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1 Summary

This report summarises the responses to a survey of smallholder farmers in Kenya who grow crops for export as fresh produce to Europe. The survey form consisted of around fifty questions exploring business, livelihoods and market access. It was carried out by members of a Kenyan company in three regions of Kenya from which significant exports of fresh produce take place to Europe. The survey canvassed 102 farmers on their businesses and particularly the factors affecting their access to the export market which in all cases involved sale through intermediaries. The survey involved only farmers that had been GlobalGAP (formerly named EurepGAP) certified but whose certification had lapsed, or farmers who had made preparations for GlobalGAP but had not completed the process of obtaining certification.

In the past, these smallholder farmers who exported produce to Europe did not have the same safety and quality pressures but in recent years the supply chain has started to demand certified produce, so the farmers have had no option but to comply. Now GlobalGAP is a widely accepted private standard whose membership is often a prerequisite of being linked to an export company.

Being GlobalGAP compliant was closely associated with the relationship between farmers and their buyers, often an export company. The survey indicated that the company or buyer had often helped the farmer towards obtaining certification by providing advice and support. Once part of the GlobalGAP scheme, revenues for crops were higher and in addition, the process of becoming compliant brought other benefits such as improved hygiene, access to credit, information and training. Farm safety had also progressed significantly due to improved practices in storage and handling pesticides.

Despite these benefits, all respondents left GlobalGAP within one to three years of first obtaining certification. The predominant reasons given were high investment and running costs and lack of or inadequate price premium for certified crops. While most farmers wished to continue to export crops and 83 per cent still do so, some no longer export produce, even though they recognise that revenues for exported crops are higher than those for ones destined for the domestic market. Those 83% of respondent farmers that still export crops demonstrate that being GlobalGAP certified is not essential, but a general acknowledgement by respondents of the benefits of being certified compliant implies that in addition to high costs, their reason for leaving GlobalGAP was connected with severance in their linkages with their buyers.

Since leaving GlobalGAP different income strategies have been adopted (cultivation of new crops, employment off farm and adoption of new business) but respondent farmers would generally still like to be GlobalGAP certified if it were not for the fact that they found it too costly compared with the benefits.

Key findings

- 102 small-scale farmers surveyed, all of whom had participated in the GlobalGAP (formerly EurepGAP) compliance process.

- 75 per cent of the growers expressed a wish to grow or continue to grow export crops in the future.

- The proportion of farmers canvassed who currently export crops has fallen compared to previous years – 100 per cent of the farmers used to grow crops for export to the EU, 83 per cent continue to grow export crops despite not currently being GlobalGAP certified.

- 17 per cent of small-scale growers surveyed are no longer growing crops for export, although most would like to grow export crops in the future.

- 100 per cent of growers interviewed had attempted to demonstrate compliance with the requirements of the GlobalGAP standard, but only 45 per cent became certified.

- Farmers outside of GlobalGAP receive a much lower level of advice and support from the buyer, are paid a lower price per kilo, grow and sell smaller volumes and derive much less of their household income from sales of export crops.

- All of the formerly GlobalGAP certified farmers had left the scheme within one to three years of initial certification.

- Revenue and income (per kilo) was higher for export crops compared to crops grown for national markets.

- Small-scale growers cited twelve advantages of GlobalGAP certification, the most important advantages being improved hygiene (70 per cent of respondents) and safe use of chemicals (55 per cent of respondents).

- The chief disadvantages of GlobalGAP certification were cited as high investment and running costs and the lack of any price premium for certified production.

2 Background and rationale

GlobalGAP (known as EurepGAP until September 2007) is a private sector body that sets standards for the certification of agricultural products based on Good Agricultural Practices (GAP). Farmers who are certified as compliant demonstrate that they meet the food safety and quality standards required by the scheme. GlobalGAP certification has the obvious advantage of making the produce more acceptable to supermarket retailer members of GlobalGAP. The standard is also widely accepted as a de-facto baseline for primary production within the food industry in the EU. However, certification does not guarantee market access, and some supermarkets require additional criteria and standards to be met that go beyond the basics defined in the GlobalGAP standard.

Previous work with exporting farmers by NRI and IIED, carried out in Zambia, Kenya and Uganda, indicated that many growers face challenges accessing the export market or maintaining their status as exporters, with the smallest growers being worst affected. Work in Kenya (Graffham *et al*. 2006) highlighted the high investment and running costs of GlobalGAP compliance and the important role of export companies and donors in supporting and subsidising small-scale growers' certification under the GlobalGAP standard. One outcome of the 2006 survey was the indication that 60 per cent of small-scale growers involved in growing fruits and vegetables for export to EU supermarkets prior to the introduction of the GlobalGAP standard had been excluded from the market. Some of these growers had been certified, whereas others withdrew or were dropped by their export company before certification could take place. Farmers cited high costs as the main reason for withdrawal from GlobalGAP supply schemes. Some of the larger export companies said that the high costs of maintaining a GlobalGAP compliant supply system had forced changes in procurement policy towards a smaller number of larger farms thus excluding hundreds or even thousands of small-scale growers from using the company as an outlet for export sales.

After the work in 2006, many unanswered questions remained regarding the 60 per cent of growers unable to complete or maintain certification under the GlobalGAP standard:

- Were these growers excluded from export altogether?
- Did growers form a new relationship with another company and continue export sales?
- If growers were excluded from exports how did they fare financially afterwards?
- How well can alternative sources of income replace export crops?
- Was exclusion from GlobalGAP such a bad outcome for small-scale growers?

The rationale for the current survey was a desire to answer some of these questions by looking in more detail at a sample of small-scale growers drawn from the 60 per cent of small-scale growers in Kenya identified as no longer being involved with GlobalGAP certification. The survey included growers who did not complete certification or allowed their certification to lapse.

3 Approach

Survey design

The survey form was prepared by members of NRI and IIED and then pilot-tested by Real IPM, the company commissioned to carry out the survey interviews in Kenya. Following the pilot interviews after discussions between RIPM and NRI, some of the questions were modified slightly to avoid ambiguity. The finalised survey form (appendix 1) was to gather information from 102 farmers (see below for more details of selection criteria) who are or have recently been growing vegetables and/or avocados, and for whom export to overseas markets in Europe has been a significant part of their business. Name and contact details were recorded for each respondent and the name of the enumerator was also recorded. Note that as all exported produce is handled and transited by brokers (middlemen) or export companies, rather than by the farmers themselves, the survey concentrated on production issues and compliance with the most well known farm standard, i.e., GlobalGAP. Neither the BRC Global Food Standard which applies to post harvest packing and transportation nor the private standards associated with individual retail chains were part of the survey.

The survey sheet included a cul-de-sac question (Q15) to which a positive response (indicating that the respondent was still GlobalGAP certified) stopped the survey. This was put in place to avoid wasting time on currently certified growers. None of the 102 completed survey forms were from growers who fell into this category. Respondents included farmers who had achieved certification and those who started to prepare for certification, but never completed the process. It was considered important to explore fully the growers' reasons for wanting to be GlobalGAP certified, but as stated above, none of the respondents were currently certified or involved in a GlobalGAP compliance scheme when the survey was conducted.

The main aims of the survey were to:

- Assess the importance of exports in the context of the farm economy
- Assess the relative importance of farm income versus other income sources
- Determine farmers' reasons for joining or wishing to join GlobalGAP
- Determine their reasons for leaving or lapsing GlobalGAP certification after they had joined
- Determine financial pros and cons of GlobalGAP compliance
- Compile information, including cost, of the preparations they had made to join GlobalGAP scheme, annual cost of compliance and who paid for annual compliance costs
- Identify new sources of income that farmers had adopted since leaving GlobalGAP
- Contrast the revenue and profitability of exported crops (as a GlobalGAP compliant or non-compliant grower) with domestically marketed crops
- Explore, compare and contrast transport issues before joining, whilst member of a GlobalGAP scheme and since leaving GlobalGAP with regard to:
    - their source of information
    - where they obtain inputs such as seed, fertiliser and chemicals
    - source (if any) of credit
    - source of farm labour

Implementation of the survey

The survey was carried out by Real IPM, Kenya Ltd., a company that has worked closely with the export industry in Kenya and elsewhere. Using the form (appendix 1) that had been developed by NRI and IIED, their canvassers interviewed 102 growers who were not currently registered or certified as GlobalGAP compliant growers, but had either been certified in the past and allowed the certification to lapse or dropped out before completing the certification process.

Respondent farmers were selected within regions of Kenya that have a history of supply to export markets. The growers and grower groups were initially identified by approaching three of the largest export companies, namely Homegrown, Kenya Horticultural Exporters and East African Growers, who kindly assisted in the process of locating and communicating with appropriate individuals and groups of smallholder farmers (outgrowers). Selection was based on the grower having produced export crops, though not necessarily as a GlobalGAP certified grower.

The major province that produces horticultural crops in Kenya is Central Province (Fig. 1). This province has a range of climates that can suit the range of export crops. It is within 200km of Nairobi, the major export hub of Kenya and has reasonable infrastructure to enable efficient exporting of fresh produce. As a consequence, all growers identified were located in the Central Province with the exception of Meru District which is in Eastern Province. The grower's location was identified by the District and sub location (Table 1).

Table 1: Districts and sub locations of growers who participated in the survey

District - sub location	Number of growers
Kirinyaga – Kiarukungu	4
Kirinyaga – Gathya	8
Kirinyaga – Mikarara	5
Kirinyaga – Nyanyati	10
Kirinyaga – Kiamiari	1
Kirinyaga - Gathiginin/Muhigaini	4
Kirinyaga – Kiaga	3
Kirinyaga – Githumbu	8
Kirinyaga – Kiarukungu	13
Kirinyaga – Kirogo	3
Kirinyaga - Mutitu/Kianjanga/Gitakwa	8
Mwea	2
Nyeri - Munyu/Lusoi/Karatina	6
Nyeri – Sagana	5
Nyeri – Gaturiri	2
Meru	4
Thika – Gikuambo	6
Thika – Gethanji	10

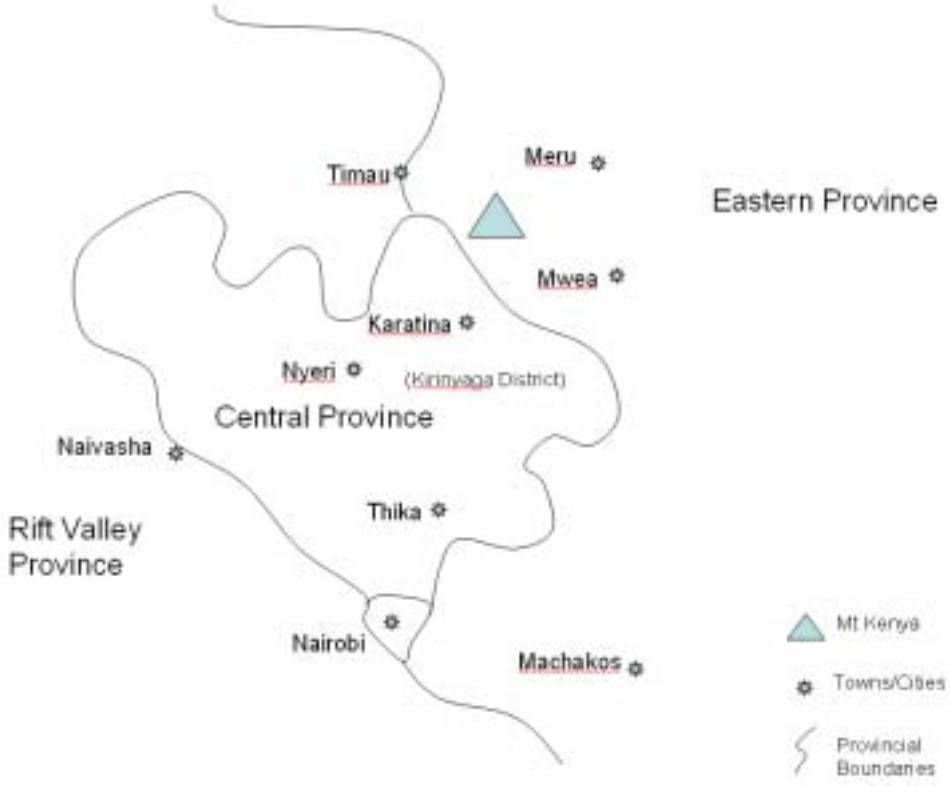
In the case of farmer groups, an approach was made to the group chairman and permission was obtained to interview selected group members. The chairman was asked to identify growers who farmed on a range of farm sizes to cover a wide spectrum of different grower units. No other criterion was used to select growers within a group. The number of growers interviewed in any single group did not exceed one third of the members and was often less than this proportion.

A big proportion of respondents were from the Kirinyaga District. This is a large district that ranges in altitude from 1,000 – 2,000 metres, has a large range of crops and is the location for a large government-sponsored irrigation scheme. There are many grower groups based in this extensive scheme, hence the large number of survey participants identified in this district.

Information was gathered on a wide range of social, economic and demographic issues relating to the farmer, his or her business, and specifically the proportionality of export crops versus ones grown for sale to the domestic market. The latter was intended to help explore and understand how well the alternative local market compares financially with selling produce for export.

In exploring the technical and financial criteria relating to participation in GlobalGAP in terms of costs and benefits, and the adaptive changes in the farm practices before, during and after involvement in GlobalGAP, the survey gathered information that was intended to tease out growers' rationale in deciding how best to access export markets.

Figure 1: Map of survey district



4 Results & discussion

Information on respondents and their farms and households

Socio-economic information about the respondents was included in the survey questionnaire to provide a grower profile, so that we could if necessary analyse responses by age, sex, household, dwelling type, area farmed, how long they had been farming and by household income. The survey also gathered information on whether the growers belonged to a collective grouping and recorded the size (number of members) of the group.

Of the 102 respondents, four out of five were male. Their average age was just under 40 years. The number of people in the household ranged from a single person (the farmer himself/herself) to 15 people. The average number of people in the household was five.

All farmers surveyed were smallholders with farms ranging in area from 0.25 to 20 acres with an average area farmed of 3.12 acres. The majority of farms were from half to three acres (0.2 to 1.2 hectares) in size - a small area to forge a living. For 80 per cent of respondents farming was their sole source of income.

Household income levels are presented in more detail in Table 4, but as part of the survey a question was asked regarding the type of housing available to the farmer as this would provide a guide to relative level of income if more direct questions failed to elicit an answer. As can be seen from Table 2, the majority of growers live in semi-permanent (and relatively less expensive) types of housing which is in keeping with the amount of income potential associated with growing vegetables or fruits on small farms of 0.2 – 1.2 hectares of land.

Table 2: Types of dwelling occupied by farmers taking part in the survey

Type of house	Number
Permanent	20
Semi permanent	34
Mud walls with iron roof	33
Mud walls with makuti/ grass roof	1
Timber house with cement floor	5
Timber house without cement floor	2
No response	7

It has been suggested previously that many of the farmers excluded from GlobalGAP certification might have lost out in terms of not having to adopt good business practices such as record keeping and having lower technical competence. Lack of experience in farming has also been cited as a weakness that might be more prevalent in non-certified farms. However, inexperience was not a dominant factor for the majority of the 102 growers in the current survey (Table 3) as around 56 per cent had between six and twenty years of experience.

Table 3: Farmers' years of experience in commercial horticulture

Years of commercial farming experience	Number of respondents
Unspecified	20
1-2	11
3-5	13
6-10	40
11-20	16
21-25	2

Household income from all sources

Around one in five households had a person earning a salary from full time employment off the farm or some off farm self employed income. For the rest, the farm was the sole source of income, with crops being the most important means of generating income (Figure 2 & Table 4). Eighty three per cent of respondents are currently exporting crops, although none of the respondents is certified or involved in a GlobalGAP certification scheme. Seventeen per cent of respondents no longer export crops.

Figure 2: Farm income sources based on survey responses

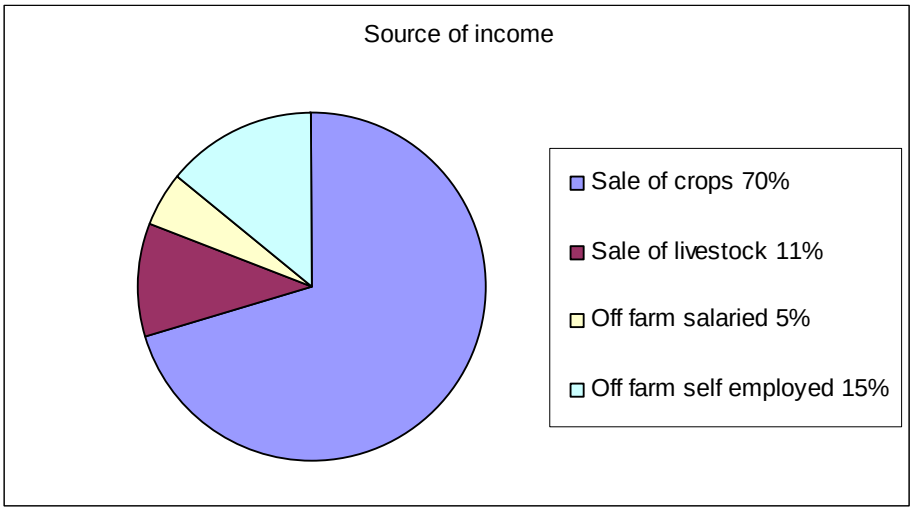


Table 4: Source and range of farm incomes

Farm income source in Kenyan shillings	Income range	Average income from source
Sale of crops	9,000 – 480,000	108,000
Sale of livestock	3,000 – 120,000	16,300
Off farm salaried	15,000 – 120,000	7,500
Off farm self employed	5,000 – 450,000	21,800

NB: $1US = K67/-, £1 = K139/- Oct 2007)

Group membership

Small-scale farmers in Kenya are often organised into groupings known as Self Help Groups (SHG) which are registered with the government. Group membership means that the farmers organise collectively to grow and market their produce. This can have advantages in terms of bulk purchasing of inputs and potential for volume production and sales. Farmer groups also make it easier for export companies to work with small-scale growers, as centralised facilities are easier to establish and the land area of the group is more attractive than that of the individual farms. Group operations are essential for small-scale growers to benefit from certification under option 2 of GlobalGAP. This option allows individual farmers to reduce compliance costs by certifying as a group under a common management system. All the farmers who responded to the survey belonged to some sort of grouping (Table 5). Group size varied, but most were in the range of 20-50 farmers per group. This size is large enough to provide economically viable production areas in most cases, but not so large as to become unmanageable.

Table 5: Size of the group to which farmers belong

Group size	Number
Unspecified	20
2-10	1
11-20	28
21-30	11
31-50	36
51-100	6

Participation in the GlobalGAP standard

All of the respondents had been or were currently involved in export horticulture. Around two thirds marketed produce directly to an exporter and one third indirectly - 64 respondents were linked to one of ten export companies with the remaining 38 selling via brokers and middlemen. The export companies ranged from very large well resourced operations to small companies with limited resources. As the point of contact between farms and overseas buyers in the EU, the export companies transmit to their suppliers the EU buyers' demand for GlobalGAP certification.

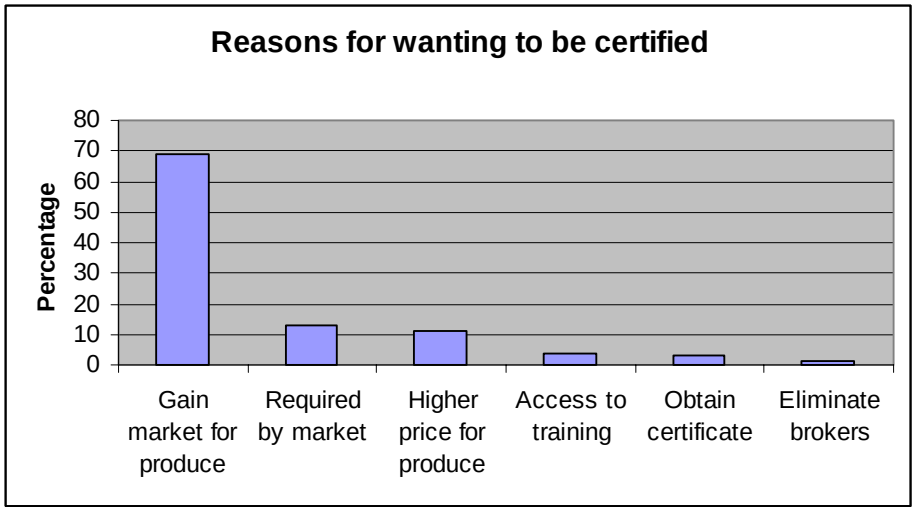
Reasons for implementing GlobalGAP

The respondents to this survey took a very positive view towards implementation of GlobalGAP. Most (69 per cent) saw compliance with the standard as a way to gain or maintain a market for their produce (Table 6 & Figure 3). Only 13 per cent recognised standard compliance as being compulsory and 11 per cent thought standards compliance would lead to improved prices as compared to non-certified sales.

Table 6: Reasons cited by farmers for implementing GlobalGAP

Response	Number of respondents	Percentage
Gain market for produce	70	69
Compulsory	13	13
Higher price for produce	11	11
Access to training	4	4
Certificate	3	3
No particular reason	2	2
Eliminate brokers	1	1

Figure 3: Reasons cited by farmers for wishing to participate in GlobalGAP



Implementation of GlobalGAP

Implementation of GlobalGAP requires considerable changes for an African small-scale farmer. In most cases farm infrastructure must be upgraded to include a field toilet, hand-washing facilities, a pesticide store and permanent plot markers for every field. Record keeping and traceability systems have to be introduced, and the farmer and any farm workers need training in hygiene, good agricultural practice, safe and effective use of pesticides and farm management. The farmer must also undergo a shift in attitude away from subsistence farming towards modern professional techniques that stress detailed farm management.

Table 7: Types of compliance measures implemented by farmers

Response	Number of respondents	Percentage
Construction of pesticide store	88	86
Construction of field toilet	64	63
Attended training sessions	32	31
Introduced record keeping	30	29
Consulted advisers	24	24
Implemented a QMS	24	24
Place plot markers in the fields	19	19
Introduced traceability system	15	15
Registered with farmers group	15	15
Went through farm checklist (internal farm audit)	10	10
Construction of grading shed	9	9
No changes made	1	1
No response	1	1

Respondents in the current survey cited a range of measures (Table 7) that they had taken as part of moving towards compliance with the GlobalGAP standard. Growers who had achieved certification cited all or virtually all of the measures given above. Growers who started to implement GlobalGAP but did not complete certification cited only a few of the measures listed in Table 7. Capitally intensive measures such as construction of pesticide stores and field toilets were the most common measures cited by 86 per cent and 63 per cent of respondents respectively. Some examples are shown in Plates 1 & 2.

Plate 1: Example of a store for chemicals and equipment, built by a small-scale farmer in Kenya to comply with GlobalGAP

Plate 2: Example of field toilet on a small-scale farm in Kenya

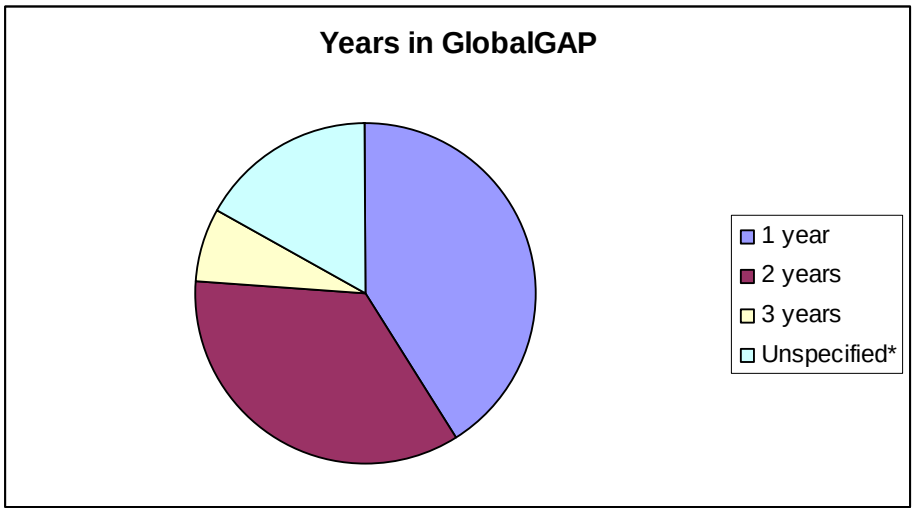
GlobalGAP certification

All of the respondents had made an attempt to implement the GlobalGAP standard on their farms but only 45 per cent had achieved certification before being dropped by their exporter. Certification took place between 2003 and 2006 with certifications peaking in 2005 (Table 8). Forty one per cent of certified growers only managed to maintain certification for one year (Figure 4 & Table 9), a surprisingly large number maintained certification for two years (35 per cent) and a smaller number maintained certification for as long as three years before allowing the certificate to lapse in year four.

Table 8: Year of first certification

	2003	**2004**	**2005**	**2006**
Number of growers	13	12	16	5
Percentage of total	28%	26%	35%	11%

Figure 4 and Table 9 (below): Number of years that farmers remained certified under Option 2 of GlobalGAP



	1 year	**2 years**	**3 years**	**Unspecified***
Number of growers	19	16	3	8
Percentage of total	41%	35%	7%	17%

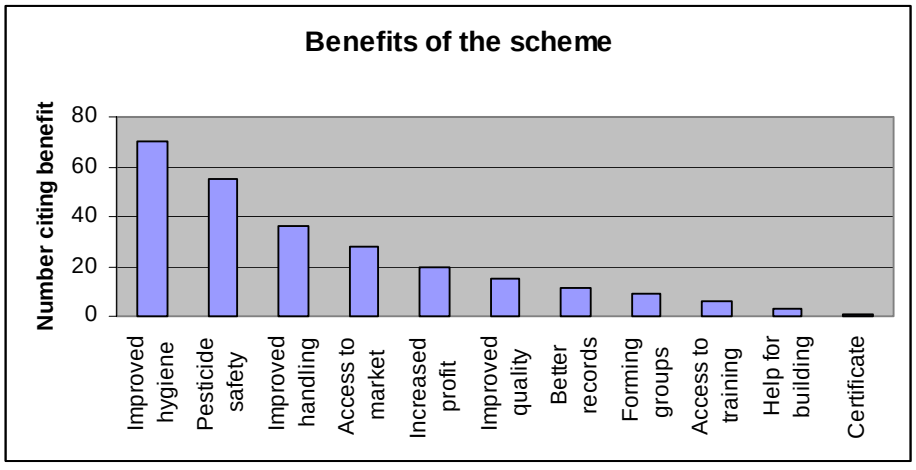
* - These growers cited the year of first certification and reported lapsing certification but did not quote the year that certification lapsed.

Advantages & disadvantages of GlobalGAP compliance

Farmers were asked to list advantages and disadvantages of GlobalGAP compliance (Figures 5 and 6 & Tables 10 and 11). These questions were left completely open so as not to bias farmers' responses. In the majority of cases farmers cited several advantages and disadvantages hence the number of responses does not match the total number of respondents.

Table 10 & Figure 5 (below): Advantages of GlobalGAP compliance cited by farmers (shown graphically and in tabular form)

Response	Number of respondents	Percentage
Improved hygiene	71	70
Safer use of chemicals	56	55
Improved crop handling	37	36
Access to market	29	28
Increased profit	20	20
Improved crop quality	15	15
Better farm records	11	11
Brings farmers together	9	9
Access to training	6	6
Help to construct grading shed	3	3
Certificate	1	1



All of the respondents recognised important advantages associated with GlobalGAP compliance, with improved hygiene (70 per cent) and safer use of chemicals (55 per cent) obtaining the highest scores. Access to market (28 per cent) and increased profit (20 per cent) were also among the top five advantages of GlobalGAP compliance. It is interesting to

note that although farmers complained that standard compliance did not lead to a price premium (Table 11) they still recognised that GAP can improve profitability of production.

Given that none of the respondents were currently GlobalGAP compliant, it is unsurprising that 90 per cent of the farmers cited various disadvantages to GlobalGAP compliance although surprisingly 10 per cent said there were no disadvantages to compliance (Table 11).

Table 11 and Figure 6: Disadvantages of GlobalGAP compliance cited by farmers

Response	Number of respondents	Percentage
No disadvantage	10	10
High investment costs	59	58
High running costs	44	43
Prices did not improve	42	41
Strict rules	20	20
Time consuming	17	17
Poor grading & selection	11	11
Disintegration of the farmer group	2	2

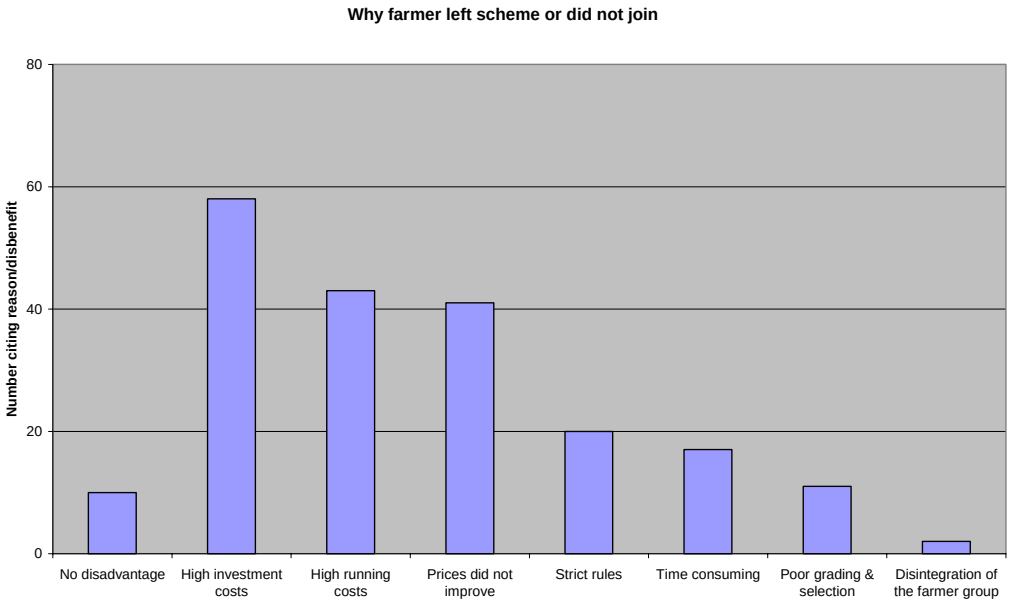


Figure 6 contains in graphical form the same information as Table 11 on the disadvantages that caused them to leave or not join the scheme.

The three most cited disadvantages were all related to high costs that were not justified by improved returns. High investment and running costs were the most frequently cited by 58 per cent and 43 per cent of respondents respectively. Forty one per cent of growers said that failure to improve prices was a major disadvantage. As mentioned earlier farmers recognised that GAP improves profits but they were still expecting some additional return for the extra financial and time investments in the form of a premium. Ultimately all of these growers were excluded from GlobalGAP certification but 83 per cent are continuing to grow and

market export crops. If 83 per cent of respondents are still growing and selling export crops without any of the costs associated with GlobalGAP certification, is it really worthwhile for small-scale growers to invest in GlobalGAP compliance? We return to this question later in the discussion section.

What were the costs of GlobalGAP compliance and who paid?

Getting reasonable estimates of the costs of compliance with the requirements of GlobalGAP directly from small-scale growers is difficult as the grower may not be aware of the real cost, nor know what percentage of the full cost has been paid by them as opposed to the exporter and any donor agencies, particularly when they were preparing to become certified.

The survey revealed that 14 respondents were unable to estimate the annual cost of compliance. Of the remainder, 64 growers had costs ranging widely from KSH2,000 to KSH100,000 (£14-£719) per annum. Eighteen growers claimed costs of over KSH200,000 (£1,439) per annum for GlobalGAP compliance, with one of the latter claiming a wildly unrealistic sum of KSH6,000,000 (£43,165) per annum for compliance with the standard. In the previous survey, growers were contributing a maximum of £650 per annum for initial investment costs, and this level of contribution required a loan that took on average two to three years to repay.

Looking at the farm size and levels of household income (Table 4) it seems extremely unlikely that any of the growers had the necessary resources to contribute more than KSH100,000 per annum towards the cost of standards compliance. On this basis the high end outliers have been discounted leaving 64 growers quoting costs of KSH2,000 to KSH100,000 (£14-£719) per annum. The average cost per annum for GlobalGAP compliance for these 64 growers was £163. However, none of these figures can be taken as a realistic estimate of the true cost of compliance for small-scale growers as they reflect a highly heterogeneous group where some people had attained certification, but others had made widely differing levels of preparation before dropping out of the GlobalGAP process. Some had put most measures in place and were close to certification, whereas others reported only implementing one or two measures and these growers gave very low estimates for the cost of compliance.

When asked who paid for the cost of GlobalGAP compliance, a high percentage (80 per cent) of growers said they paid all of their own costs (Table 12), only a small number mentioned cost sharing with exporters or donors. This could be a reflection that many of the growers were selling via brokers and small export companies who have limited resources and generally provide a lower level of support than large well resourced exporters. However, it also probably reflects the fact that growers are not aware of the nature or size of the contributions made by the export company which are mostly invisible to the grower. Thus even a grower supplying a large export company such as Homegrown often thinks that they have borne most of the costs of compliance. However in many cases the company may be meeting the bulk of costs.

Table 12: Who paid for annual cost of GlobalGAP compliance?

Who paid for the farmer's GlobalGAP annual compliance costs	Number
Paid all of annual costs themselves	81
Shared cost with donor/exporter	4
Exporter paid all of annual costs	2
Donor paid all of annual costs	0
Number who implemented GlobalGAP but were not certified and gave a response of "not applicable"	6
No response given	9

Reasons for leaving GlobalGAP

Almost 40 per cent of the farmers gave no reason for leaving GlobalGAP compliance schemes (Table 13) and none made any direct reference to being dropped by export companies although the decision for removal would have been with the export company in most cases.

Table 13: Summary table of farmers reasons for stopping participation in GlobalGAP

Response	Number of respondents	Percentage
No reason given	40	39
Failed audit	20	20
Poor payments	11	11
Too expensive	9	9
Poor market	9	9
Trainers transferred	9	9
Failure to pay	8	8
Disintegration of farmers group	6	6

Of the reasons given for ceasing membership of the scheme, failure at time of audit was the most common (20 per cent) followed by poor payments (payments from the exporter for produce purchased from the farm). Eleven per cent cited the fact that GlobalGAP compliance was too expensive for farmers. In some cases essential supporting services such as training and advisory personnel were withdrawn (9 per cent) and in some cases the farmers group simply disintegrated. This last reason would prevent involvement in GlobalGAP compliance, but cannot be attributed to the challenges of attaining the standard. More likely it indicates that the group was poorly resourced and probably badly managed, leading to disillusionment and ultimate fragmentation.

Did leaving GlobalGAP make any difference for the farmers?

This is the key question with regard to any farmer who has dropped out of GlobalGAP. To approach the full answer it is necessary to analyse the response to several subsidiary questions.

Are the farmers still involved in export horticulture?

Dropping out of GlobalGAP compliance has not prevented 83 per cent of the respondents from still growing and selling export crops. This indicates that an export market exists for non-certified production. Of the remaining 17 per cent of respondents, most have stopped growing export crops altogether and diversified into national markets and other businesses. However, three of the non exporting growers said that they still grow French bean and one was still growing baby corn. There is very little local demand for these crops so it seems reasonable to speculate that the produce is being sold on to a farmer who is still linked to an export company.

Have there been any changes in the range of export crops?

Leaving GlobalGAP resulted in a reduction in the range of export crops grown from fourteen to ten types of crop (Table 14). The number of farmers growing French bean reduced by just over 30 per cent after leaving. Even more significant was the 67 per cent reduction in farms growing baby corn after leaving the scheme. This is unsurprising as baby-corn is not a popular crop with farmers. Aside from its relatively low price, the crop is normally only grown to order for an export company that produces mixed vegetable packs. Six crops had been dropped completely, probably for a combination of the reasons mentioned above, but although not addressed in this survey, it would be interesting to know whether there is a greater emphasis on certification for these crops, effectively precluding produce from non-compliant farms.

Table 14: Types of export crops grown

Export crop	While in a GlobalGAP scheme	After leaving GlobalGAP
None	0	14
French beans	81	55
Baby corn	21	7
Snow pea	16	12
Avocado	10	9
Courgette	9	2
Garden pea	7	3
Melons	3	0
Banana	3	0
Soya bean	2	0
Bullets	2	0
Butternut	2	2
Tomatoes	2	2
Passion fruit	1	0
Carrots	1	0
Sugar-snap pea	0	5
Flowers	0	1

It is interesting to note that five growers have started to grow sugar-snap pea after leaving GlobalGAP and one has diversified into flowers. This further demonstrates that leaving a GlobalGAP compliance scheme does not create a total barrier to accessing export markets.

Has the price (per kg) paid for export crops changed?

A summary of price revenue for export crops is given in Table 15. Revenues per kilo are given (in KSH) for produce from certified and uncertified farms. French bean was the most commonly grown crop during and after leaving GlobalGAP and has the most complete data set of any of the crops.

The trend in prices paid for French bean shows a remarkable reduction after lapsing membership of the GlobalGAP scheme. When the growers were within GlobalGAP compliance schemes, 46 per cent received payments in the range from 1-30KSH per kilo, whereas 54 per cent were able to get prices in the range from 31-60KSH per kilo. After leaving GlobalGAP only 20 per cent of growers were able to achieve the higher price range, whereas 80 per cent fell into the lower range with the majority getting less than 25KSH per kg for their produce.

GlobalGAP membership does not guarantee a premium but it clearly helps in some way. One reason could be that quality fell after leaving the GlobalGAP scheme, but experience indicates that the fall in price obtained per kilo reflects more changes in market linkages. There are strong indications that respondents' membership of GlobalGAP correlates with their linkage to an export company. The best prices tend to be paid by the larger companies who form strong links with their growers. These companies definitely prefer that suppliers are GlobalGAP registered. In contrast, lower prices are often associated with casual sales to brokers and middlemen.

Because having GlobalGAP status is a prerequisite for formal linkages with the better paying exporters, GlobalGAP *does* make a difference for the farmers.

Table 15: Changes in the price (per kg) paid to farmer for export crops during and after leaving GlobalGAP

Crop	Price range (KSH) per kg and number of growers citing each range											
	1-10	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**36-40**	**41-45**	**46-50**	**51-60**	**61-70**	**71-80**
During participation in a GlobalGAP compliance scheme												
French bean	1		3	18	15	20	8	5	10	1		
Baby corn	4	4	8	2				1				
Avocado			10									
Courgette			1	1		1	1	2	1			1
Snow pea		1	2		1	2	1	1		5	2	1
Garden pea					2	1	3				1	2
After dropping out of a GlobalGAP compliance scheme												
French bean	3	1	7	13	11	5	2	1			1	
Baby corn		1	2	1	1							
Avocado												
Courgette			2		2	1		1				
Snow pea					1	1	1		2		2	
Garden pea												

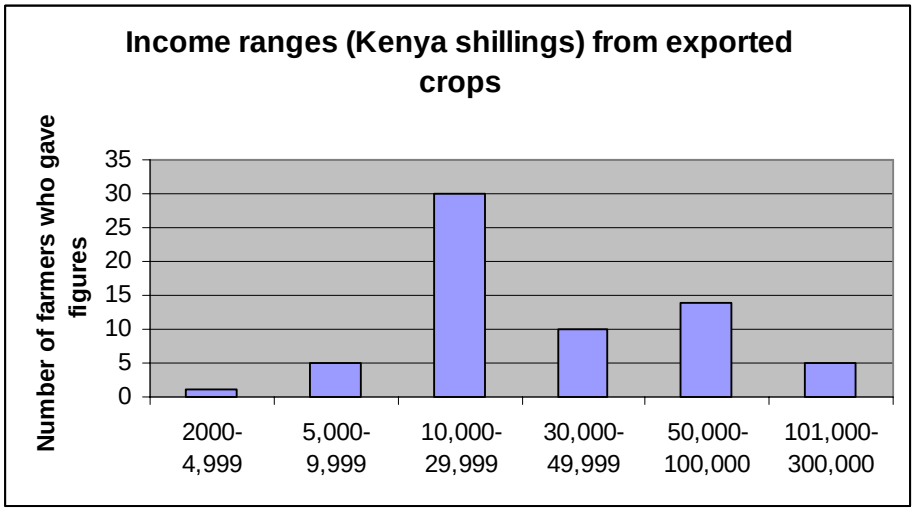
Has the proportion of total income from export sales changed?

Growing crops was the chief source of household income for the majority of survey respondents, providing a contribution of £65-£3,453 per annum and a mean of £777 per annum (Table 4). Income from export crops whilst GlobalGAP compliant ranged from £14 to £2,158 with a mean income contribution of £359 per annum from sales of export crops (Fig 7 & Table 16).

Table 16 & Figure 7: Contribution made to household income by sales of export crops grown under a GlobalGAP compliance scheme

Price range		Number of respondents	Percentage
KSH	£STG		
Unspecified		36	35
2000-4,999	14-35	1	1
5,000-9,999	36-71	5	5
10,000-29,999	72-215	31	30
30,000-49,999	216-359	10	10
50,000-100,000	360-720	14	14
101,000-300,000	727-2,158	5	5

Conversion rate: £1 = 139KSH (October 2007)



During the time of belonging to GlobalGAP compliance schemes, income from sales of export crops contributed a significant proportion to household income (Table 17) with approximately 60 per cent of respondents saying that sales of export crops contributed to between 50 per cent and 100 per cent of their household income. The situation changed dramatically after leaving GlobalGAP with around 58 per cent of growers saying that export crops contributed to less than 50 per cent of their annual household income. In the highest range (76 per cent to 100 per cent contribution) the number of respondents fell from 34 per cent of the total to just 9 per cent.

Table 17: Change in proportion (percentage) of income derived from sales of export crops during and post participation in a GlobalGAP compliance scheme

Proportion of income	Number of respondents	
	GlobalGAP	Post GlobalGAP
No contribution	0	17
1-25%	13	13
26-50%	22	28
51-75%	26	12
76-100%	34	9
Unspecified	7	23

Leaving GlobalGAP did not prevent most growers from selling export crops, but the prices per kilo (Table 15) and contribution to household income dropped dramatically indicating that GlobalGAP compliance is essential for accessing the best markets in terms of price, volumes and consistency of sales so as to gain the maximum return from growing export crops.

Have there been any changes in the level of support (information / credit / farm inputs / labour) before, during and after leaving GlobalGAP?

Compliance with a strict standard such as GlobalGAP requires a high level of management for success. Farmers must have access to reliable inputs, up to date information on GAP practices and affordable credit to justify and support upgrading of farm infrastructure. Care needs to be taken with purchase and use of inputs such as agrochemicals to ensure that those used on the farm meet the necessary standards for quality and safety. For this reason farmers were asked questions about institutional support (Tables 18 to 20) in terms of information access, credit and source of farm inputs before, during and after leaving a GlobalGAP compliance scheme. In addition they were asked about employment of labour on farm (Table 21) as it was reasoned that a successful GlobalGAP compliant operation could offer more rural employment opportunities.

Prior to joining GlobalGAP, production of export crops was well established and enabled around 88 per cent of respondents to employ farm labour. This only rose a few points to around 92 per cent during the period of GlobalGAP compliance (Table 21). Buyers played an important role in sourcing agricultural inputs (Table 20), but this fell away after leaving the scheme. Buyers were much less involved in providing information on GAP and financial support (Tables 18 & 19) prior to the introduction of GlobalGAP. Presumably they recognised the need to upgrade farmer practices to enable them to comply.

It is interesting to note that there is a much greater level of similarity between results for some components of the support system before and during GlobalGAP than for post GlobalGAP. This is particularly the case for levels of hired labour and sources of farm inputs, but less so for sources of information and access to credit. This indicates that the growers had established strong relations with their export prior to the advent of GlobalGAP, but that these relationships floundered. It is not possible to prove cause and effect, i.e., whether loss of the linkage precipitated the exit from the scheme

or whether leaving the scheme itself caused the buyer to break the link. Anecdotal evidence indicates that the former is most likely as exporters are becoming less enthusiastic about buying from smallholders of the type who took part in the survey.

The introduction of GlobalGAP bought the buyers' role in institutional support to a significant level, with around 80 per cent of respondents relying on the buyer for information and purchasing of agricultural inputs. Buyers almost doubled their financial support (Question 19) for growers during the GlobalGAP compliance period and there was a marked rise in the number of respondents obtaining credit from a range of sources in order to make infrastructural improvements on their farms.

When the growers dropped out of GlobalGAP, buyer support for information, agricultural inputs and credit fell away to a much lower level than pre-GlobalGAP. At the same time the number of growers employing farm labour dropped from 92 per cent to just 34 per cent (Table 21). This indicates that dropping out of GlobalGAP had serious implications for the farm businesses. Unfortunately after leaving GlobalGAP the situation did not simply return to that pertaining before the introduction of the standard.

The data shown in Tables 18 to 21 strongly implies that withdrawal from GlobalGAP was linked in some way to a withdrawal of support by the buyer. In many cases this must have involved the exporter dropping the growers from their pool of outgrowers.

The dramatic fall in employment of farm labour similarly implies a sharp reduction in availability of resources to pay for farm labour, presumably associated with reductions in price and demand for high-value export crops.

Table 18: Farmers route for access to information on GAP

Source	Number of respondents		
	Pre-GlobalGAP	GlobalGAP	Post-GlobalGAP
Fellow farmers / members of group	45	3	12
Buyer	24	80	16
Ministry of Agriculture	24	15	7
Self	7	1	15
Media	6	0	0
Seminars	3	3	6
Friends	0	0	1

Table 19: Farmers route for access to credit

Source	Number of respondents		
	Pre-GlobalGAP	GlobalGAP	Post-GlobalGAP
Self	47	33	24
Buyer	13	24	5
Bank	5	7	4
SACCO	5	16	2
AFC	1	3	0
Not applicable	24	20	21

Table 20: Farmers route for access to farm inputs

Source	Number of respondents		
	Pre-GlobalGAP	GlobalGAP	Post-GlobalGAP
Buyer	59	80	20
Agrovet	30	14	14
Self	12	11	8

Table 21: Farmers employment of hired labour

Source	Number of respondents		
	Pre-GlobalGAP	GlobalGAP	Post-GlobalGAP
Yes	88	92	34
No	12	10	68

Returning again to the question as to whether leaving GlobalGAP had any effect on farmers, it is clear that changes have occurred. Leaving GlobalGAP had not prevented export of produce in most cases, but combined with the loss of relationship with buyers, had changed the market environment. Farmers outside of GlobalGAP receive a much lower level of institutional support from the buyer, are paid a lower price per kilo, grow and sell smaller volumes and derive much less of their household income from sales of export crops.

Do farmers consider themselves better off being in GlobalGAP?

As all respondents in this study had been excluded from GlobalGAP certification, it might be expected that they would have a negative view of standard compliance. However, this was not the case; 68 per cent were of the opinion that they were better off when they were in a GlobalGAP compliant grower scheme, 15 per cent felt that GlobalGAP made no difference and only 14 per cent felt that they had been worse off whilst in GlobalGAP (Table 22). This is an understandable conclusion. It is clear from the growers' responses to the various questions that whilst involved in GlobalGAP compliance they received a higher level of support from their exporter. Prices were generally higher than post GlobalGAP and many recognised that GAP improved the profitability of their production.

Table 22: Do farmers consider themselves better off in GlobalGAP?

Response	Number of respondents	Percentage
Better off in GlobalGAP	69	**68**
No difference	15	**15**
Worse off in GlobalGAP	14	**14**
No response	4	**3**
Total	102	

Have farmers developed alternative sources of income since leaving GlobalGAP?

With the fall in income from sales of export crops post leaving GlobalGAP, almost three quarters of growers have responded by diversifying production into more crops grown for local markets. Some have established business ventures or have taken employment off farm to improve income levels. A summary of the alternative sources of income taken on after leaving GlobalGAP is provided in Table 23. A significant number of farmers (around 28 per cent) had not developed any alternative sources of income yet, while others are still in the process of doing so. This is unsurprising as 70 per cent of the formerly certified growers did not lose their certification until 2006-2007 allowing little time to develop alternative sources of income between then and the time of the survey.

Of the alternative sources of income developed, growing tomatoes, maize and rice for local sale was the most commonly adopted practice. Next came diversification into other (unspecified) business activities, followed by cultivation of local beans which unlike French bean are allowed to mature and then dried for sale as a pulse rather than as a fresh vegetable.

Table 23: New ways adopted to earn income after leaving GlobalGAP

Crop or business activity	Number of respondents
No action taken	28
Tomatoes	23
Maize	20
Rice	17
Other business	16
Local beans (sold in dried form)	14
Bananas	10
Still in process	10
Employment	8
Leafy vegetables	7
Potatoes	7
French beans	4
Butternut	3
Flowers	3
Sweet melons	3
Courgette	1
Ground nuts	1
Onions	1
Baby-corn	1

5 Conclusions

In the previous study conducted in Kenya in May 2006 (Graffham, *et al*, 2006) working with eleven of the export companies, it was found that 60 per cent of small-scale growers who had formerly sold export produce through these companies had broken these linkages. This figure raised questions as to whether these people had been excluded from export horticulture or not, and what impact GlobalGAP had on their lives.

In the present study a survey and series of case studies was made working with 102 growers who shared the common denominator of no longer being involved with GlobalGAP although all had attempted to implement GlobalGAP and 45 per cent had been GlobalGAP certified growers. The findings of the current study reveal a much more complex and interesting picture, which is really the story of changing relationships between growers and exporters where GlobalGAP compliance is just one factor driving change.

Most of the respondents were involved in export horticulture prior to 2002 when GlobalGAP compliance began to become an issue in Kenya, and already had strong relationships in most cases with export companies. The EU buyers demanded GlobalGAP compliance of the export companies who passed on the requirement to the production base. Implementation of GlobalGAP had many positive features that were recognised by respondents in the current survey, including improvements to hygiene, worker safety and profitability of production. Some important infrastructural changes were made on farm such as construction of plant protection product stores and field toilets that have a lasting impact even if the grower drops out of GlobalGAP compliance.

Farmers were all very positive about the content of the GlobalGAP standard, and 68 per cent said they were better off while operating as part of a GlobalGAP compliance scheme. However, none of these growers had been able to remain in GlobalGAP.

Dropping out of GlobalGAP did not prevent some 83 per cent of growers from continuing to grow and sell export crops but conditions had changed. Post GlobalGAP the range of export crops and price per kilo had reduced, as had the level of income derived from export horticulture. Employment of farm labour had fallen dramatically from between 88 per cent and 92 per cent of farms before and during GlobalGAP compliance to just 34 per cent of farms post GlobalGAP. The level of support provided by the buyer was drastically reduced once the growers dropped out of GlobalGAP.

However, these changes have more to do with a change in relationship between the growers and the export companies than simply being or not being GlobalGAP compliant. It is evident from the survey and case studies that the majority of growers were formerly closely linked to one of ten export companies. However, after leaving GlobalGAP, 52 per cent said they were now selling via brokers, and in one of the case studies farmers refer to being dropped by their exporter and having to sell the same product to the same company via a broker.

Withdrawal from GlobalGAP seems to have coincided with reduced or broken relations between the growers and their export company leading to the reduction in support, prices, crop range, volumes and income from export crops. Discussions with export companies in 2006 indicated changes in procurement policies whereby GlobalGAP certification was starting to become a condition of being associated to one of bigger and better resourced export companies. The results of both surveys highlight the key supporting role played by export companies in making it possible for small-scale growers to be GlobalGAP certified.

The present survey showed that small-scale growers are keen on GlobalGAP and two of the case studies showed groups of farmers determined to re-enter GlobalGAP compliance scheme in spite of earlier setbacks. Exporters interviewed in May 2006 were very positive about small-scale growers as a source of procurement. Given these factors why have relations changed so between exporters and growers?

Evidence from both the current and May 2006 surveys indicates that the major problem is the high cost of GlobalGAP compliance. GlobalGAP certification has started to become a prerequisite for working with one of the bigger companies especially, but the costs of compliance have become too high for small-scale growers to handle without support. The high costs of compliance affect the smaller export companies badly, and have forced the larger companies to reduce procurement from small-scale growers as the returns from some growers are not justified by the high cost of supporting a GlobalGAP compliant production scheme.

Many of the respondents in the current survey have diversified into other crops and businesses to try and replace income lost due to reductions in sales of export crops. However, income levels have still dropped and employment of labour on farm has dropped dramatically indicating that the farms cannot generate such good incomes out of the export industry. It is unsurprising that most farmers said they wanted to remain in export horticulture and were still keen to be GlobalGAP certified. Compliance costs appeared to be the underlying reason for small-scale farmers dropping out of GlobalGAP. Bearing in mind the growers' perception of the benefits one must consider ways to help them retain certification rather than letting it lapse.

6 Recommendations

A possible solution to the problem of high costs of GlobalGAP certification would be to develop a package of cost reduction measures. To do so one would need to work directly with producers and export companies in Kenya where the industry is highly developed. These measures would not dilute the standard, but would assess actions to bring about a more cost effective interpretation and implementation of the standard. Risk assessments would be used to determine what measures can be made whilst still maintaining the same level of risk management and aversion.

It is recognised that such measures would have no practical value without the support of the standard owner.

We propose that a package of measures be developed in the remaining five months of the current NRI/IIED/DFID project and that these measures be discussed with the GlobalGAP management system with a view to their being evaluated and hopefully adopted. The obvious route to take the measures forward would be via the mechanisms being established under the GlobalGAP Africa Observer Project of DFID & GTZ.

The case studies highlighted a lack of understanding of the export horticulture business by many small-scale growers. Undoubtedly this creates unnecessary tensions in their relations with export companies. It is therefore proposed that consideration be given to development (and implementation) of a training and support programme outside of the current project. This would foster improved communications and understanding between export companies and growers, and recommend ways to strengthen the organisation and management of farmer groups.

There are strong indications that some produce destined for export is purchased from non-certified farmers. What is more significant for the growers who are certified is that there is little or no price distinction between produce sourced from certified and non certified farms. Clearly this lack of reward for farms supplying certified produce creates a huge disincentive for growers who have made or plan to make the significant financial and infrastructural investment in obtaining GlobalGAP certification.

7 Case studies of farmers' experiences

As part of the survey, five case studies were commissioned to gather a more detailed narrative of the farmers' experiences with GlobalGAP compliance. These studies reflect experiences between 2002 and 2007 hence the farmers refer to the standard as EurepGAP rather than by the current name of GlobalGAP which was only adopted in September 2007. Details of farmers' names, names of export companies and donor initiatives have been removed to ensure anonymity of the respondents.

The case studies are given in full below, and encapsulate the key issues raised by the farmers. The case studies follow some summary comments by the authors.

Positive benefits from GlobalGAP compliance

The case studies add to the material derived from the survey questionnaire. Growers were very positive about the content of the standard and identified several major benefits from GlobalGAP compliance, including the following:

- Farmers saw marked improvements in field & personal hygiene, crop health and cleanliness on farm.

- Pest scouting and targeted interventions proved much more effective than the old haphazard approach to crop protection.

- Farmers appreciated the value of messages from health and safety training and had adopted proper personal protective equipment for handling agrochemicals, a practice that they never did in the past.

In addition, although all of the survey respondents have dropped out of GlobalGAP they still have access to proper plant protection product stores, field toilets and knowledge of good agricultural practice and say they are determined to continue with what they see as good practice. This is a real benefit in terms of safety in the household as it moves growers away from the old practice of storing dangerous chemicals under the bed or in the kitchen area of the homestead.

Why was GlobalGAP certification not maintained?

Respondents from the case studies gave the following reasons for not continuing with GlobalGAP:

- There was no guarantee that the buyer would purchase all of the growers produce.

- Exporters (the buyers) applied volume restrictions and thus only purchased the required volume leaving the farmer with quantities of export vegetables that have no value on the domestic market.

- There were no price premiums paid for being GlobalGAP certified.

- Grading was severe with low pack-out percentages and rejects were not returned to the farmer.

- Some exporters continue to purchase produce from non-certified neighbouring farms at the same price, making certified growers wonder why they invested in GlobalGAP certification.

- Some exporters delayed payments for produce thus placing a financial burden on the grower.

- GlobalGAP certification was too costly and the level of return from produce sales did not justify the high investment and running costs.

With the exception of high investment and running costs, none of the farmers' reasons for dropping out of GlobalGAP are directly related to the content or operation of the standard. In most cases the growers show a lack of understanding of how export markets work and the position of the export company within the market chain. Farmers in the case studies evidently expect the operation of the export market to be the same as for domestic markets, whereby the buyer buys and pays for all of the produce in the field preferably on the day of harvest. In reality the export company is very much at the behest of the buyers in Europe. Demand for product can rise and fall dramatically on a daily basis, hence the inability of most exporters to guarantee volumes or prices for the farmers. Similarly farmers were angry that exporters supplied too much seed (in relation to the final volume purchased) but this reflects a fine balance of calculations by the exporter to ensure sufficient product availability to meet predicted demands with a margin of error for unexpected increases in volumes required by EU buyers.

Farmers' frustration with export companies continuing to purchase produce from non-certified neighbouring farms is understandable as this leads the farmers to question why they should make big investments on standards compliance when others continue to deliver the same product without any investment.

What are the farmers' plans for the future?

Farmers involved in the case studies remain optimistic about the future, and have various strategies for overcoming their current problems with accessing export markets. Some are trying to re-enter the GlobalGAP system, while others are looking for alternative markets or ways to sell to the EU market without being certified. Each case study offered a different way forwards and these can be summarised as follows:

- **Case study 1** – The farmers are forming their own marketing ("export") company to market produce in bulk and gain power and leverage by collective action.

- **Case study 2** – The farmers have dropped out of GlobalGAP, and are looking for non EU markets where GlobalGAP certification is not a condition of market entry.

- **Case study 3** – The farmers have been dropped by their exporter and are out of GlobalGAP, but continue to grow and sell snow-pea to the same exporter and other export companies via brokers.

- **Case study 4** – The farmers failed their GlobalGAP certification audit and have been dropped by their export company, but are negotiating with another exporter to form a new partnership and re-start the process of GlobalGAP certification. These farmers feel they have a strong case as most of the required infrastructure and management systems are already in place.

- **Case study 5** – The farmers have dropped out of GlobalGAP but are determined to maintain high standards of product safety so as to sell to brokers, and intend to seek help from their former exporter to see if funds can be found to support GlobalGAP certification in the future.

Case study 1

MRS C M

Questionnaire number 5
Farm size – 9 acres
Farmer for 5 years
Aged between 45 and 60 years
Household 8 persons
EurepGAP certified as an individual unit

Mrs. C M hails from KZ Division of TK District. She has been doing horticultural farming for the last ten years growing French beans for export.

When the buyers of the produce started to demand compliance to EurepGAP conditions, she was one of the first farmers from the area to fulfil the conditions as demanded by her exporting company. She invested heavily in construction of a produce handling shed and chemical store. On the farm, she introduced with the help of the exporting company an elaborate system of pest and disease control. She is very happy with the EurepGAP conditions as she has seen improvements to personal and environmental hygiene on farm as a result of implementing the standard. She says "there are no disadvantages of being EurepGAP certified".

However, Mrs C M has not renewed her EurepGAP certificate because she has been frustrated by the exporters of her produce. Even after supplying seeds to her, the buyer does not collect all of the produce harvested and even when it is collected and transported to the pack house, the produce is further subjected to very severe grading and she never receives the rejected produce. This translates to very poor payments at the end of the day. This is very frustrating to her considering that the cost of maintaining the EurepGAP standard is very high.

Sometimes the exporter limits the quantity of produce to be supplied by the farmer making her wonder why the exporter supplied the seeds knowing well that he was not going to buy. Since she has nowhere to take the unwanted produce, she either sells to other buyers or feeds the cattle with it.

She estimated compliance with the EurepGAP standard to have cost about KSH20,000 (£144) per year.

To overcome the problems Mrs C M together with other farmers from the area have registered their own exporting company that will be able to take in all their produce. She is determined to see it succeed as long as the farmers do not stop applying the EurepGAP standards to make their produce acceptable in the market.

Case study 2

VEGETABLE MARKETING ORGANISATION AND FARMERS

Questionnaire numbers N/A
Farm size – 1 to 5 acres
Farmer for 5 to 10 years
Aged between 30 and 60 years
Household variable
EurepGAP certified as a group (15 in the group)

"Traceability has been thrown to the dogs" was how the members of an unspecified Vegetable Marketing Organisation (VMO) described the process of being EurepGAP compliant. "The exporters do not care where they get the produce from so long as it suits them". The VMO is an agronomic and marketing service provider company established and assisted as part of a major donor support programme. The VMO works with five to ten groups of farmers who have been EurepGAP certified. Each of the groups has a produce collection centre where the exporting company collects the produce. The VMO and the farmers have a formal supply contract with one of the bigger export companies.

The VMO farmer groups were donor assisted to comply with the requirements of EurepGAP. By being compliant the farmers and the service provider have seen farm, personal and environmental hygiene improve. For the farmers and the service provider to be certified about KSH6 million (£43,165) was used in order to set up the collection centres, construct office facilities and conduct training sessions for the farmers on aspects of GAP required under EurepGAP.

Despite all that investment, EurepGAP compliance was not able to provide a stable market for the produce. "Why subject the farmer to all these conditions, yet when it comes to buying the produce, the exporter even gets produce from the uncertified farmers. What is traceability for?"

This has made the farmers and the service provider decide not to renew their EurepGAP certification, as being certified does not provide either premium prices or any guarantee of market access. They thought after complying there would be a premium price for certified farmers, while those who had not complied were to be encouraged by the price difference and traceability requirement. This was not the case, and sometimes those who have not complied got better prices than the compliant farmers.

For the VMO and the farmers, EurepGAP has the disadvantage of not being able to guarantee prices and a market for produce. Farmers were incurring high costs without profit. As long as EurepGAP condition are only required by European countries, the VMO and farmers see opportunities to sell to non EU markets where EurepGAP certification is not required.

Case study 3

MK SELF HELP GROUP (SHG)

Questionnaire numbers (N/A)
Farm size – 0.5 to 1 acre
Farmer for 5 to 10 years
Aged between 30 and 60 years
Household variable
EurepGAP certified as a group (15 in the group).

"We joined EurepGAP because we were told that, unless we comply, our produce will not be brought". This was a common response from the farmers in MK SHG.

Before joining EurepGAP, these farmers did not care much how they grew and handled their snow-pea crop. When the exporting company, started to demand certified produce from the farmers, they had no option but to comply so as to remain relevant in the market. They underwent rigorous, time consuming training and constructed produce collection centres and group chemical stores as per the requirements of EurepGAP.

All of the money for the infrastructural improvements including purchase of land for construction of centralised facilities was raised by the farmers without support from the exporter or donor agencies.

To them, the major disadvantage of being EurepGAP certified is that, despite the high investment cost involved it does not guarantee a market for the produce as promised by the trainers.

The exporting company supplied them with seeds but when it comes to buying the produce, they would set limits for produce volume, yet they supplied all the seeds for the farmers. Packability (grading turn-out) of produce collected from the farmers was very low, making the farmers incur very high losses due to high produce rejection levels. Also, produce payments were delayed, very much to the displeasure of the farmers. This makes the returns from the farming very low in comparison to the high cost of GlobalGAP compliance.

This resulted to the disintegration of the farmer group, and the few who were left could not manage to grow the volume of produce required by the exporting company. The majority of the members still continue to grow snow-pea but sell their harvest to brokers who sell produce to exporters on a casual basis, often to the same exporting company that MK SHG was formerly associated with.

The farmers are not keen to renew their EurepGAP certification because the group disintegrated and the few who are left cannot meet the cost of certification.

Case study 4

NG SHG

Questionnaire numbers 16 – 23 and 25
Farm size – 1 to 5 acres
Farmer for 5 to 10 years
Aged between 30 and 60 years
Household variable
EurepGAP certified as a group (33 in the group)

NG SHG is a group of French bean farmers based in MW Division. The farmers have been growing French beans for the last seven years.

When they were informed that their French beans would not be bought for export if they were not EurepGAP compliant, the farmers invested in buying land to construct grading sheds, chemical stores and toilets, as well as in employing and training personnel.

The farmers started the process to become EurepGAP certified in the year 2006 and have not been certified yet. The farmers have managed to meet most of the costly investment towards achieving the certification, and are already feeling that having done the bulk of what is required from them they will get certified very soon. They feel someone has maliciously denied them recognition of their efforts (certification) just because of a few group members who had double contracts. The export company was not keen to have the farmers certified because of this, and when the audit was done the group failed.

The farmers have talked to another export company, and have started the process towards EurepGAP certification again. There farmers are very optimistic that they will get certified and be able to sell horticultural produce for export as a certified product.

Case study 5

KY SHG

Questionnaire numbers (N/A)
Farm size – 1 to 3 acres
Farmer for 5 to 10 years
Aged between 30 and 60 years
Household variable
EurepGAP certified as a group (25 in the group)

KY SHG is a group of about 25 farmers in KD District (Machakos). The group was certified for EurepGAP in the year 2006/2007. The cost of meeting the certification was donor funded. The group members produce French beans, baby corn and peas for a large export company.

With the donor funds the farmers have constructed a grading shed equipped with all the facilities and equipment required for EurepGAP certification.

They have employed their own technical assistant paid by the farmers from revenue generated by export sales. From the time they started complying with EurepGAP procedures, the farmers have seen field hygiene, crop health and cleanliness improve drastically. Formerly the farmers were not used to scouting for pests in the field but they do so now as they have seen the benefits of early detection of pest build-up and targeted interventions. They never used to protect themselves when applying agrochemicals, whilst now they have spray teams that comply with all the requirements for personal protective equipment as the farmers have appreciated messages from worker health and safety training sessions.

The farmers have not renewed their certificate this year because they do not have the money to pay for it. The profits they have made cannot meet the costs and the farmers feel that the certification does not benefit them in terms of market prices.

But they are looking forward to being able to maintain the standards such that even if they do not get the certificate, they are able to sell safe and healthy produce even to brokers. They are also talking to the exporter to see whether he will be able to assist them to renew the certificate in future.

Annex 1 – copy of survey form

NRI IIED Survey Version d Farmers who were once EurepGAP certified, or started to prepare to join but did not obtain certification.

1. Date of interview	2. Enumerator _____	3. Name of head of household 4. Man Woman
5. Phone number 6. No. in household	7. District /Sub location/Village 8. Farm size (acres) 9. If a group, number of group members	10. How many years have you been a commercial farmer 11. Age (tick) 15-30 30-45 45-60 Over 60
12. Do you export crops at present (Y/N)	13. Did you used to export produce 14. Would you like to export produce	15. Are you at present EurepGAP certified (END SURVEY IF ANSWER IS YES)
16. Did you ever prepare for EurepGAP but not complete the certification process	17. Were certified but have now left EurepGAP a) as an individual, b) in a group scheme	
18. Which preparations or changes did you or your farm make for EurepGAP? Which of them was most difficult or costly **PLEASE CIRCLE 3** a Building pesticide store d Consulting advisers g Quality management system j Record keeping b Attending training e Registering with a group h Going through farm checklist k None c Constructing field toilet f Putting plot markers in place i Traceability system		
19. What do you consider as the **advantages** of EurepGAP? Please list four **Tick the most important one**	1. 2. 3. 4.	
20. What do you consider as the **disadvantages** of EurepGAP for you? Please list four **Tick the most important one**	1. 2. 3. 4.	
21. When you joined EurepGAP what was the reason that you joined?	22. If you did **not** join EurepGAP, what was the reason you did not finally join?	
23. If you once were in EurepGAP, Which year were you certified?	24. If you have left EurepGAP, which year did you leave?	

25. Is a household/farm better off as a whole being in or out of EurepGAP (fill only 1 box)	a. Household <u>better off in EurepGAP</u>	b. Same (no difference to household income)	c. Household <u>worse off in being in EurepGAP</u>
26. Please try to estimate the K/- total per year (difference) if any to the household annual income - even a guess.	Financial **benefit** to household of being in EurepGAP (K/-) per year-	No difference	Financial **cost** to household of being in EurepGAP (K/-) per year
27. What crops were you exporting or planning to export while a member of EurepGAP – please list	1. 2. 3. 4.	28. What proportion of your household income came from exports **while in EurepGAP** (%) _____%	29. What proportion of your household income comes from exports **NOW** (%) _____%
30. What crops do you export now (please list)	1. 2. 3 4.		
31. Who buys your crops for export?	Middleman/broker (name)_____Export company (name)_____		
32. Crop by crop, what is an average price per kilo you were paid (list K/- for each crop) **while <u>in EurepGAP</u>** (list crops)	1. K/-/kg 2. K/-/kg 3. K/-/kg 4. K/-/kg	33. For the crops listed left, what is average price per kilo **<u>now you have left EurepGAP</u>** for those crops (draw a line if no longer grown)	1. K/-/kg 2. K/-/kg 3. K/-/kg 4. K/-/kg
34. How much was the annual membership cost of being in EurepGAP to you	_____K/- Who paid this? Self _____% Donor_____% Exporter_____%		
35. Have you found new ways of obtaining income since leaving EurepGAP (List examples)	1. 2. 3.		

36. Residential housing type a. Permanent stone walls with tile / iron roof [ ]	b. semi-permanent with iron roof [ ]	c. Mud walls with iron roof [ ]	d. Mud walls with makuti/ grass roof [ ]	e. Timber house with cement floor [ ]	F Timber house without cement floor.

37. Are there members of this household on full time salaried employment? Yes[ ] No[ ]

Access to information, credit, export market, farm inputs, labour, transport and extension service – now and previously

	Before joining EurepGAP	While in EurepGAP	Now you have left
38. Where did you get information			
39. Where did you get credit			
40. Where did you get inputs [fertilizer, chemicals, etc]			
41. Do you hire labour			
42. How does produce get transported to market			

Please estimate your average annual income from the following **now**

Source	Annual Income
43. Sale of crops	
44. Sale of livestock products	
45. Off farm salaried	
46. Off farm self employment	

Thank you for answering these questions.

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