Private Standards in Kenyan Horticulture: Did the Donors Respond Effectively to the Challenge?

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1 Introduction

Food safety has moved up the agenda in all industrialised countries in recent years, partly as a result of successive food scandals and its consequences for consumer confidence. Governments have tightened both product standards and standards for the processes through which food is produced, transported and processed. Business, too, has had to respond. It faces legal requirements to meet ever more stringent public food safety standards and the need to maintain customers’ confidence at a time when global supply chains are becoming more complex.

One of the private sector's responses to these new food safety challenges has been to develop private standards, and in particular collective private standards developed by business coalitions, administered by specialist organisations created for the purpose and enforced through third-party certification. These standards are not simply product and process standards, but rather schemes to incorporate standards-setting (and standards-revising) procedures, rules and guidance for implementation, monitoring through internal and external audit and enforcement mechanisms.²

There is a wide range of such standards, which have been developed by various types of organisations in many different countries. The focus in this paper is on one particular standard, GLOBALGAP.³ This is chosen for three reasons. First, it is particularly relevant for small farmers in export horticulture in Kenya. It has been adopted by many leading supermarkets in some European countries, including the UK, which remains one of the most important destinations for Kenyan horticultural products. Although GLOBALGAP is a voluntary standard without legal force, it is a standard which is very significant in two markets which are important destinations for Kenyan fresh produce, the UK and the Netherlands.⁴ Second, it is a 'pre-farm gate' standard, applying to the way products are planted, grown and harvested. Therefore, its requirements have an immediate and specific impact on farming practices and farmers. Third, the standard operates through process controls that are verified through record-keeping, internal audit and external, third-party audit. This can be challenging for small farmers.

Realising the profound implications for farming practices, including those of small-scale farmers, of the requirement for farmers supplying leading European supermarkets to comply with this standard from January 2005 onwards, there was a considerable effort in Kenya directed to facilitating farmer compliance and certification. In addition to various national bodies, aid donors working in Kenya also supported efforts to enable farmers to meet the requirements of the EUREP GAP (now GLOBALGAP) standard. This paper proceeds in six stages. Section 2 briefly discusses the current private standards landscape and the characteristics of GLOBALGAP. In this section, the analysis focuses on EUREP GAP Revision 2, as this was the version of the standard applicable at the time. Section 3 examines the impact of GLOBALGAP on farmers in Kenya, outlining the implications of implementation and considering some recent studies on the costs of conformance. Section 4 outlines the donors' responses to the challenges posed by the introduction of GLOBALGAP.

² For a discussion of collective private standards, how they have emerged and their links to public regulations, see Henson and Humphrey (2008).
³ GLOBALGAP was, until September 2007, known as EUREP GAP. It was originally developed by the Eurep group of European fresh produce (fruit and vegetables) retailers. Since the late 1990s, however, the membership of the standards-setting organisation has extended beyond Europe and beyond retailers, and is no longer confined only to standards for fresh produce. More information on the standard and how it operates can be found at http://www.GlobalGAP.org/cms/front_content.php?idart=3&idcat=9&lang=1. In this paper, reference will be made to GLOBALGAP, even though it was not known by this name at the time of the research.
⁴ Equally, however, it is not important or necessary for all Kenyan producers and exporters of horticultural products.
Section 5 reframes the issue, arguing that a better understanding of how small farmers fit into the export horticulture value chains that require GLOBALGAP produces a different set of policy issues to be addressed. Section 6 concludes with recommendations for future policy responses to new private standards.

2 The emergence of collective private standards

Food safety has moved up the agenda in all industrialised countries in recent years, partly as a result of a series of food scandals: dioxins, BSE ('mad cow' disease), pesticide residues, cyclospora contamination in raspberries, salmonella in eggs, contamination of dairy products, etc. These have led to a crisis in consumer confidence that both governments and food companies (producers, manufacturers and retailers) have struggled to address (Jaffee 2005; Caswell and Hooker 1996). In response to these food safety scares, a new global food safety regime has developed.

Global, or international, standards are not new. Compliance with the food safety standards of importing countries has been an issue for food exporters since the nineteenth century. However, this new regime can be distinguished from its forebears by three novelties. First, this new regime is characterised by a shift away from product quality/safety controls in favour of controls on the processes involved in food production and processing. Risk-based quality and safety assurance schemes such as the Hazard Analysis and Critical Control Point (HACCP) approach and the ISO 9000 quality systems are being applied by food chain operators all over the world. Second, the new food safety regime is extending controls to primary agricultural activities, imposing process standards right down to the field or to the aquaculture pond. Third, the new regime increasingly involves both public and private actors as standards setters and enforcers. Whereas governments once claimed all responsibility for food safety in its territory, at present food safety assurance is sought by a complex interplay between public and private actors.

These tendencies have been particularly evident in the European Union, where a succession of food safety regulations have not only tightened up product standards (for example, with the introduction of more stringent maximum residue levels, MRLs, for pesticides) but also introduced new process controls aimed at securing the safety of food at source. It can be argued that the EU has created a new and distinctive food standards philosophy based on four key principles, as set out in the regulation setting up the European Food Safety Authority (CEC 2002):

1. A whole chain approach to food safety: 'In order to ensure the safety of food, it is necessary to consider all aspects of the food production chain as a continuum from and including primary production and production of animal feed up to and including sale or supply of food to the consumer because each element may have a potential impact on food safety' (preamble, para. 12).
2. Food safety is to be achieved through identification and control of risk, which means a process control approach, rather than a testing approach (preamble, para. 17).
3. Traceability, secured through identification of suppliers and customers for all products incorporated into food or feed, involving record-keeping and labelling (preamble, para. 29, and article 18, paras 1 and 2).
4. Private sector responsibility. The General Food Law legislation states that: 'A food business operator is best placed to devise a safe system for supplying food and ensuring that the food it supplies is safe; thus, it should have primary legal responsibility for ensuring food safety' (preamble, para. 30). In the UK, this

5 Collaboration of these issues has benefited greatly from collaboration with Spencer Henson, Guelph University, Ontario, Canada. For more detailed discussion of these issues, see Henson and Humphrey (2008).
obligation is particularly strict because of the introduction of strict liability for food safety moderated only by a statutory 'due diligence' defence by the 1990 Food Safety Act.\(^6\)

This new environment poses new challenges both for farmers and for actors (processors and exporters) downstream in the value chain. Securing and demonstrating food safety becomes an issue for the whole of the food value chain and for the regulatory processes that contribute to its governance – both public and private. The new approach not only implies that process controls (controls over how activities are carried out, rather than reliance on inspection and control of the product resulting from the activities) operate at different points along the chain, but also that food safety depends upon the integrity of standards being maintained as products move between companies and countries in their journey from farm to fork.

In addition to this, the measures that focus directly on the feed and food chain are accompanied by further controls to ensure that harmful substances or agents cannot enter into the food chain:

- Standards for the quality of water sources, surrounding surface waters and effluents, and a monitoring system for this.
- A system for the approval and registration of agro-chemicals such as fertilizers and pesticides and animal antibiotics.
- Monitoring and control of the occurrence of contagious diseases, both veterinary and human through the public health system.

In other words, food safety is based not only on controls over food production, but also the environment in which food production takes place.

Rather than seeing collective private standards aimed at securing food safety as the driver of the standards environment, they should be seen as a response to the changing food safety environment.\(^7\) On the one hand, food business operators are expected to secure food safety and to provide safeguards such as traceability. On the other hand, food safety has to be secured in the face of an expanding range of food safety concerns and the increasing globalisation of food supply systems. In spite of the increasing fragmentation of food value chains across companies and across countries, there are strong expectations from government and consumers that the level of control and the level of knowledge about how food is grown, handled and processed at multiple points on the chain should be maintained or increased.

In this environment, public regulations provide some indications of the food safety outcomes that food business operators are expected to achieve. They also provide broad indications of the types of safety system that should be in place – there should be traceability, food establishments should meet certain minimum standards, etc. However, they do not provide the systems that will ensure that these desirable outcomes will be achieved. One of the functions

6 Prior to the 1990 Act, 'food legislation contained the so-called "warranty" defence. A person accused of an offence would escape conviction if he could prove that, when he bought the product, he obtained a written warranty from his supplier that the product could be lawfully sold or dealt with; that there was no reason to believe, when the offence was committed, that the true position was otherwise, and that the product was in the same state as when he bought it' (Humber Authorities Food Liaison Group n.d.: 4-5). The 1990 Act introduced 'strict liability' to sell safe food, but there is a statutory defence (i.e. one which is specified in the legislation) of due diligence. If all reasonable precautions are taken, the strict liability does not apply. In many European countries, the continued availability of the warranty defence means that a positive case of negligence has to be proved.

7 Private standards are not only aimed at food safety. First, they can be used for product differentiation, particularly for establishing claims about credence characteristics such as origin, particular production methods, social standards, etc. (Reardon et al. 2001). Second, some of these non-safety characteristics may be bundled into private standards (as with the inclusion of environmental standards into standards aimed primarily at food safety).
of private standards is to fill this void by establishing clear rules for how food value chains should be organised at different points in the chain, by extending food safety controls to new points in the chain, such as primary production in the case of GLOBALGAP, and by providing well-specified systems of enforcement (monitoring, audit, sanctions for non-compliance) that (in principle) increase the likelihood that the rules laid down for securing food safety are actually implemented and followed.8

Private companies and standards-setting coalitions go to the trouble and expense of developing these standards schemes in order to avoid the equally high costs of non-compliance. In addition to sanctions laid down by government regulations, the damage to brand capital from non-compliance is also high, and increased by policies such as ‘naming and shaming’. In a consumer environment where food safety concerns continue to be a high priority, failing on food safety and being shown publicly to have failed on food safety, is potentially very damaging.

3 GLOBALGAP in practice: what does it mean at the farm level?

The foregoing discussion of collective private standards has been quite abstract. What does the implementation of GLOBALGAP actually mean at the farm level? What does it imply in terms of resources, competences and the controls needed to maintain system integrity?

Many of the basic elements of GLOBALGAP are quite standard within food safety systems. Traceability is now a fundamental element of food safety systems. The principles of risk analysis and control, embodied in the HACCP approach (see, for example, Caswell and Hooker 1996; Unnevehr 2000), are widely implemented in the food industry and beyond. Third-party certification is an increasingly common method of establishing compliance with food safety standards (Bain et al. 2005; Hatanaka et al. 2005; Busch et al. 2005).

Nevertheless, one of the distinguishing features of this particular standard is that it is implemented at the farm level. This represents a significant shift. It can be argued that the application of a similar process-based food safety standard at the processing plant level, the British Retail Consortium's Global Standard for Food Safety, does not represent a massive shift in processing plant practice because national regulations frequently involve the application of HACCP, internal audit and inspection. In contrast, the adoption of similar standards at the farm level does represent a very significant change.

There are well known costs associated with GLOBALGAP. These include investments in on-farm facilities for safe handling, and storage of chemicals, provision of running water, and improved facilities for grading, cooling and storage of produce. GLOBALGAP also requires the implementation of appropriate agronomic techniques. The goal of reduced pesticide use and reductions in pesticide residues requires the introduction of improved ‘soft’ technologies relating to agricultural practices — in particular, integrated crop management and integrated pest management, including the use of natural predators, etc. Such farming practices are very different from those that have been practised widely in Kenyan horticulture, particularly among small farmers, as observed by Okello and Swinton (2005: 6) and by Nyambo and Nyagah (2006: 10).

3.1 GLOBALGAP controls

In this paper, however, the focus is on GLOBALGAP as a control system and what it implies at the farm level. The scope of GLOBALGAP is indicated in Figure 1. Revision 2 of the standard contains 14 chapters. Four of them refer to crop production.

8 These ideas about the relationship between collective private standards and public regulation have been developed jointly with Spencer Henson.
The introduction of GLOBALGAP is challenging because farms and farmers have to establish the risk identification, management and control systems associated with the process standard. Farms have to demonstrate that specific procedures designed to produce particular desired outputs are being followed, and decision-making relating to these procedures is appropriate and informed. This means creating and keeping documentation about skills and record-keeping systems for decision-making activities.

The complexity of this challenge can be illustrated by one element of Chapter 8 of GLOBALGAP, which is about crop protection: pesticides and their use. The requirements with respect to pesticide use include:

A) Show that crop protection has been 'achieved with the appropriate minimum crop protection products input' (EUREPGAP 2005a: Control Point 8.1.1). This is to be achieved through documentation of crop protection product inputs, including the justifications for their use, their targets and the intervention thresholds.

B) The farm receives assistance with implementation of integrated pest management either through formal, documented training of the technically responsible person on the farm, or from an external consultant whose technical qualifications can be demonstrated (Control Point 8.1.4).

C) Crop protection products applied are appropriate for the target crop (Control Point 8.2.1).

D) Only registered crop protection products are used (Control Point 8.2.2).

E) Crop protection product application records 'confirm that no crop protection product has been used within the past 12 months on the crops grown under [GLOBALGAP] destined for sale within the EU having been prohibited by the EU' (Control Point 8.2.5).

F) Confirm that the choice of crop protection products has been made by a competent person, indicated through records as to the person making the choice and documentation of the person's qualification or training. If the farmer makes the choice, his/her competence must also be indicated in this way (Control Points 8.2.6 and 8.2.7).
G) Crop protection records must indicate the name and variety of the crop treated, the geographical area, the exact date and the name and active ingredient (Control Points 8.3.1 to 8.3.4).
H) Use of the previous item together with harvesting dates to indicate that pre-harvest intervals have been met (Control Point 8.3.10).

As GLOBALGAP is a quality management system, the farm has to prove that it has the capacity to operate this system. GLOBALGAP requires that farms (or the PMO in charge of a farmer group) self-inspect (i.e. first party audit) once a year, document this inspection and show that this inspection results in effective corrective action as a result (Control Points 2.2 to 2.4).

These controls are complemented by a traceability requirement. GLOBALGAP requires that for farms: There is a documented traceability system that allows [GLOBALGAP] registered product to be traced back to the registered farm or, in a Farmer Group, group of registered farms, and tracked forward to the immediate customer’ (Control Point 1.1). Meeting these requirements is checked by means of a third party audit, which is carried out annually. It is this third party audit that results in the certification.

As is well-known, the system also allows for group certification, known as Option 2, which is particularly important in the context of small farmers in Kenya. This has both costs and benefits. The main benefits are that the certification audit applies to only a sample of the farms in the group, typically the square root of the total number of farms. However, in return GLOBALGAP places further requirements on farmer groups in order to establish that they have the means to supervise and exercise control over the different farms in the group. In particular, the group has to have a Quality Management System in place (accompanied by a QMS manual adapted to the specific farming conditions of the group), traceability, quality control and internal audit (see EUREPGAP 2005b: 34-45 for further details).

3.2 The economics of GLOBALGAP: Can small farmers afford to obtain GLOBALGAP certification?

The economics of EUREPGAP certification in Kenya, particularly as it applies to small farmers, has been the focus of a number of recent studies. The concerns of donors about marginalisation of small farmers have led to studies of the cost of small farmer and farmer group certification being commissioned by some of the donors involved in Kenya. These focus mainly on the cost of small farm and group certification, the extent to which these costs are borne by exporters and donors, and the financial viability of small farms. The basic framework for these studies is ‘how much would it cost a small farmer to achieve certification and conformance with GLOBALGAP standards?’

Two recently published analyses have attempted to quantify the costs of compliance and their impact on farm incomes. Graffham, Karehu and Macgregor (2007) examined the introduction of smallholder EUREPGAP schemes by 11 exporters in Kenya, including all of the largest Kenyan horticultural exporters. The second study, by researchers based at ICIPE (Asfaw et al. 2007; Mithöfer et al. 2007), focused on the costs of introducing EUREPGAP, sampling a total of 539 small farmers in five districts of Kenya.

The findings of these reports with respect to costs are mostly consistent and can be summarised as follows:

- The costs of introducing GLOBALGAP are substantial, although they vary considerably. Graffham et al. (2007: 21) calculated the cost of various schemes introduced by exporters to meet the EUREPGAP standard in the run-up to its introduction for Kenyan exports to some EU supermarkets in January 2005. The
cost per farm of different schemes ranged from £100 per farm to £2,800. These variations are partly the result of different scales: schemes involving more farmers reduce the per farm cost, and the cost per farm reduces substantially when more than 50 growers are involved (2007: 26). However, it seems likely that, in addition to inconsistencies in the way that companies calculate costs, these estimates reflect substantial differences in the preparedness of different exporters. Exporters with highly organised out-grower schemes would already have had in place many of the elements required by GLOBALGAP. This point will be discussed further below.

- Notwithstanding the high level of exporter contributions to recurrent costs, these still represent a substantial burden for small farmers. Graffham et al. (2007) calculate that the true cost per farm of small farmer certification is over £1000, and that an average 36 per cent of total cost contributed by farmers works out at £433. They further calculate that this initial investment would have to be financed out of a production margin before labour costs for small farmers of only £182 per annum. Similarly, Asfaw et al. (2007) found that the initial and recurrent cost per group member of GLOBALGAP certification amounted to one third of farmers’ annual income, even when exporters and donors paid for substantial costs such as external auditing, certification, training and soil analysis.

Overall, then, the results of the studies appear to suggest that there is not much of a commercial case for small farmers investing resources to meet the requirements of the GLOBALGAP standard. In fact, it could be argued that even with a substantial subsidy from the exporters and from donors, the financial case for farmers is marginal at best.

4 The donor response to the challenge of GLOBALGAP

For development agencies, the Kenyan government and NGOs, GLOBALGAP posed a serious challenge. Promoting small farmer involvement in export horticulture was seen as a means of reducing rural poverty through increasing the access of small farmers to global markets, and in particular to the promotion of non-traditional agricultural exports as a means of increasing farm incomes and supporting rural livelihoods. Therefore, the immediate challenge was to ensure that the implementation of GLOBALGAP in Kenya did not undermine these goals.

Concern over EUREPGAP was part of a broader concern with the impact of developed country standards on developing country farmers. This concern was highlighted in the report of the Commission for Africa (2005). Published in 2005, this made explicit reference to the potential impact of private food standards on small farmers in Kenya:

‘Export markets offer very lucrative opportunities but can be very hard to exploit. Large retailers such as supermarkets in Europe play a decisive role in structuring the production and processing of fresh vegetables exported from Africa. The top 30 supermarket chains worldwide control almost a third of grocery sales. Their informal or private standards can be even more exacting than official ones – such as sanitary and phyto-sanitary (SPS) described later in this chapter – leading to the exclusion of small farmers and concentrating business in the hands of large firms. In 1997, approximately 70 per cent of Kenya’s high-value horticulture export earnings were supplied by small-scale farmers. By 2000, the need to comply with international food standards meant this fell to 30 per cent. It is estimated that the effects of the 2005 EU food safety regulations could cost Kenya over US$400 million annually in lost export earnings. If African countries do not meet these standards (see following sections), a shift in procurement from other regions, such as Latin America, could take place’ (Commission for Africa 2005: 265-6).
The fact that the new standard would only apply for exports going to those supermarkets in Europe requiring it is lost in this analysis, as it was in some of the discussion in Kenya itself. According to a respondent from one of the donors active around the standards issue in 2004-05, 'We were panicking about January 1st, of course. Everyone was doing some activity. All of us were running around, panicking. We did understand that there was going to be a deadline. We did understand that this was going to be an important thing.' Similarly, in May 2005, another respondent stated, 'EUREPGAP is like a buzzword now at this moment. Everyone is talking about it.' This respondent went on to observe that 'Smallholder farms, we need them, and to support them we have to get them certified.'

Note here that translating an overall concern about rural poverty reduction into a preoccupation with helping farmers achieve GLOBALGAP certification involves three displacements. The first is to equate poverty reduction with the continued inclusion of small farmers in export value chains. There are arguments to suggest that large-scale farming could achieve the same poverty reduction result (Maertens and Swinnen 2009; McCulloch and Ota 2002). The second was to frame the issue in terms of making it easier for small farmers, and particularly farmer groups, to achieve GLOBALGAP certification, rather than in terms of integrating small farmers and farmer groups into those horticultural export value chains that require certification. These are not the same. The third displacement was to focus, to some extent, on certification as the main goal. Certification is not the end in itself, but rather verification that a quality system has been put in place.

Donors did respond very actively to the challenge as they saw it. In addition to initiatives funded by government agencies from the European Union, Germany, Japan, the Netherlands, the United Kingdom and the USA, some NGOs were involved along with institutions linked to the Kenyan government and private sector companies. In addition, organisations such as FPEAK (the Fresh Produce Exporters Association of Kenya), KEPHIS (Kenya Plant Health Inspection Services) and KEBS (Kenya Bureau of Standards) were also actively involved in meeting the challenge of conforming to public and private food standards in the European Union. In particular, they were involved in the national technical committee working towards a national equivalent standard, KenyaGAP. The richness of the local institutional environment, the importance of aid donors for the Kenyan economy and Kenyan government, and the widely-recognised importance of export horticulture for rural development, all came together to create rich and varied responses to the perceived challenge of the EUREPGAP standard.

Information on 18 different donor initiatives undertaken in 2004-06 can be found in Humphrey (2008: 50-54). These can be categorised into three main types: 9

- Developing private sector provision of the support services needed for EUREPGAP. Work in this area was led by two pre-existing donor programmes for promoting business services: the DFID-funded Business Services Management Development Programme (BSMDP) and the USAID-funded Business Development Services Program (BDS). 10 The aim here is to create markets for the provision of services related to standards and certification. These included support for local certification bodies, development of specialist companies for services such as crop spraying and training of consultants to provide inputs into exporting companies.

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9 This classification is not intended to include all donor initiatives relating to GLOBALGAP. More detailed information about these initiatives can be found in Humphrey (2008).

10 For information on BSMDP, see http://bsmdp.org/index.asp. USAID has produced an in-depth review of two of its Kenya programs, Kenya BDS and Kenya Horticulture Development Project (KHDP) (Sebstad and Snodgrass 2008).
- Supporting small farmers through training and through subsidising some of the costs of meeting capital investment (secure pesticide stores, latrines, disposal pits, etc.) associated with meeting the standard. These programmes were frequently linked to initiatives to develop farmer groups. The types of subsidies extended to exporters and farmers are discussed in detail in Graffham et al. (2007). Training initiatives were extensive. In some cases, these were focused on farmers already supplying exporters, while in other cases existing training programmes aimed at small farmers were revised to include training for GLOBALGAP. One such programme is described by Nyagah (2007: 8).
- Working with exporters and produce marketing organisations (PMOs) to develop the value chain linkages and management structures needed to sustain outgrowers and certification. Included in this category would be KHDP initiatives to support exporter management systems and links between exporters and outgrowers.

In order to consider how these responses measured up to the challenge posed by the new standard, it is necessary to consider them in relation to the challenges posed by the standard itself, as discussed earlier.

5 The standards challenge: supermarket value chains

It was suggested above in Section 2 that the development of the GLOBALGAP standard has to be situated in the context of the changing nature of public regulations and the responsibilities placed on food business operators, particularly in the European Union, which is the main destination for horticulture products exported from Kenya. Summarising, the key elements of this particular private standard are:

- It was initially developed by supermarkets in response to the food safety demands placed upon them by public regulations relating to food safety. As a voluntary standard, its reach depends upon which companies decide to adopt it. So far, this means mostly supermarkets in northern Europe. While the standard is adopted by these supermarkets, implementation is carried out at farm level, and the obligation to supply certified produce is placed on exporters and importers in the value chain.
- The function of the standard is to codify requirements into a written set of rules and to put a compliance scheme in place that provides some degree of assurance that these rules will be followed. This means that in many cases the procedures established by the standard were already being followed prior to its introduction. The standard is a particular way of achieving objectives which less formalised and more heterogeneous procedures were already designed to achieve. For example, GLOBALGAP requires traceability to be established. Traceability was established long before January 2005.
- The biggest challenge for a process standard is to maintain the integrity of the standard through defined procedures, record-keeping, internal audit and third-party certification. The certification element is only one element, and not necessarily the most important.

These characteristics are quite generic and could apply to different types of private standards. This means that the lessons drawn from a better understanding of the impact of this standard could be relevant to other standards that might become important in the future. Putting the previous discussion on standards in the context of the three bullet points immediately above, it is possible to draw five lessons.

The first lesson is that only farmers who are producing for exporters that supply customers that require GLOBALGAP need to invest the time and effort required to comply with the standard. UK and Dutch supermarkets are important customers, but they are not the only
customers for Kenyan produce. Encouraging farmers to obtain a certification that does not add value to their products in the eyes of their specific customers is counter-productive. In fact, in order to understand which farmers might require this standard, it would be necessary to have a much deeper understanding of the entry and exit of small farmers into the segments of export horticulture value chains that supply leading supermarkets. The processes by which small farmers are incorporated into such value chains are still not well understood.

The second lesson is that when calculating the costs and impacts of the introduction of a standard such as GLOBALGAP the starting point for the process has to be clarified. In various cost calculations, the implicit starting point is a farmer who has none of the necessary equipment and procedures needed for compliance. The 'starting from scratch' scenario has to include the costs of changing farming practices, capital investments, investments in control systems and the costs of maintaining the system (annual certification and the daily cost of monitoring, control and form filling). Certainly, such a scenario can exist. Since the introduction of GLOBALGAP there have been completely new farmer schemes developed – for example, in the case of outgrower schemes designed to meet UK demand for passion fruit. But, exporters will be likely to prioritise their existing growers. In this case, the costs will relate to the upgrading of a set of producers that are already used to meeting export demands and incorporated into the exporter’s procedures; the exporter will have been under pressure for a number of years to cut down on pesticide residues and demonstrate compliance with the non-codified buyer requirements of the supermarkets. Tightened European safety standards were evident in the 1990s, and well-managed outgrower schemes were a feature of export horticulture at that time. This is the implication of the findings of Okello and Swinton (2005), who examined the adoption of international food safety standards on two Kenyan farms.

The third lesson relates to the issue of start-up and recurrent costs. The donors appear to have focused on start-up costs arising from GLOBALGAP, particularly capital expenditure at the farm level, initial training and the costs of the first certification. Clearly, identifying start-up costs as the major problem provides a good basis for justifying donor intervention. However, to the extent that system integrity and maintenance of control over processes at all times is the goal of a process-based food safety system, it is the recurrent costs that are particularly problematic. Various exporters indicated the costs involved in maintaining surveillance over outgrower schemes. The daily routines of record-keeping, scouting, decision-making with respect to pesticides, control over side-selling and side-buying, etc. are expensive. Exporters frequently report the need for constant reinforcement of messages about farming practices along with routine monitoring in order to check compliance. As with any 'quality-at-source' scheme, the challenge is not to just to provide training with respect to how things should be done, but to ensure that these things are carried out consistently even when there is no immediate surveillance or control.

The fourth lesson relates to where the costs of compliance fall within the value chain. Various studies of the financial impact of GLOBALGAP on small farmers take as their starting point (implicitly or explicitly) the individual small farmer who now needs certification in order to stay in the supply value chain. The question is posed in terms of whether or not farmers find it profitable to meet the standard. For example, Asfaw et al. characterised the problem in terms of small farmers deciding whether or not to adopt the standard: 'Faced with high cost of compliance and complexity of the standard, farmers examine the perceived benefits vis-à-vis the expected cost before making a decision to adopt the standard' (2007: 2).

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11 Side-selling is a well-known problem in outgrower schemes. Side-buying occurs when farmers increase the quantities delivered to the exporter through buying in crops from other farmers. This is profitable when the exporter's price is greater than the market price. Unfortunately, it destroys traceability and process controls.
A different way of posing the question is to argue that the exporters requiring GLOBALGAP are in the business of supplying (via European importers) supermarkets with certified produce. If they cannot do this, they lose business. From this point of view, they have two decisions: first, whether to stay in this segment of the market or exit it; second, if they stay in to work out the lowest-cost means of satisfying the customers' requirements. This means that the incidence of the costs of complying with GLOBALGAP should be calculated with respect to the total export costs, not small farmer costs. It also means that those exporters that decide to remain in the business can only pass on the cost burden for farmers up to the extent that it remains attractive for farmers to continue supplying them. In the circumstances, it is not surprising that Graffham et al. (2007) calculate that 80% of recurrent costs were born by the exporters.

This argument leads onto a fifth lesson. When will smallholders be included or excluded from GLOBALGAP-compliant value chains? It seems to be the case that the costs per unit of output of securing certification are higher for small farmers in outgrower schemes and for large contracted farms or exporter-owned farms. There are significant economies of scale in compliance. This raises the question of the relative competitiveness of small farmers. In the national context, do the increased costs of certification for small farms nullify prior cost advantages of small farm production? In the international context, is Kenya more or less cost-effective in securing certification, and hence gaining or losing competitive advantage in relation to other fresh vegetable suppliers?

On the question of national competitiveness, there is no indication that Kenya is less effective in meeting the standards than other countries. In fact, there may well be a competitive advantage because of the sophistication of the Kenyan production system. With respect to possible switching to large-scale farms, this depends partly on the availability of land and partly on the political acceptability of switching away from small farmers. What might happen is that there will be a switch towards the larger end of the small-scale outgrowers. In other words, there is a shift in outgrower strategy occurring, but it is more about what types of small farmers might be included in Option 2, rather than abandoning such farmers altogether. It might also be the case that outgrowers will be easier to manage for the production of tree crops, such as passion fruit, where the cycle of production is much lower and the control challenges rather less.

6 Conclusions: what to do next time

Standards continue to evolve. Further challenges for export production cannot be ruled out. What should government and donors do in response to new standards challenges when they arise? The first thing is to ensure that there is a good understanding of the value chains in which the standards are applied. However much small farmers might be affected by new standards, they will only be one part of a more complex value chain. It is particularly important to understand who makes the key decisions in the value chain and what factors affect these decisions.

The second conclusion is that it may not be wise to intervene at all. To the extent that the financial burden arising from compliance with new standards is concerned with recurrent rather than start-up costs, it becomes harder to justify interventions. To the extent that the key actors in the chain, particularly the exporters, will be making business decisions based on the business logic, donor interventions run a serious risk of either being too limited to be effective or failing to provide additionality because the exporters would have performed the same actions even without subsidy.
Bibliography


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