is therefore a good case for the public sector support, either directly or through intermediaries – NGOs, trade associations or individuals who may be contracted to facilitate the development of outgrower relationships.

A suitable NGO will be one with an entrepreneurial outlook, which has staff

trained in marketing and finance, and which seeks to “work its way out of the job”. The importance of the later was highlighted at the Harare workshop. NGOs should avoid any direct commercial involvement, and should in no way become intermediaries between agribusiness and farmers. Commercial activities are best carried out by commercial companies. Concerns were expressed lest NGOs move seamlessly into the role that government had in the promotion of agricultural trade, i.e. become too “hands-on”. This admonition is pertinent in view of this research team’s earlier findings about earlier donor experience in supporting the development of farmer co-operation. Due to the pressures to disburse funds and achieve numerical targets, much of this support had been counterproductive and damaging to the prospects for lasting co-operation (Stringfellow *et al.*, 1997).

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Appendix 1

Case study - Hortico Produce - Zimbabwe.

By John Millns, Plunkett Foundation

Summary

Since 1989 horticultural exports from Zimbabwe primarily to western Europe have increased dramatically and on average by 25% per year. Since registration in 1985 Hortico produce has become one of the four largest exporters of fresh vegetable produce from the country.

In order to secure a consistent supply of export quality produce the company initiated an innovative scheme in December 1996 aimed at obtaining produce supplies from communal farmers on land plots of less than 600m².

The initial pilot crop for the scheme was babycorn and within 2 years 1,700 smallholder farmers were involved with the scheme, accounting for 50% of babycorn supplies to the company equal to 102 tonnes of produce per annum. More than 1,500,000 \$Zim was paid to communal farmers by the company in 1998. The company now operate 17 collection points employing and the scheme employs 70 persons full time in communal areas.

In order to build upon the initial success the company have ambitious plans to more than double the numbers of smallholder suppliers, build upon and improve the post harvest infrastructure and expand the project into other areas and crops.

Background.

Hortico Produce is a company registered in Zimbabwe. It is situated 45 kilometres north east of the capital Harare. Hortico began operation in 1985 to export horticultural produce primarily to European markets. The company export a variety of horticultural produce including runner beans, babycorn, sweetcorn, mangetout peas, sugar snaps, fine beans, baby carrots, salad onions and asparagus.

Table 1 shows the annual growth of horticultural exports from the company, which is now the fourth largest horticultural exporter from Zimbabwe.

| | 1985 | 1988 | 1991 | 1994 | 1997 |
|--|------|---------|--------|--------|--------|
| Exports - value (Z\$ 000's). ¹⁴ | 23 | 3,484 | 15,075 | 31,919 | 51,228 |
| Percentage increase (3 years) | | 15,048% | 333% | 112% | 60% |
| Export - volume (tonnes). | 11 | 749 | 1,735 | 1,093 | 1,095 |

98% of exports are sold to Europe on a daily basis by refrigerated air transport. 90% of produce is sold to the UK, fresh, packed and labelled primarily for supermarkets.

¹⁴ 1 GBP = 45 \$Zim.

Hortico Produce was supplied solely from their own farms and other commercial growers until December 1996. At this time the company decided to expand its suppliers to include small scale growers primarily in communal¹⁵¹⁶ areas north of Harare.

The Hortico Produce - small scale farmer outgrower scheme.

In January 1997 Hortico Produce established a subsidiary, Hortico Agrisystems with the objective of dealing exclusively with small scale growers in communal land areas within the region of Mashonaland East. The scheme was modelled on successful contract farming schemes in Kenya. Within the first year the company were working with 700 smallholder growers and by November 1998 a total of 1,700.

Farmers have been selected on the basis of a 10 point checklist including access to reliable water supply, their experience of growing vegetables, the correct soil fertility and their distance from the main Hortico Produce packhouse as well as their own houses. A spread of farmers across a number of areas also lessens the possibility of disease spread.

Contracts are drawn up between Hortico Agrisystems and each individual grower. Selling prices are agreed with the grower prior to each season and the company guarantees a minimum price to enable growers to draw up budgets for the growing season. The farmers are obliged to sell their produce to Hortico Agrisystems who sell on to the parent company after deducting costs for their activities. Growers are paid in cash against crop receipts within 14 days of crop delivery to the collection point.

Each grower is advised to grow to a standardised plot size (initially 600 m² for babycorn and 300 m² for mangetout peas), requiring no more than two hours per day on average to cultivate and harvest. This allowed growers to allocate proper time to growing the crop without a major interference in their other activities. The growers are advised to grow other crops for their own consumption and for local sales.

The standard plot size also ensures that a standard package of inputs (a plot kit) can be provided to the grower at the beginning of each growing cycle. Hortico Agrisystems provides a plot kit valued Z\$220 to each grower. Hortico Agrisystems provides all the inputs required to grow the crop except for labour and irrigation. This ensures that the crop meets all the required hygiene and quality standards, by closely controlling the growing process and through providing extended supervision and agronomic assistance. Small scale growers are able to acquire the technical know how with which to grow export quality products.

Hortico Agrisystems support includes:

- providing spraying services (Hortico Agrisystems is not prepared to allow growers to apply chemicals themselves on the crops).

¹⁵ The smallholder farming sector in Zimbabwe comprises of 1.2 million farming units in communal lands (5.6 million persons) including many of the poorest inhabitants.

¹⁶

- agronomic advice from field clerks.
- providing collection centres within the proximity of groups of farmers.

Hortico Agrisystems provides seeds, chemicals and fertilisers on credit, the cost of which is deducted from payments made to growers for their crop, with a 15% service charge added. The average repayment rate for this credit was 98% in 1998.

A transport lorry provided by Hortico collects graded produce every second day and transports it to the central packhouse. This enables a continuous supply of produce and reduces the risk of produce being sold elsewhere¹⁷. Grading of produce is undertaken locally in front of the farmer. On average 1-2% of the crop is rejected initially. The farmer is paid according to accepted produce even if a further rejection (approximately 20%) is made at the central packhouse.

The organisational structure for the operation of the scheme primarily focuses upon collection points. By November 1998 the company was managing 17 collection points north east of Harare, each with between 50 - 200 farmers and had hired an additional cooling and collection point for produce delivered from smallholder growers at Murewa, 40 kms outside of Harare.

On average each centre employs four persons (Figure 1). These staff include:

- A field clerk providing crop management advice and informal training of growers on land preparation, planting, cultivation, fertiliser application and harvesting.
- A sprayer applying pesticides to the crops of individual growers.
- A grader to sort crops delivered to the centre according to size and quality specifications.
- An accounting clerk recording acceptable crop and grower receipts which are redeemable for cash as well as other paperwork duties.

Staff at the collection points are paid a basic wage plus bonuses according to the amounts of produce delivered. Staff are recruited locally and at village level.

There is a well developed recording system at each centre which records, the size of each plot, the issuing of inputs with quantities and dates, the dates of plantings and harvests, the dates and types of applications and the amount of crop delivered and accepted each day.

A reconciliation sheet is also issued when farmers are paid which includes details of produce delivered, input charges and net incomes for farmers. This system enables Hortico Agrisystems to compare performances between farmers as well as to trace product to collection centres and to particular picking dates.

The babycorn market

The initial pilot crop for the Hortico small scale outgrower scheme was baby corn. Between 1992-1997 the world market for baby corn experienced an average growth of 15% per annum.. Europe accounted for the bulk of that growth. Active

¹⁷ Side trading is a well known problem of smallholder outgrower schemes.

markets also existed in North America and the Middle East. During this time Thailand was the largest exporter in the World. Increasingly however Kenyan, Zambian and Zimbabwean exporters began to make inroads into the market.

90% of exports are to supermarkets, 5% to food caterers, 3% to wholesalers and manufacturers of ready made meals and 2% to local supermarkets and individual customers.

Babycorn is a management and labour intensive crop requiring detailed monitoring. It requires harvesting at exactly the correct time in order to ensure the correct size and quality. As a result labour comprises of 35% of the total production cost. Irrigation comprises of a further 25%.

Babycorn therefore provided a useful opportunity for small scale production, particularly as labour and irrigation costs were significantly reduced, due to manual irrigation. Communal land areas within Mashonaland East are largely in frost free areas, enabling a longer growing season to be possible. Communal farmers also have experience of growing a similar and more traditional crop, maize and the attention to detail provided by small scale growers soon proved that a high quality product could be grown.

Plantings are scheduled by the company for every six weeks with selected groups of growers in order to maintain a continuity of supply, with each grower expected to grow a plot size equivalent to 15 rows of corn (600m²). By November 1998 the company reported obtaining 2 tonnes of babycorn per week from smallholder growers, 50% of total supply, with average yields of one tonne per hectare, though yields of over two tonnes have been achieved, a higher figure than for commercial growers.

An average of 15% of the crop is rejected at the initial collection point and a further 40% after payment to growers during grading at the packhouse.

The growing skills of growers vary and resulting in different cash returns for their produce after deductions for input supplies. The average return per plot in 1998 was Z\$900, with annual earning varying from a profit of Z\$2,800 per plot to a loss of Z\$100, based on two crop seasons per year¹⁸. The babycorn growing cycle is shown as figure 2. Farmers noticeably improved outputs and returns in the second season of the scheme.

Future perspectives.

Hortico intend to further develop the smallholder outgrower scheme in order to increase the numbers of growers working with the scheme, the tonnage supplied and the numbers of crops grown. The intention will be over the following two years to increase the number of growers supplying the company by 180% to 4,600. Over the same period the amount of babycorn supplied from smallholders is projected as increasing from 2 tonnes (50% of supply) to 7 tonnes (70% of supply) per week.

¹⁸ Some farmers achieve 3 crops per year based on a 100 day growing cycle.

The company have also gradually encouraged a limited number of growers to grow mangetout peas, a more complicated crop to grow. Initial results suggested a positive result as a pilot project with 100 farmers growing a single crop during the winter. Most farmers were achieving an average of 22 pickings per crop, again above the average achieved on commercial farms.

Hortico Produce are required by their buyers to ensure safety of the product and are generally subjected to the requirements of HACCP ¹⁹ guidelines. These guidelines require proper procedures to be followed and recording systems adopted for production, handling and transport of the crop before delivery to the buyer.

As the smallholder scheme develops Hortico intend to update and implement a programme of HACCP of relevance to smallholder growers. The company are also eager to develop codes of practice for the horticultural sector which ensures proper trading practices to be adopted between buyers and smallholder growers and also encourages greater adoption and encouragement of these schemes.

The company also anticipates increasing the numbers of regional centres in line with the anticipated increases in the numbers of smallholder growers. The company estimate that a minimum number of 50 growers are required in order that a regional centre may be established.

In order to build upon the current infrastructure developed primarily through the expansion of the babycorn scheme and to develop mangetout production, the company intend to further invest in a programme of expansion. This would include purchase of trucks, motor vehicles, bicycles, computers, weighing equipment and knapsack sprayers.

Post harvest handling of crop is a particular focus for the future in order to ensure better handling and reduced losses, particularly from crop dehydration. The installation of evaporative coolers at collection points is anticipated.

Hortico are also interested in further developing appropriate technologies which would enable smallholders to improve yields and qualities from their plots. In particular technologies to enable improvements to be made in water, chemical and fertiliser applications. The company intend to work with a number of aid programmes in order to improve these areas.

¹⁹ Hazard Analysis Critical Control Points.

Figure 1: Organisational chart of Agrisystems.
 Also shown are the responsibilities and number of personnel in brackets.

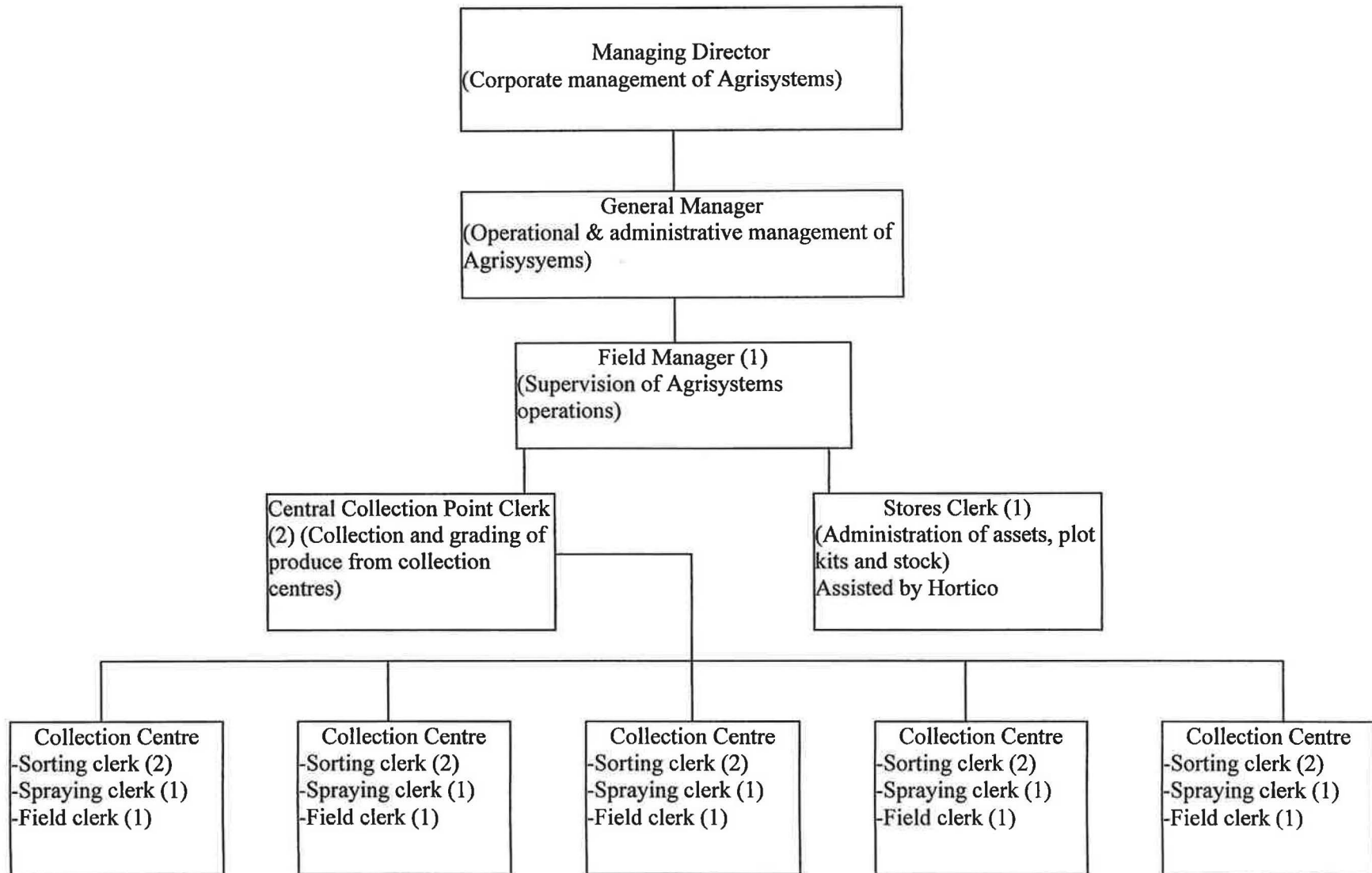
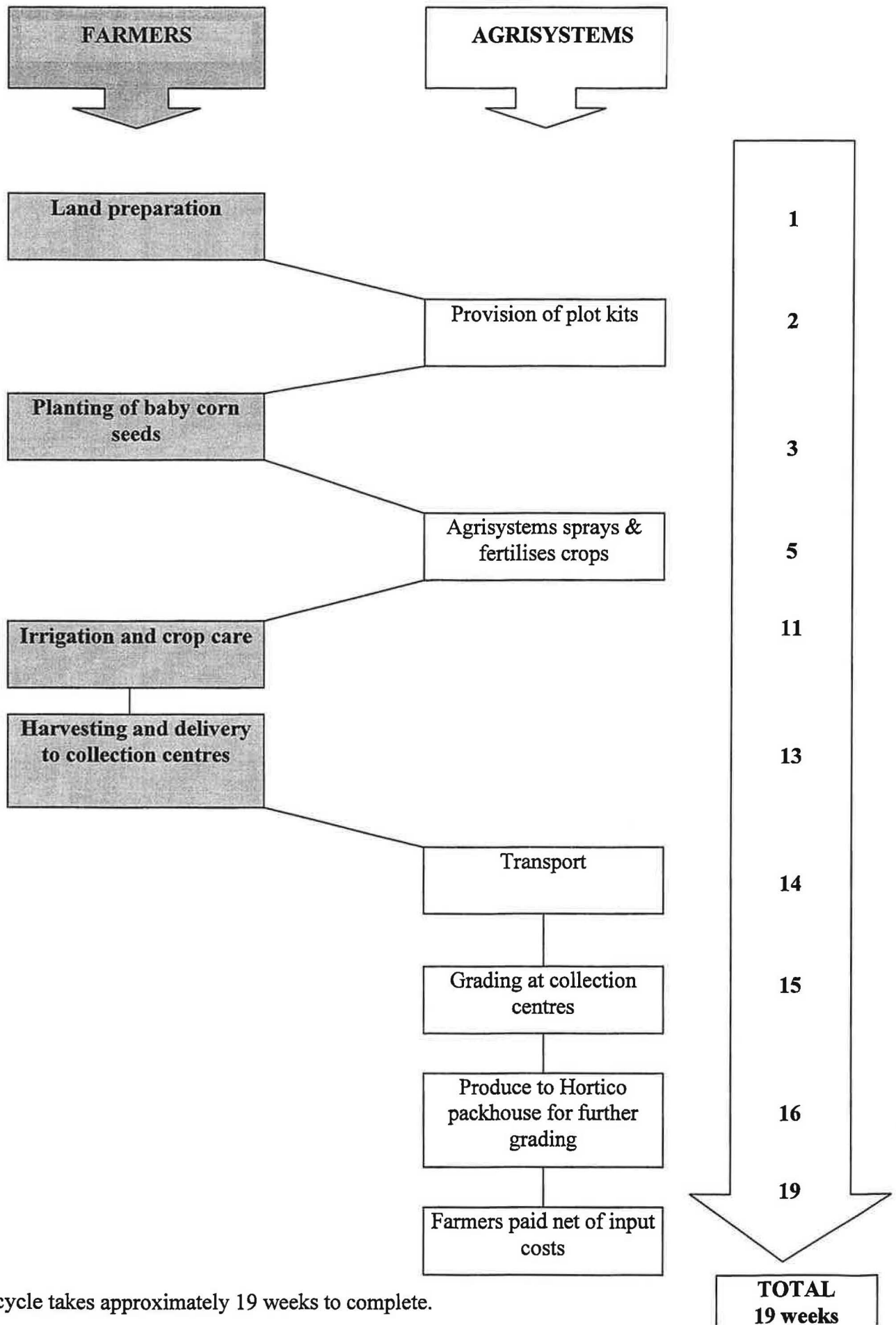


Figure 2: The baby corn cycle



The cycle takes approximately 19 weeks to complete.

Appendix 2

Harare Workshop Report

The further development of smallholder out-grower schemes in Zimbabwe

Background.

On Thursday 29th September 1998, a workshop was held at the offices of CARE International in Harare, Zimbabwe. This workshop was part of an ongoing DFID supported research project focusing upon the provision of agricultural services through self-help in Sub-Saharan Africa. Seventeen persons were specifically invited to the workshop and included industry representatives (mainly horticultural exporters), NGOs and farmer support organisations. The list of participants can be found below.

The workshop followed discussions with the participants individually (as well as with a number of other persons) over the preceding 6 months. The main purpose of the meetings had been to appraise the effectiveness of smallholder out-grower schemes and to develop recommendations that will assist in their future establishment and growth. The purpose of the workshop was to build further upon these individual discussions.

The workshop particularly focused upon the role of Government, NGOs, research and advisory centres, donors, financial institutions and industry, in encouraging the development of smallholder out-grower schemes. The workshop was facilitated by John Millns (Plunkett Foundation) and Geoff Bockett (NRI).

This paper summarises the main issues highlighted and views expressed during the workshop. It does not necessarily reflect the views of the authors. This material is to be read in the context of the findings of the wider research project.

The role of Government.

The general consensus within the group was that trade activities are best managed by private commercial entities. It was positively noted that the role of Government in agricultural trade activities was gradually being reduced within Zimbabwe.

However, the group did express the view that Government still had a key role to play in the encouragement of smallholder marketing schemes, particularly in relation to:

- enabling farmers to obtain ownership titles on land;
- improving banking regulation and promoting sensible bank lending programmes;
- providing preferential taxation or other financial incentives for commercially developed smallholder out-grower schemes; and
- improving basic communication, road and water infrastructures.

It was agreed however that smallholder schemes should develop further through initiatives established by farmers and commercial companies, regardless of

Government action and incentives. These incentives were not anticipated as being forthcoming in the immediate future.

The role of NGOs.

Commercial parties expressed the concern that, as the role of Government in agricultural trade was reduced, there may be a tendency for NGOs, donor programmes and associations to take over activities which were best left to commercial companies and market forces.

It was agreed that NGOs were best able to provide sources of technical know-how and information support in order to facilitate and encourage schemes, rather than attempt to manage them. NGOs function most effectively in a networking and awareness creation rôle— see below.

It was agreed by group members that NGOs could also provide useful support in reducing the establishment costs of developing smallholder outgrower schemes, for both farmers and commercial companies. In particular this would involve providing support for facilitating linkages and contacts between farmers and commercial companies and undertaking initial feasibility studies and groundwork.

NGOs represented at the workshop were in general agreement that marketing issues remained a major problem for smallholder farmers and were still not adequately addressed in many projects, including those implemented by NGOs. NGOs recognise this weakness and have started to take measures to ensure that marketing specialists are involved in future projects.

There was a feeling that many NGO programmes could further facilitate smallholder out-grower schemes by supporting the development of appropriate technologies, in co-operation with commercial companies, particularly in relation to irrigation, water conservation, growing, storage and handling technologies.

It was generally felt that NGO training support to farmers would be useful, particularly if focused upon helping farmers to understand techniques for growing higher value, less traditional crops (including export varieties) as well as on farm planning and cash management.

Views were expressed that, at the present time, the Zimbabwean Farmers' Union was unable to provide independent services which would help establish commercially-led and viable smallholder out-grower schemes and their role was largely politically focused.

Research and advisory services.

The group, generally felt, that agricultural research and extension agents should be further encouraged to develop more commercially directed programmes which could link with smallholder out-grower schemes. The consensus was that research based on commercial considerations was much more sustainable.

It was felt that at the present time Agritex (state funded extension service) had neither the experience nor the resources enabling them to provide reliable extension services to smallholder farmers interested in growing non-traditional crop varieties.

Commercial companies and NGOs would need to take a lead in this area.

Donors.

A general consensus within the group was that most aid programmes in Zimbabwe aiming at improving and strengthening smallholder marketing over the last 30 years had been unsuccessful, and that there needed to be honest evaluations of the lessons learned.

The experience of most group members of farmer marketing schemes which had been managed through donor programmes in Zimbabwe suggested that the project plans and anticipated outputs were generally over optimistic and commercially unrealistic.

The group felt that many projects had been detrimental to smallholder farmers and had fostered a mentality of dependence on donor aid rather than commercial, economic and sustainable development.

The group generally expressed the view that donor programmes should complement issues of food security with projects that would stimulate commercial and economic development through more creative initiatives and business linkages, involving a wide variety of stakeholders.

The possibility of establishing an independent forum for supporting the establishment of more smallholder out-grower schemes was raised. It was recommended that this forum would include representatives from commercial companies, farmers, Government, donors and NGOs.

It was also generally accepted that donor programmes should continue to involve local institutions in projects as far as possible, so that skills and experiences were transferable.

Financial institutions.

Within the group there was a general feeling that commercial banks neither understood the potential of smallholder out-grower schemes nor their specific financial requirements. Poor lending programmes, particularly from the Agricultural Finance Company, had also in recent years, helped to reinforce a prejudice against these schemes within commercial banks.

The group expressed a hope that more innovative schemes and imaginative solutions would develop which would enable joint risk partnerships, between farmers, banks and commercial companies, to be created.

Subsidised loans for smallholder out-grower schemes, supported by the Government or donors, were raised as possibilities, but only on the basis of clear and open guidelines.

Generally it was accepted that financial institutions would only become convinced of the economic potential of these projects if, truly successful examples were developed and smallholder farmers became more able to manage their own money. The view was expressed that with inflation presently at 40% the value of any incomes not invested by farmers was rapidly reduced throughout a year.

Commercial companies.

The group recognised that the development of any smallholder out-grower scheme could not be considered as a short-term possibility for commercial companies. Any development would require senior management a strategic decision and commit time and money resources for a minimum of 3 years.

The group felt that the large majority of companies would not make commitments of this kind or take the risk of developing a project involving a large number of small growers without immediate returns on investments.

It was also noted that commodity type products, such as cotton and paprika did not provide sufficient margins to be made which would enable further developments to schemes to be made, even though the main suppliers were smallholder farmers.

It was noted that successful schemes in Zimbabwe had senior management support but also generally required a committed and enthusiastic individual in the company who would actually drive the scheme forward and make it work.

Minimum guaranteed prices were considered as being important assurances for farmers, but it was felt that of greater importance was the need for more trust to develop between smallholders and commercial companies.

It was agreed that it was dishonest to persuade smallholder growers to grow crops for which there was no clear market opportunity and that companies committing themselves to these schemes would need to accept a wider responsibility. This responsibility would involve enabling greater empowerment of smallholder farmers and support to farm management, growing techniques and crop rotations.

A final concern expressed within the group was that the current rapid increases in prices, particularly for irrigation, electricity and other inputs was likely to make the profitability of all kinds of farms and many new projects questionable.

Participants at workshop 29th September 1998.

John Millns (Plunkett Foundation), Geoff Bockett (NRI) - facilitators.

A.Garikayi - Coopibo (NGO).

M.Mutambira - Self Help Development Foundation (NGO).

P.Lehrmann - Cargills (Commercial company).

P.Chinogo - Olivine industries (Commercial company).

A.Turner - Interfresh (Commercial company).

O.Mutoko - Olivine industries (Commercial company).

J.Buttery - Oxfam (NGO).

S.Musa - Commercial bank of Zimbabwe (Commercial bank).

D.Nyahondo - Farmers Development Trust (NGO).

G.Tobaiwa - CARE International (NGO).

Man-Kwun Chan - NRI (Research and consulting company).

T.Chivere - The Cotton Company of Zimbabwe (Commercial company).

M.Manda - Intermediate Technology Development Group (NGO).

T.Yuba - Horticultural Promotion Council/USAID (Trade association).

K.Stevenson - CARE International (NGO).
G.Evans - Hortico (Commercial company).
D.Perlman - Hortico (Commercial company).

Appendix 3

The London Workshop

Enhancing the Development Impact of Export Horticulture in Sub-Saharan Africa.

This workshop was organised jointly by NRI and the Trade and Enterprise Programme at the Institute for Development Studies. John Humphrey and Catherine Dolan of IDS have been researching similar themes on export horticulture from sub-Saharan Africa.²⁰ Both teams of researchers wished to promote interaction and debate between development practitioners, the private sector, academics and government and therefore decided to join forces to present and discuss research findings.

The one-day workshop was held at the Holiday Inn Victoria in London on 3rd February 1999 (see below for full list of participants). The following summaries are presented here:

- Main highlights
- List of presentations
- List of participants

²⁰ The IDS group is examining the links between African exporters and UK supermarkets, and is part of a broader research programme on private sector development financed by ESCOR.

ENHANCING THE DEVELOPMENT IMPACT OF EXPORT HORTICULTURE IN SUB-SAHARAN AFRICA MAIN HIGHLIGHTS

Summarising the findings of a full day of discussion involving 60 people is a challenging task. A more in-depth treatment can be found in the attached summary of the workshop discussion and of the individual speakers' presentations.

The following main points emerged from the day:

- Export horticulture is one of Africa's recent success stories. It is very important to increase the involvement of smallholders, as this will: (a) spread the benefits more widely across the population, and: (b) allow the industry to grow more in the longer term.
- In the UK trade, there is significant apprehension about sourcing from smallholders in Africa, relating mainly to issues of quality, reliability, safety and cost. Exporters also face risks including loan default and side selling to other exporters.
- Notwithstanding these problems, professional and far-sighted operators in both Kenya and Zimbabwe have organised highly effective out-grower schemes that have enabled smallholders to meet the quality and other requirements of the European trade.
- Smallholders also offer certain advantages: (a) crop care is frequently better; (b) they save costs with labour-intensive crops; (c) larger farmers often face problems of labour motivation and management control; (d) small plots enhance continuity of supply through geographically dispersed microclimates, pose fewer problems of disease, and allow for inter-cropping, which increases protection against wind damage.
- Smallholder schemes appear to work best when major, established, exporters take on the role of "benign dictator", organising smallholders and assuming responsibility for a rigid enforcement of standards.
- The "benign dictator" approach can be valuably complemented by "bottom-up" initiatives of the kind promoted by FPEAK in Kenya. Farmers organise into small groups of 15-20 to obtain information, inputs, technical and quality assistance. In this way they can achieve economies of scale and interact more successfully with exporters. Given the poor record of larger co-operative type organisations, the focus should be on such small primary level groups.
- Specialised trade associations and NGOs can perform a valuable role in facilitating strong and mutually beneficial relationships between smallholders and exporters.
- A "Paint by Numbers" approach can create unnecessary hurdles for smallholders, and in view of this the UK trade should do more to tailor its quality, ethical and environmental monitoring to the reality of smallholder-based systems. This does not mean that standards should be relaxed - only that they should be applied in ways that are cost-effective and manageable for smallholders.
- Donors and Governments should work in partnership with the trade to reduce the risks and costs involved in sourcing from smallholders. The following are priority areas for support: the creation of a facilitative policy framework; the development of appropriate quality guidelines; support for specialist institutions to facilitate linkages; steps to ease critical financing bottlenecks; continued research on the implications of ethical trade guidelines for smallholders.

Presentations

Introduction, *Jessica Irvine, Business Development Advisor, DFID*

Session I: Market Requirements in the UK

John Humphrey, *Professorial Fellow, Institute of Development Studies*

John Foley, *Head of Buying, Waitrose*

Sudhir Mehta, *Financial Director, Minor, Weir and Willis*

Session II: Experiences in Smallholder Sourcing for the UK Market

Annabelle Malins, *Post Harvest Technologist, Natural Resources Institute*

Graeme Evans, *General Manager Hortico Agrisystems, Zimbabwe*

Gary Tomlins, *Director of Agronomy, Homegrown, Kenya*

Session III: Support for Smallholder Development

Jonathan Coulter, *Principal Economist, Marketing Systems, Natural Resources Institute*

John Karugua, *Chairman, Fresh Produce Exporters of Kenya and Director, Everest Enterprises, Kenya*

Antony Ellman, *Consultant agriculturalist, specialised in development of outgrower schemes*

Closing Remarks, *Jessica Irvine, Business Development Advisor, DFID*

Workshop participants

Ms. Lucy Ambridge, DFID, UK

Mr. Paul Bashell, Malet Azoulay, UK

Mr. Clive Bayton, Geest Fresh Produce, UK

Mr. Nick Bernard, Albert Fisher, UK

Mr. Bill Blackburn, Mack Multiples, UK

Mr. Mick Blowfield, NRI, UK

Mr. Hugh Eduard Campbell, Deciduous Fruit Producers' Trust, South Africa

Mr. Jim Cheatle, Association for Better Land Husbandry, Kenya

Mr. Ralph Cant, Mitchell and Mitchell, UK

Mr. Jonathan Coulter, NRI, UK

Mr. Derek Cull, Wealmoor, UK

Mr. Benny Dembitzer, GIC, UK

Mr. Atul Dhanani, Exotic Farm Produce, UK

Ms. Claire Dirdal, Safeway, UK

Dr. Catherine Dolan, IDS, UK

Mr. Alex Douse, W Baileys Ltd, UK

Mr. Mark Driver, Minor Weir and Willis, UK

Mr. Graeme Evans, Hortico Zimbabwe, Zimbabwe

Mr. Jacobus Christian Faure, Deciduous Fruit Producers' Trust, South Africa

Ms. Sharon February, African Farmers Union, South Africa

Mr. John Foley, Waitrose, UK

Mr. Joe Foroma, Zimbabwe High Commission,

Mr. Pablo Gonzalez, Selby, UK

Ms. Ann Gordon, NRI, UK

Mr. Peter Grimby, Commercial Horticultural Association, UK

Mr. Jim Harvey, DFID, UK
Mr. Ed Havis, Albert Fisher, UK
Mr. Doug Henderson, Fresh Produce Consortium, UK
Mr. Simon Hendry, W Baileys Ltd, UK
Mr. Stanley Heri, HPC, Zimbabwe
Mr. David Hirst, COLEACP, UK
Mr. John Humphrey, IDS, UK
Mr. Stephen Humphreys, COLEACP, France
Ms. Jessica Irvine, DFID, UK
Mr. Calisto Karimanzira, Zimtrade, Zimbabwe
Mr. John Karuga, Everest Enterprises, Kenya
Mr. Alan Legge, Mack Multiples, UK
Ms. Annabelle Malins, NRI, UK
Mr. Alaric Marsden, GIC , UK
Mr. Dickson Mbugwa, Kenya High Commission,
Mr. James McCleod, GIC, UK
Mr , Ignitius Nicholas Mdaka, Mpumalanga Dept of Agriculture, South Africa
Mr. Sudir Mehta, Minor Weir and Willis, UK
Mr. John Millns, Plunkett Foundation, UK
Mr. Chris Mukindia, Fresh Produce Exporters Association of Kenya, Kenya
Mr. Martin Mulandi, Horticultural Crop Development Authority, Kenya
Mr , Johannes Muller, Western Cape Farm Workers Association, South Africa
Mrs, Dhavamoney Naidoo, Dept of Agricultural, South Africa
Mr. Daniel Perlman, Hortico Zimbabwe, Zimbabwe
Mr. Dhanapalan Subramoney Pillay, Freshmark, Kwazulu Natal, South Africa
Mr. Dickon Poole, Del Monte, UK
Mr. Simon Rawlinson, Plunkett Foundation, UK
Mr. Andrew Richardson, Capespan, UK
Ms. Tamara Rusinow, CARE-UK, UK
Ms. Anne Tallontire, NRI, UK
Ms. George Taylor, DFID, UK
Ms. Joanna Thorneycroft, Arbor International, UK
Mr. Gary Tomlins, Homegrown, Kenya
Ms. Lucy Waithaka, Export Promotion Council, Kenya
Mr. Paul Ward, Malet Azoulay, UK
Mr. Wilfred Wentzel, Centre for Integrated Rurl Development, South Africa
Mr. Thomas Yuba, Horticultural Promotion Council, Zimbabwe
Mr. Adrian Zeederberg, Mitchell and Mitchell, Zimbabwe
Mr. Emerson Zhou, Zimbabwean Farmers Union, Zimbabwe

Synthesis of Key Findings from Presentations and Discussion

Introduction

Horticultural exports have been one of the biggest economic success stories in sub-Saharan Africa over the past decade. African countries are main suppliers of off-season fruits and vegetables to UK markets due to favourable climatic conditions, geographic proximity to European markets, and low-cost labour. The horticultural trade has provided many jobs, not only in agricultural production and post-harvest processing, but also in the service and logistics activities required to move high-quality, safe products from African farms to supermarket shelves. However, one striking feature of the industry has been its reluctance to source from self-employed smallholders. In the case of the foremost supplying country, Kenya, there were reports of a move away from smallholders in favour of horticultural estates which employ wage labour.

The workshop brought together UK retailers and importers, African exporters and representatives of business associations in both Africa and Europe in order to discuss the constraints and opportunities facing smallholders in the export horticultural trade. Specific attention was awarded to examining the types of support that smallholders would need to meet the requirements of the UK supermarkets.

Market requirements in the UK

The UK is the most sophisticated food market in Europe. Consumers want convenient, good quality food, which is well presented and at a competitive price. UK supermarkets have shifted these customer preferences down the supply chain, expanding the type of requirements that African suppliers must meet in order to access UK markets. These are volume, consistency, reliability, quality and price. Furthermore, supermarkets are under increasing pressure to source products that comply with UK food safety regulations and are produced under ethically and environmentally sound conditions. Market access is contingent upon meeting these standards, which are key factors driving the structure of the industry, both in the UK and in Africa.

These stringent requirements have made retailers more selective about their suppliers, and suppliers more discerning about their growers. In particular, retail demands for quality and due diligence place considerable organisational burdens on African exporters, who must demonstrate traceability of a product from field to supermarket shelf. Horticultural crops demand a level of technical and managerial skill that exceeds other agricultural sectors due to consumer concerns, the environmental sensitivity of crops and the importance of inputs and post-harvest practices for market profitability. Because of this, exporters seek producers who can afford appropriate inputs, verify due diligence and ensure quality produce. Increasingly, exporters require producers to have management systems that oversee the use of chemicals, undertake audits, and develop monitoring procedures.

These factors pose potential impediments to market entry for smallholders who generally lack adequate credit, inputs or technical capabilities. To date, traceability requirements have favoured large producers, who having centralised production facilities and consequent economies of scale, can economically supervise pesticide application and ensure quality. From an exporter's perspective, it is far easier and cheaper to audit and monitor a large production unit than dispersed farmers.

Several other factors have encouraged exporters to source from large producers, including the production, logistics and management aspects of supplying overseas markets. At the production level, it has been argued that smallholders have difficulty achieving product

consistency throughout the season. This is partly due to variation in agronomic practices (harvesting, crop rotation and pesticide application) as well as an absence of co-ordinated technical services. Specifically, there is concern that smallholders will not use pesticides safely, efficiently or in accordance with environmental guidelines. Smallholders also suffer from logistical constraints such as transport, haulage, airfreight, and cold storage facilities. The costs for logistics are often predicated on economies of scale and larger entities are better able to make these investments. Finally, the horticultural supply chain relies on the transmission of market and technical information, which is more easily communicated to 50 people on one 100-hectare farm than to 50 people on separate, perhaps dispersed, two-hectare farms. Thus, the ever-increasing demands for scale are reducing the number of producers to those who can not only provide large quantities of products, but also guarantee higher levels of investment into post-harvest processing and logistics.

Can smallholders meet these requirements?

While scale and volume are increasingly essential for exporters, they are not essential for production. There is nothing inherent in smallholder production that prevents UK requirements from being met. In fact, smallholders can offer exporters certain advantages. Some product lines, such as babycorn and French beans, are particularly competitive for smallholder production. Crop care is frequently enhanced and smallholders are better equipped to cultivate crops with a high degree of labour intensity. Smallholder production is reliant on family labour and hence offers exporters amounts of labour unavailable on large commercial farms. Further, small plots facilitate continuity of supply through geographically dispersed microclimates, pose fewer problems of disease, and allow for inter-cropping, which increases protection against wind damage. Smallholders also enable exporters to overcome constraints regarding land availability.

If smallholders are to capitalise on these advantages, they must overcome the various obstacles mentioned and offer UK customers equivalent quality and the same degree of confidence about safety as offered by larger producers. But how can this be achieved? For an answer we now turn to two successful cases where smallholders have gained access to the UK market.

Effective Smallholder Integration: Case Studies

Many exporters have been deterred from incorporating smallholders due to the costs and risks involved, including the risk that smallholders will not repay cash advances and will side-sell produce to alternative market outlets, and the risk UK customers will react negatively to the simple fact that they source from smallholders. Yet two of Africa's largest horticultural exporters, Hortico (Zimbabwe) and Homegrown (Kenya), have shown that by intensively supervising smallholders and assuming responsibility for rigid enforcement of standards, exporters can effectively integrate them into supermarket chains. This general approach was described as the "benign dictatorship model".

Hortico

Five years ago Hortico realised that there was exceptional potential for growth in export horticulture that they could not satisfy by sourcing from large commercial farmers, who were realising substantial profits through tobacco production. As a result, the company explored the possibility of sourcing produce from smallholder farmers to meet rising retail demands. Today, Hortico has organised over 3,000 farmers into outgrower schemes comprised of farmers who grow horticultural crops on plots as small as 600square metres. Notably, these farmers work un-irrigated land using watering-cans. There are 19 service centres staffed by Hortico personnel, who co-ordinate the production and harvesting activities of between 50

and 250 farmers.

In order to satisfy their UK customers, Hortico needed to ensure that pesticide use, product traceability and post-harvest handling systems equalled those of with their commercial outgrowers. They achieved this by working closely with smallholders and closely supervising production. Specifically, Hortico provides farmers with training and inputs, and company staff carry out all spraying with agrochemicals Hortico identifies the foundation of their programme as commitment, good working relationships, based on trust, and well-defined roles and responsibilities.

The developmental success of Hortico's outgrower scheme is reflected by their near 100% recovery of input costs, the involvement of women in the scheme (sixty percent of the participating farmers), and the expansion of multiplier effects throughout local communities including improved roads, services and employment opportunities.

Homegrown

In contrast to Hortico, Homegrown sources produce from smallholder farmers on plots of up to 50 hectares. Homegrown also maintains very tight control over smallholders in order to supply safe, good quality food to UK customers. In fact, the company's confidence in smallholder produce is so great that it encourages UK supermarkets to chose smallholders at random for inspection. It also provides high quality seed (not readily available on the market), extension services through agronomists and crop protection agents, and loans to mitigate financial constraints. Key measures include:

- *Strict record-keeping and traceability:* All monitoring and documentation required of Homegrown's large production units are applied to smallholders, who are audited for compliance with its code of practice every month.
- *Pesticide use:* It provides regular training on correct pesticide measurement and application and ensures that chemical stores are inspected and monitored.
- *Facilities:* It provides farmers with grading facilities as well as a charcoal cooler to ensure temperature-controlled conditions throughout the supply chain.

Like Hortico, this smallholder scheme is responsible for spreading the benefits of the horticultural trade throughout the rural economy. Each year Homegrown pays smallholders an average of \$1.6 to \$1.8 million, which is generating significant knock-on effects in rural areas.

What support is required?

Homegrown and Hortico clearly demonstrate that smallholders can meet the strict quality standards of the UK market but that support is needed to mitigate financial, technical and infrastructural constraints. Key requirements for smallholder success include:

- logistics and local facilities for product protection and collection
- technical support such as an agronomist and spray teams
- management and technical resources to ensure product traceability, documentation and reliable records
- training (ICMS, hygiene, pesticide use, record keeping, etc.)
- trust and commitment between players in the chain

These requirements can only be satisfied through the development of linkages and trust between exporters and producers.

Whilst a strong working relationship between exporters and their smallholder outgrowers is the “core requirement” for the healthy development of this industry, there are other needs calling for outside support. The most obvious requirement is that **Government** provides the enabling environment to enhance the competitiveness of the sector. This could include ensuring maintenance of the infrastructure, research and development into new crop varieties etc., and conducive export policies (i.e. reduction in export duties etc.). In many countries, the case for such support is very strong, given that horticultural exports are central to Governments’ foreign exchange and employment goals.

There is also a case for **third-party support** to: (a) reduce the risks and costs which discourage exporters from working with smallholders, and; (b) address longer-term issues and equity considerations which may be beyond the concern of the exporter. Whilst there are many advantages to the “benign dictator” model, one may ask what happens if and when the dictator leaves? Or, what happens if he proves not to be benign?

For these reasons there is a valuable role for “**bottom-up**” initiatives of the kind promoted by FPEAK in Kenya, or the “**marriage-broker**” approach adopted by FAIDA in Tanzania. In the case of the FPEAK scheme, farmers organise into small groups of 15-20 to obtain information, inputs, technical and quality assistance. They are trained in integrated crop management systems, hygiene, pesticide uses 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.

More experience is needed to substantiate the effectiveness of these groups. However, past DFID-funded research indicates that small village groups of this kind often interact successfully with agribusiness. By contrast Africa’s general experience with larger co-operative-type organisations at district, regional or national levels has been very poor.

As the above examples show, both trade associations and non-Governmental organisations (NGOs) can provide a range of educational support and facilitate effective linkages between smallholders and exporters. However, export horticulture has been private sector driven and companies are naturally wary of interference by outsiders, who may moreover lack necessary local knowledge. Here it should be recognised that some NGOs already have experience in facilitating such linkages, and are well equipped to mobilise farmers, provide training and capacity building to farmers’ organisations. The important thing to recognise is that NGOs vary widely in their outlook towards business, experience and capabilities, and that only certain of them have a vocation for this sort of work²¹.

African export associations have a role in promoting horticultural activities in general, through such activities as developing and promoting all-encompassing codes of conduct and a positive brand image of the country’s products. Specifically on the smallholder issue, their role depends on the needs expressed by the exporters.

The UK supermarkets define how the chain is structured, what is produced, to what standards and by whom. They are, therefore, well placed to communicate market information and customer requirements down the chain to African producers. In particular, supermarkets need to communicate their support for smallholder integration to their suppliers in the UK and Africa and to ensure that the specification of their requirements does not involve a “painting by numbers” approach with inappropriate verification systems. Quality, ethical and environmental monitoring procedures should be fully adapted to the realities of smallholder-based systems and avoid creating unnecessary hurdles.

²¹ The fact that the speakers representing both Homegrown and Hortico had initially gained African experience with NGOs suggests that they may provide critical experience needed for developing smallholder-based agribusiness manager. The leading grain trader in Mozambique also entered the business via this route.

International aid donors (and more specifically DFID) can support smallholder involvement in the following ways.

- By supporting the development of quality guidelines that will enable exporters sourcing from smallholders to meet the requirements of the 1990 UK Food Safety Act. Guidelines need to be fully adapted to African realities.
- By building up a cadre of highly skilled “facilitators” to assist in developing linkages between smallholder farmers and exporters in Africa.
- By considering the case for support for venture capital funds and/or loan guarantee funds, with a view to overcoming financial bottlenecks. Zimbabwean participants mentioned the conservatism of local banks as an important constraint on the development of smallholder based schemes. Very weak local banking sectors are a problem in various countries of Southern Africa. However, it is stressed that before setting up a new fund, one should first determine whether a better use of existing funding agencies could solve the problem.
- To continue researching the implications of ethical trade guidelines for smallholders, in close consultation with supplying country stakeholders. Great care should be exercised to ensure that such guidelines do not inadvertently lead to the exclusion of smallholders, on the grounds of using family labour or other criteria.
- To provide other ad hoc support to help the African trade to overcome important constraints preventing the development of smallholder-based horticulture. This might for example involve training support or helping Governments build penetration roads in areas seeking to develop horticultural exports.