

# **Reflecting National Circumstances and Development Priorities in National Codes on Good Agricultural Practices That Can be benchmarked to EUREPGAP – The Case Of Kenya**

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<sup>1</sup> For further information, please see the meeting website at [www.unctad.org/trade\\_env/meeting.asp?MeetingID=217](http://www.unctad.org/trade_env/meeting.asp?MeetingID=217)

### **Note**

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## **ABBREVIATIONS & ACRONYMS**

AfricaGAP	Africa Good Agricultural Practice
BRC	British Retailers Consortium
BSMDP	Business Services Market Development Project
BVQI	Bureau Veritas Quality International
CB	Certification Body
DFID	Department for International Development
EU	European Union
EUREPGAP	Euro-Retailer Produce Good Agricultural Practice
ETI	Ethical Trade Initiative
FAO	Food and Agriculture Organization of the United Nations
FPEAK	Fresh Produce Exporters Association of Kenya
GTZ	Gesellschaft für Technische Zusammenarbeit
GAP	Good Agricultural Practice
GRASP	Good Risk-based Agricultural Social Practices
HCDA	Horticultural Crops Development Authority
KHDP	Kenya Horticultural Development Programme
ICIPE	International Centre of Insect Physiology and Ecology
ISO	International Organization for Standardization
IPM	Integrated Pest Management
JICA	Japan International Cooperation Agency
KARI	Kenya Agricultural Research Institute
KEBS	Kenya Bureau of Standards
KenyaGAP	Kenya Good Agricultural Practice
KEPHIS	Kenya Plant Health Inspectorate Service
KFC	Kenya Flower Council
KS	Kenya Standard
MOA	Ministry of Agriculture
NEMA	National Environmental Management Authority
PCPB	Pest Control Products Board
PIP	Pesticides Initiative Programme
PMOs	Produce Marketing Organizations
PSDA	Private Sector Development in Agriculture
QMS	Quality Management System
SPS	Sanitary and Phytosanitary
SRA	Strategy for Revitalizing Agriculture
TOT	Training of trainers
UNCTAD	United Nations Centre for Trade and Agricultural Development
USAID	United States Agency for International Development

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It must be emphasized that the opinions expressed in this study are solely those of the author, who undertook the assignment on behalf of UNCTAD. The author takes responsibility for any errors of omission or commission that may be found in the report.

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## **Introduction**

International trade in high-value products has expanded enormously over the last decades, fuelled by changing consumer tastes and advances in production, transport and other supply chain technologies. Developing countries have enjoyed tremendous success in expanding their export of high value and value-added food products. However, the proliferation and increased level of product and process standards poses challenges for developing countries' capacities to cost effectively meet external regulatory or supply chain requirements.

The cost of compliance with these standards is exceedingly high – eroding existing comparative advantage, and thus is likely to result in reduced market access and international market share by developing countries. If compliance strategies are not adequately supported, these standards could adversely affect developing countries that may lack public and private assets to meet the technical and market requirements. Many developing countries lack the administrative, technical and other capacities to comply with new or more stringent requirements. However, in many cases, these challenges are manageable (given the right capacity) and compliance costs are a worthwhile investment relative to the value of exports and associated benefits.

It is generally assumed that developing countries and enterprises are 'standard takers', and have limited influence over the setting of many internationally recognised standards. However, there is room for designing policy and strategies to ensure compliance with these requirements and hence continued international market access and competitiveness. From the country's experience so far, it is emerging that even local consumers will demand more assurance of the safety and quality of their food supplies. This is definitely a push for national food safety efforts to incorporate this, in a bid to removing the current two-tiered food safety and quality system.

The Kenyan situation has received quite a heavy presence subsidizing/partnership from donors no doubt about that. This is based on various factors as explained shortly. Firstly, Kenya is a very strategic European supplier of a broad-based variety of fresh fruits and vegetables throughout the year. Often when no other country is supplying products in the European market, Kenya has special windows that are uniquely hers. Due to this, donors like the EU, have had a long term interest in the performance of the sector.

Secondly, by the time the EUREPGAP standard was gaining momentum in 2002, Kenya already had donor projects that were working on a variety of issues within the horticultural sector's supply chain: i.e. a 2001/2 USAID funded project on Training of Trainers (TOT) on Food Safety and Traceability and this was being

implemented by the International Centre of Insect Physiology and Ecology (ICIPE), EU support on the upgrading of the national laboratory toward ISO 17025 accreditation, EU funded PIP/COLEACP funded project (1999) on various levels of due diligence and traceability, GTZ funded projects on IPM and development of a local certification body amongst other key initiatives that were ongoing pre-EUREPGAP (2002).

Lastly, Kenya, like most other African countries has attracted lots of donor funds due to high poverty levels. Agriculture is the main source of income both for export production and local production in the country. It is estimated that 85% of all businesses run in the country are directly related to agriculture; with resulting poverty alleviation, employment creation and most importantly, foreign exchange. Since the early 80s, various charity foundations from developed countries have come up to assist Kenyan farmers to set up businesses to establish sustainable production.

For the last 10 years horticulture has grown tremendously to figures of 16% (GDP) average growth per year. And being a better income earner than indigenous crops, most donors have encouraged farmers to push for international standards so as to compete with other growers globally.

This may be difficult to emulate in other countries.

In other countries where donor presence may not be so heavy like in Kenya, then other options could be sought; either

- Active involvement of governments in line with the strategic importance of the sector, both economically and socially, or
- Private public partnerships, between farmers, private sector players/ stakeholders.

The laxity in policy development and to some extent low government involvement in the Kenyan horticultural sub-sector has been a blessing in disguise, leaving the sector mainly in the hands of the private sector. This has opened room for development players and partners to get involved, with the resultant improved performance in the same.

This study will explore how: a favourable policy environment can influence the development of national GAP; what the necessary and appropriate roles of the public and private sector are and the combination of crosscutting and industry specific interventions suitable for the Kenyan setting.

# Overview of production and trade patterns of horticultural products and the role of EUREPGAP

## I. Kenya's Main Export Products

It is estimated that in 2004, the total production volume for fruits and vegetables was 4.5 million tonnes with a total value of approximately KSh 85 billion [1]. In 2003, 94% of the production was consumed domestically (88% - fresh and 6% processed), whereas 6% of the total produced volume was exported (3% as fresh and 3% as processed). During the past 10 years, the total export volume of fruits and vegetables has almost doubled from approximately 37,500 in the early nineties to 72,000 tonnes in 2003 [2].

**Table 1 Leading Fruit and Nut Exports**

	<b>Fruit Type</b>	<b>Volume in Kg.</b>
1.	Avocados	15,960,150.72
2.	Mangoes	2,009,175.45
3.	Passion fruits	1,334,578.89
4.	Pineapples	598,498.41
5.	Passion Fruit Juice	103,540.15
6.	Macadamia nuts	28,015.00

Source: Horticultural Crops Development Authority (HCDA)

**Table 2 Leading Vegetable Exports**

	<b>Vegetable Type</b>	<b>Volume in Kg.</b>
1.	French beans	32,704,835.95
2.	Mixed vegetables	6,504,334.24
3.	Runner beans	5,566,803.36
4.	Peas	1,806,060.15
5.	Okra	1,710,565.32
6.	Snow peas	1,684,047.37
7.	Other Asian Vegetables	1,516,491.6
8.	Snap Peas	1,210,531.46

Source: Horticultural Crops Development Authority (HCDA)

**Table 3 Export Volumes of Fruits and Vegetables (Tons)**

<b>Year</b>	<b>Vegetables</b>	<b>Fruits</b>	<b>Total</b>
1994	26,978	13,079	40,057
1995	32,126	13,865	45,991
1996	32,742	16,869	49,611
1997	30,890	17,450	48,340
1998	36,800	11,350	48,150
1999	46,377	15,595	61,972
2000	45,039	15,415	60,446
2001	34,771	22,482	57,366
2002	46,479	22,482	66,000
2003	48,674	23,575	71,845

Source: Horticultural Crops Development Authority (HCDA)

## **II. Main Export Markets**

**Table 4 Fruits' Destinations (% Share by Value)**

<b>Country</b>	<b>% Value</b>
France	44%
Holland	27%
UAE	12%
UK	8%
Saudi Arabia	3%
Belgium	1%
Bahrain	1%
Seychelles	1%
Germany	1%
Others	2%

Source: Horticultural Crops Development Authority (HCDA)

**Table 5 Vegetables' Destinations (% Share by Value)**

Country	% Value
UK	63%
Holland	17%
France	11%
Germany	3%
Belgium	2%
U.A.E.	1%
Switzerland	1%
Seychelles	1%
Others	1%

Source: Horticultural Crops Development Authority (HCDA)

### III. Producer Profiles for the Main Export Products

Kenya's horticultural sub-sector has grown tremendously in the recent past, supporting approximately 200,000 smallholders and 50,000 medium to large-scale growers. Smallholders constitute growers whose average land parcel ranges from 1 acre to 1 hectare in size. Conversely, medium to large commercial farms range from 1 hectare to above 50 hectares in size. Table 6 below gives the producer profiles of the major horticultural export products in Kenya.

**Table 6 Producer Profiles of Major Horticultural Export Products**

Product	Main Producer
Avocado	Smallholders
Passion Fruit	Smallholders, Mixed Large & Smallholders
Fine Beans	Smallholders
Runner Beans	Large producers
Asian Vegetables	Smallholders
Shelled peas	Smallholders, Medium & Large producers
Snow peas	Smallholders & Large producers
Sugar Snap peas	Smallholders & Large producers
Chillies	Smallholders
Mixed Vegetables	Smallholders
Green beans	Medium producers
Baby carrots	Smallholders
Baby Corn	Smallholders & Large producers
Courgettes	Smallholders, Medium & Large producers

Horticultural Crops Development Authority (HCDA)

#### **IV. Benefits of Standards**

Compliance with strict market food safety and quality standards may serve as a stimulus for developing country investments in supply chain modernisation, while providing incentives for the adoption of better safety and quality control practices in agriculture and food manufacturing [3,4]. Additionally, opportunities may be provided for clarifying the appropriate and necessary roles of both public and private sectors in food safety and agricultural health management. Rather than degrading the comparative advantage of developing countries, the compliance process can result in new forms of competitive advantage and contribute to more sustainable and profitable trade over the long term [3-5]. There are numerous benefits associated with compliance with market food safety and quality standards at grower, industry and country levels (See Box 1). So far in Kenya, some EUREPGAP-compliant smallholders have already realized benefits such as: improved quality of produce, both for the local and export markets; increases in numbers of employees and acreage under export and local market vegetables; better environmental conservation and management; marketing contracts with major exporters as well as considerable savings on the pesticide use.

Thus, the advantages of compliance have been outlined as:

- a. Stimulating new investments
- b. Modernisation of export supply and regulatory systems
- c. Enhancing the sustainability of production systems
- d. Improving worker and consumer welfare
- e. Fostering improved public-private collaboration
- f. Adoption of safer production and processing systems
- g. Improve domestic food safety and agricultural productivity
- h. Can form the basis of an overall competitive strategy - a strategy to position industries for long-term competitiveness
- i. Maintain and improve market access - assured regularity of demand;

Conversely, the costs of non-compliance involve losses in trade, income and employment [3-6].

## Other potential benefits of GAP programmes beyond market access

Successful implementation of GAP programmes comes with other benefits, in addition to market access as shown in Box 1 [3-5, 7]:

### Box 1

### Other Potential Benefit of GAP Programmes

#### Benefits for Growers

- Better and easier access to the market
- Clear agreements with retailers
- More opportunities for fair competition
- Possible increase in quality and quantity
- Possible reduction of production costs long-term

#### Benefits for Agriculture

- Prevention and risk reduction of issues related to consumer health, safety and environment
- Reduction of health risks for agricultural workers
- Restore professional image of agriculture and gain trust
- Compliance to the most advanced EU legislation
- Possible harmonization of existing protocols

#### Benefits for the Environment

- Awareness that in everyday practices, respect for wildlife and conservation policies are important factors for implementing a more sustainable agriculture
- Reduce negative impact on the environment
- Implementation of conservation management plan

#### Benefits for Consumers

- Reduce risks to health and safety
- Better and clear information about food origin: traceability
- Trust in food production
- Satisfaction of food demand in terms of quality, variety and safety

#### Benefits for Retailers

- Reliable expectations of food safety and quality
- Clear agreements with growers
- Reduction of risks of issues relating to consumer health and safety
- Increased confidence of consumers in food produce (*positive purchasing attitude*)
- Compliance to the most advanced EU legislation

## Key International Market Standards

At the national level, there have been several initiatives to create awareness about various food safety and quality requirements in the main export markets as follows:

**HCDA/JICA/MOA Training** - In the last 3 years these institutions have been involved in sensitisation and training of field extension staff from the Ministry of Agriculture (MOA) and HCDA on EU regulation and EUREPGAP requirements. This was done through training and workshops that exposed the staff to Quality Management Systems (QMS) - ISO 9000, Environmental Management System - ISO 14000 and Social Accountability - SA 8000. The trained officers can now serve as trainers for smallholder farmers and internal auditors who prepare farmers for pre-audits. Several training-and production manuals covering export fruits and vegetables were also developed and all these incorporated Good Agricultural Practices (GAPs). Subsequent to these trainings farmers' groups were trained at district level and group secretaries trained on record keeping, an essential component to attain compliance [2].

**The National Food Safety Committee** - This is a committee that was formed to work within the existing National Codex Committee. The main task was to oversee the framework for adoption of the Codex Alimentarius Food Hygiene Code into the domestic as well as export market production. All major stakeholders are represented in this including the Kenya Plant Health Inspectorate Services (KEPHIS), Kenya Bureau of Standards (KEBS), HCDA, Department of Public Health, donors involved in facilitating smallholders' compliance such as Business Services and Market Development Programme (BSMDP) and the Kenya Horticultural Development Programme (KHDP), funded by the DFID and USAID, respectively, GTZ, just to mention a few.

Individual exporters have their own private initiatives to train their out-grower network of farmers, to ensure compliance of the produce delivered.

**EUREPGAP** has been highlighted in the local press through various donor-funded projects (JICA, BSMDP, EU-PIP and KHDP). EUREPGAP was a major wakeup call for Kenyan producers – leading to mainstreaming of food safety and quality.

**British Retailers Consortium (BRC)** has been mainly publicized in the firms with pack house operations.

The role of the main private sector quality assurance systems is to ensure their consumers have assurance of not only final product quality in terms of physical attributes, but also with regard to the production process. They encompass EU

directives and EU regulations and hence exporters complying to them already meet basic criteria for market access.

The general attitude towards EUREPGAP compliance is positive, with it being agreed that there are no specific points that would be regarded as unfair competition. Additionally, there is correspondence between EUREPGAP (Chapter 10) and BRC, but only if the firm concerned has on-farm pack-house operations. The main challenge would be to work out domestic compliance criteria that are equivalent to the standard, and getting them accepted as such.

Europe is the single most important destination for Kenya's horticultural exports accounting for 95% of total value of exports in 2003 [2]. It accounts for 98% of total export value for vegetables. Conversely, EU fruit exports are slightly less concentrated, accounting for 81% in 2003. Kenya accounts for 21% of French beans exports to the EU, 10% of avocados, 13% of passion fruit and 34% of sugar snaps and snow peas. The largest retail chains which form the European Retailers Group are concentrated in UK and Holland as the statistics showed. If export produce is able to comply with the EUREPGAP requirements, this gives the importers the required guarantee and hence continuity of the market is ensured.

Currently, the share of export volume that needs to be EUREPGAP compliant is based on specific market demands, unlike the mandatory EU Food and Feeds Law.

Large suppliers tend to have incremental advantage because they can realise economies of scale, have better access to information, and benefit from well-established reputations such as with overseas inspectors. The high capital requirements for entering buyer driven chains means that the higher land and labour efficiency of smallholder production is no longer a comparative advantage; increasingly supermarket buyers are sourcing from large commercial growers who can meet the changed requirements of buyer-driven chains [3-5]

Compliance with quality and safety standards implies:

- Investments in training and infrastructure at the farms, packing sheds and distribution centres
- Availability of affordable private laboratories to audit farms
- Public extension services that deliver adequate services to upgrade production and post harvest practices to meet supermarket requirements.

Small and medium farmers are constrained by insufficient capital to meet consistency (volume and year-round availability) needs of supermarkets as while the payment period of the same is relatively long for small-scale farmers. To meet the production and transaction conditions of retailers and processors, farmers require technology, financial capital, human capital and organisation. The capacity of smallholders to implement these changes is determined by their

assets (natural, physical, financial, human and social capital). Due to these changes, farmers are facing declining returns and increased risks for agricultural commodity production [4].

Small producers have small amounts of land, limited or no access to credit and limited access to market information. The producers may also be geographically scattered making transport costs to centralised collection facilities considerable. Additionally, the coordination cost of supply chains that involve numerous small producers can be prohibitive; particularly where monitoring and traceability requirements are in place [4].

Nevertheless, the comparative advantage of small producers over large-scale producers relates to the production technologies of the crops. Given that many of the production techniques cannot be mechanised, this means lower management costs and less capitalisation hence lower costs of production. The geographically dispersed base of small producers can be an effective risk-spreading strategy for supermarket suppliers and can afford flexibility in the procurement of relatively small quantities of product that meet specific standards [4].

Whereas there is a perceived threat based on the constraints that smallholder producers have in meeting emerging market requirements, the ongoing mitigating efforts from development partners (donors), public-private initiatives and the governments, are working on ensuring that minimal destabilization of smallholder participation in the horticultural chain occurs. These efforts are all not at the same implementation/developmental level, which means that at any other time there will be producers who have not managed to catch up on compliance issues, but on a long term basis, this is planned to ensure that smallholders are not unduly marginalized [7].

In recent years, the EU, through its Pesticides Initiative Programme (PIP), has supported several leading Kenyan companies to expand their smallholder outgrower arrangements, with increased grower management and product traceability. Additionally, certain firms have also developed their own codes of practice relating to their relationships with smallholders, having detailed provisions for farmer conduct and firm supervision of land management, agronomic practices, pesticide use and disposal, hygiene and safety, as well as labour and environmental standards. Currently being explored is the 'fostering' model, where smaller exporters/players are affiliated to a larger exporter.

However, in Kenya, as in other developing countries the food supply chain management has experienced two main challenges *viz*:

- Trust building in the food supply chain is difficult because of the nature of commodity markets with volatile prices, isolation of (mostly small) farmers from markets and size imbalances between the different actors in the chain; and

- Supply chain management in the fresh produce sector has so far mainly addressed efficiency and product quality and has been dominated by the more powerful actors in the chain, which are often the retailers.

Through adoption of EUREPGAP, firms are incorporating increased responsible chain management through better environmental and social performance of the same. This, however, calls for building partnerships between the actors of the chain, with clear communication playing a crucial role – that of building of trust between actors.

Supply chain management innovations have so far mainly tried to increase efficiency and reduce costs, and more recently increase food safety. Improving social and environmental responsibility might increase costs. The big question will be who is to pay for these. Or could the chain combine the two: costs saved by increasing efficiency to be reinvested in social and environmental projects?

So far the accredited CBs operating in Kenya are AfriCert (national) as well as other CBs that are either foreign or have local offices - SGS, BVQI and CMI. The daily certification fee per unit cost of inspection varies from certifier to certifier, with AfriCert being the most affordable with a daily fee of KSh 22,200 (US \$ 296).

## **The National Experience with the Development of ‘Quality Systems’ for Exported Horticultural Products**

Kenya as a country has no third country arrangement with any foreign quality assurance scheme. Those that are certified under foreign schemes like Tesco’s Natures Choice and others like it do it as a business-to-business arrangement [7].

At the moment, there is a drive for the development of a national GAP scheme for all the Kenyan producers (small, medium and large). The current issue in relation to a national standard would be the competent authority/institution that would be responsible for: developing, implementing, revising and granting authority for certification to it (the national standard). Existing regulatory institutions have specific mandates that they execute. At the same time, a national code cannot be housed within an institution, as there are varied interested parties as well as multiple issues in the various codes that would have to be addressed by a multi-stakeholder group, representing all interests. This is more so due to conflict of interest if roles are not well defined and stipulated before commencement of development. Otherwise it may lack acceptance both at home and internationally [7].

All smallholders should, however, be given the chance to ascribe to a national code that is internationally recognised and that can be certified locally. This is in the face of globalisation, which does not favour any group. Therefore, the long term strategy should preferably involve the development of internationally accepted GAPs, irrespective of who is implementing them. In this way, we would not be asking the impossible from the global market players.

### **Towards National Quality Assurance Systems...**

#### **KS 1758 National Horticultural Code of Practice**

This was a standard that was developed by the technical multi-stakeholder National Food Safety Committee under the aegis of the KEBS. The purpose was to have a national baseline that would enable all producers have a guide on the basic principles of GAPs, worker health and safety as well as environmental concerns.

#### **KenyaGAP**

This was initiated by the Fresh Produce Exporters Association of Kenya (FPEAK) and it evolved from the Second Edition of the FPEAK Code of Practice. It is currently going through benchmarking against EUREPGAP and this is at an advanced stage.

The implementation of the above national quality assurance systems will not only safeguard Kenya's export markets but will also lead to more efficient and effective agricultural production and expansion of the nation's capacity for greater overall development. In the government's Strategy for Revitalization of Agriculture 2004-2014, due recognition is given to clustering of smallholder producers to ensure their survival in the competitive markets as well as creation of an enabling environment for compliance to standards [8]. This will be done through the revamping of extension services provision by the government.

However, implementation of the above national quality assurance schemes has not been entirely smooth. The process has been constrained, by among other factors:

- Limited institutional capacity of existing regulatory institutions to serve as the competent authority that administers the national code
- The government agency mandated with implementing the national code of practice for the horticulture industry, KEBS, does not have enough personnel to reach the remotest and smallest farmers to ensure their compliance
- Loopholes in regulatory and enforcement frame works
- Inadequate resources to ensure and police implementation
- Lack of coordination and cohesion between the pertinent public and private sectors
- Overlaps in the roles of the various national agencies mandated with the same

Nevertheless with the formation of the National Technical EUREPGAP Committee and the National Taskforce on Horticulture, there has been an attempt to streamline this.

## **Factors to Be Reflected in a National Protocol on Good Agricultural Practice**

### **General Issues of Standards Development**

In order to ensure consensus and ownership, multiple stakeholders are involved in the discussions on national standards, and they include: Exporters' associations such as FPEAK, HCDA, KEBS, KEPHIS, Department of Public Health, National Environmental Management Authority (NEMA), MOA, donor-funded projects such as BSMDP and KHDP.

In February 2005, the National EUREPGAP Technical Committee was commissioned and its mandate was to establish an interpretative guideline for the EUREPGAP Standard for Fruits and Vegetables for Kenyan smallholders and to facilitate producers to achieve sustainable compliance. The terms of reference of the Committee are:

- a. Develop a technical interpretative guideline for EUREPGAP compliance for smallholders in Kenya;
- b. Establish an auditable checklist for the technical interpretation;
- c. Develop a generic risk assessment template for use by smallholder farmers;
- d. Interface the interpretive guideline and KenyaGAP;

While its objectives are:

- a. To develop a sustainable and cost-effective interpretation guidelines for the EUREPGAP Fruits and Vegetables Standard;
- b. To define and harmonise different interpretations of the critical control points;
- c. To develop a practical approach in the implementation of the standard;
- d. To provide a communication forum with various stakeholders and the EUREPGAP secretariat with regard to the EUREPGAP Standard for Fruits and Vegetables.

The development of national interpretation guidelines presents a viable option since certification bodies need to understand the contextual environment of every producer country as these may differ. This helps the auditors appreciate the unique settings of the country that are then interpreted with due regard to the control points to ensure that all aspects are well taken care of with compliance still being achieved. In this, Kenya is following in the footsteps of France, Italy and the Netherlands, who have successfully done so.

Another route that is currently being explored is the development of KenyaGAP as a national standard that can be benchmarked against EUREPGAP. It is envisaged that exporters (FPEAK members) will be the legal owners of KenyaGAP. However, there is need for a strategy to ensure that it is all-inclusive and that there is countrywide acceptance and ownership of KenyaGAP. Currently, the smallholders are represented on the Technical Committee by donor projects working towards smallholder certification – BSMDP and KHDP.

The success of the Kenyan horticultural industry has been due to minimal interference from the government. The government has through its agency, the HCDA, continued to play a facilitative and advisory role supporting the smallholder producers through provision of technical and advisory services in production and marketing. A national code/standard should be owned a multi-stakeholder association such as the National Taskforce on Horticulture, as it is currently the only forum that has brought together the key public and private sector players in the horticultural industry. By involving other stakeholders, there will be:

- Enhanced credibility
- Compatibility with existing regulations (helps dissipate potential conflicts of interest and overlaps)
- Higher likelihood to meet needs and priorities of growers, workers and exporters; it will improve the practicality and impact of the code
- Wider skills base from the different areas of specialisation and operation
- Broad awareness and support for the code – stakeholders become the ambassadors of the code [4, 5, 7].

In the development and implementation of the national GAP, it would be necessary to consider the impact on: smallholder production schemes; casual workers as well as housing of workers. Additionally, it would be important to focus on development of adequate infrastructure, housing and institutional capacity.

So far, the Kenyan experience has been that there are no specific EUREPGAP requirements that are misplaced in the context of national circumstances and development priorities. In fact, most of the requirements are already policies housed in various government documents on water use, environmental conservation, workman safety, wildlife conservation, pesticides use and disposal. All these are present in various government legislation and regulations.

## **Specific Concerns and Requirements of Smallholder and Out-grower Networks**

### **Involvement of Smallholders and Out-growers in a National GAP**

- They can be represented at the multi-stakeholder Taskforce and hence have a voice in the development of the Code.
- Since they form the larger percentage of the production base, they will be a major component of the sensitisation and promotional activities for the Code.
- Due to the fact that their production areas are scattered and small, their needs for implementation and coordination activities in relation to compliance, audits and follow-up will require careful and structured planning as well as an extensive amount of field scouts.

There are some limitations associated with private sector promotion of small agricultural producers and these have been found to be:

- Scattered production units making coordination expensive
- Small parcels of land making unit production too low to justify investment
- Smallholders lack ready access to credit to upgrade their processes and/ or structures
- Lack of loyalty by smallholders – exporters do not have the assurance that they will get the final product as farmers have proven to be unfaithful before and may sell the produce to other buyers to avoid repayments for the exporters' investment.

On the other hand, there are some risks involved when small producers become dependent upon powerful buyers for access to export markets and they include:

- If certification costs are borne by the exporters
- If farmers do not have access or resources to go through up to marketing of the produce
- The large buyers already have an established reputation in the market that would be difficult for small producers to cultivate the confidence, consistency and trust
- However, if they ascribe to an acceptable national code, they can then market their produce through producer marketing organisations (PMOs)

In order to ensure compliance by smallholders, there are certain specific concerns and/or requirements that have to be addressed and they are:

- Training and advice on IPM suitable for a particular crop and location
- Incentives – suppliers incur costs and make investments to meet code requirements, but they receive no guarantee that their produce gets a higher price compared to lower performers

- Local systems for registering new pesticides can be slow, so regulations may prevent growers from using newer, safer pesticides
- Conditions of non-permanent/casual workers
- Development of record keeping systems appropriate for smallholders
- Access to capital for the required investments (infrastructural);
- Use of fertilizers
- Group organization

Nevertheless, through cooperative arrangements forged among small producers, they could benefit from a national GAP. These arrangements, as suggested below, would ensure that the small farmers are integrated into the marketing channel competitively while ensuring continuous compliance with GAP requirements:

- Through formalization of their consolidated operations (into producer groups) through formal contracts and 'fostering' by a large exporter. This will make certification more affordable for them.
- Through systems such as effective PMOs that have confirmed contracts to supply and hence can plan and not disappoint farmers due to cancelled orders.

Kenyan smallholders have been found to have some difficulties in the following areas in meeting EUREPGAP requirements: integrated pest management (IPM), group formation, management and dispute resolution. Additional areas to be considered include: workers' welfare, documentation and farmers' groups' quality management systems (QMS). These difficulties may be resolved through adequate and focused farmer training in these areas.

Although switching to alternative markets or market niches, with less stringent quality requirements may seem like a viable option for growers unable to comply with national GAP requirements, this is not the road Kenya would choose. A well designed and developed national GAP will ideally form the foundation on which other national standard or codes of practice will be modeled, as such: resources would thus be better utilized in first ensuring adequate understanding of and compliance with this, through training and other capacity building processes. Also, market information on various emerging markets/niches should be freely availed, as should capital for compliance with market quality requirements for the same.

Additionally, although currently, only a small percentage of the domestic market requires food for domestic consumption to be produced under high levels of due diligence, traceability and/ or food safety, this is increasingly changing and the uptake of KenyaGAP could contribute to a higher demand for safe food produced with similar quality considerations as export products. The challenge in adoption and public goodwill will have a lasting impact in bringing this about. Since each adoption (either for domestic or export) will require a change in how things are

done, availability of basic infrastructure and a certain level of awareness in technical issues, and merging these to provide a uniform platform of core requirements will make sure that farmers can grow for either market and meet requirements.

## **Importance of Extension Services for Meeting the Requirements of Precision Agriculture**

Under a national GAP smallholders would require technical assistance in agronomy, food safety and quality issues, hygiene and post-harvest handling.

Currently the support services being provided mainly are extension, by the Ministry of Agriculture and other relevant agencies such as KEPHIS, HCDA, the Pesticide Products Control Board (PCPB) and the Kenya Agricultural Research Institute (KARI). Their efforts are supplemented by the private sector, non-governmental organizations (NGOs) and international research centres such as the International Centre for Insect Physiology and Entomology (ICIPE). However, this is currently inadequate, as these support services are not optimally utilizing national expertise on subjects like IPM, integrated soil fertility management and integrated water management; as the capacity is inadequate to reach all the smallholders, especially those in remote areas. The buck, however, stops with both the Government of Kenya and the private sector.

## **Kenyan Certification and Inspection Systems**

There is a felt need for definition of inspector training. Additionally, it is necessary to develop capacity for various levels of inspection: first party inspection by the farmers; second party by extension officers and third party inspection by the CBs. On the other hand, checklists are usually developed by the standards' owners, whereas the mandate of the Certification Bodies (CBs) is approved elsewhere. Thus FPEAK and KEBS cannot accredit CBs for auditing of the KenyaGAP and Kenya Standard Code of Practice for the Horticultural Industry, respectively. However, they can follow international benchmarking procedures in nominating approved and accredited CBS.

In the certification environment, Kenya has a Certification Body (AfriCert), which is the first local company in East and Central Africa to be accredited to the ISO 65 scope, giving it international acceptance amongst equally accredited certification bodies from Europe. Apart from the issue of local operational costs, there is also the importance of local capacity who understands local conditions and who are able to provide intellectual resources between international standards requirements and local conditions and possibilities.

From the Kenyan experience, Option 2 has been found to be favourable for smallholders. Current efforts are focussing resources on building smallholder

groups' capacity for certification under Option 2. Initially farmers will be sensitized and trained on "farming as a business" focussing on group formation, management and dispute resolution. The training modules must also incorporate the following for certification within Kenyan legislation: group formation, management and dynamics; GAPs; international - and local legislation. Additional areas to be covered include: workers' welfare, documentation and farmers' groups' quality management systems (QMS). Currently there is a joint project to develop (and test) the new QMS Interpretative Guidelines for Smallholders.

## **Governmental Role in National GAP Development and Implementation**

The role of the national agro-food sector in defining and implementing national GAP programmes is to effectively assess and prioritize the nation's needs as far as the GAP programme is concerned. So far, associations or exporters and to a smaller extent retailers have been involved in the process, with intermediaries yet to be brought on board.

There has been governmental interest in and activities on developing a national GAP. First by KEBS, through the National Food Safety Committee and next the National Taskforce on Horticulture with the National EUREPGAP Technical Committee, through the National Horticultural Code of Practice and more recently the KenyaGAP, respectively. The National EUREPGAP Technical Committee, coordinated by FPEAK, has developed a Quality Management System (QMS) template for use by members. The QMS contains samples of documents and records required by a grower to comply with KenyaGAP, in anticipation of the national code being benchmarked against EUREPGAP in the near future. The QMS covers all field and post harvest data as well as equipment maintenance and personnel data. The QMS provides the farmer with options for complying with every KenyaGAP clause. In addition, the Committee has developed draft interpretive guidelines for smallholder compliance with EUREPGAP.

Additionally, there is national interest in food safety issues, not just for the export market but for the domestic market as well. In this regard, concept notes and proposals have been submitted to various government agencies, focussing on - reducing interceptions of horticultural produce in the EU; and food safety in the domestic market, with a focus on pest and disease control systems which minimise chemical residues.

The ideal role of the government in developing and implementing a national GAP should be mainly facilitative, through provision of technical and financial support as well as fostering of an enabling legal/regulatory framework. Also the government can participate in the implementation of the same, through a strong and sustainable public-private sector partnership.

The market recognizes the government's key role in management of SPS issues (through the inspection and issuance of phytosanitary certificates). Also the government covers other related aspects such as environment conservation, worker welfare through various laws (Environment Management and Conservation Act and the Labour Laws). Additionally, the government facilitates development of relevant industry standards through implementation of the Standard Act. A government-sponsored GAP standard would be advantageous in that it would have a national reach and appeal, provided it was developed by all the stakeholders and the government ensured that there was adequate capacity to implement it. Also the government could influence recognition and acceptance of the government-sponsored GAP standard [9, 10].

The government has recognized that various supportive policies are required and these are outlined in the Strategy for Revitalizing Agriculture 2004-2014 [8]. Also in order to reduce confusion, conflict, mismanagement and to lower the farmers' costs of production, the government is undertaking the review of all conflicting pertinent Acts and policies with a view to updating, harmonizing and repealing them as required. Additionally, the review will achieve enhancement of the pertinent laws [8].

The specific actions are outlined below:

- The key government focus will be on creating a single Agriculture Act, which will facilitate expeditious policy changes as required.
- Also the government will empower farmers to control their operations through greater autonomy and removing barriers to the same.
- Privatization of the commercial services currently performed by the government and be only concerned with regulation for conformance with local and export market standards.
- Merging of parastatals performing commercial functions into one regulatory body.
- Undertake capacity building of farmer organizations for their greater involvement in product inspection and quality control.
- Empower parastatals concerned with quality control to enforce relevant legislation as regards marketing inputs and outputs.
- Collaboratively review and harmonize other legislation (of other sectoral ministries such as Transport and Communication, the Treasury) affecting the sector.
- Zero rate certification services offered by local bodies to encourage wider reach at affordable prices.

Additionally, the government plans to carry out these two actions, specifically to improve quality control:

- Develop and implement an industry code of conduct , and

- Improve inspectorate services at all entry points and provision of adequate laboratory services, while developing a National Quality Assurance Referral Laboratory. It will also strive to have KEPHIS fully accredited internationally [8]. This is currently on-going.

On the regional front, there have been some initiatives for the development of a regional GAP, with the most recent being the proposal for the formation of a regional Network of Horticultural Produce Exporters in Eastern and Southern Africa (June 2005). The relevant areas identified then for possible collaboration included: smallholder capacity building for EUREPGAP compliance, creation of an AfricaGAP, based on the KenyaGAP experience; and human resource development for quality assurance [11].

## **Supportive Role of International Organizations, UNCTAD and FAO**

Both FAO and UNCTAD can assist in the national GAP development compliance efforts through:

- a. Increasing the participation of developing countries in international standard setting bodies or influencing the level and nature of the standards themselves (international ‘SPS diplomacy’) [4,9]
- b. Strengthening public and private capacities to effectively manage food safety and agricultural risks
- c. Assisting developing countries build the capacity to plan and execute the necessary strategies
- d. Facilitating development of capacities for
  - Channelling information
  - Interpreting international regulatory and commercial trends
  - Conducting risk assessments
  - Undertaking hazard surveillance
  - Monitoring and applying contingency planning in SPS management.

The strategies identified for channelling this support include:

- Suppliers need to weigh the costs and advantages associated with participating in different market segments; in some cases, there may be large and profitable opportunities to service the domestic market, the regional market and market segments in industrialised countries that impose less stringent standards or allow more time to implement certain measures.
- Building broad awareness about the need for proper SPS measures
- Facilitating the broad adoption of good agricultural and manufacturing practices
- A coherent regulatory framework
- A system to assess compliance and conformity

- Promote effective producer organisations and long term relationships with buyers
- Interventions to strengthen SPS management capacities
- Require an approach that involves all the players – policymakers, firms and industry associations who see SPS management as a core element of overall competitiveness strategies. This in addition requires building an effective multi-stakeholder institution e.g. the National Horticultural Taskforce with that has clear objectives and specific roles. The role of the institution should be:
  - a. Setting the standards and developing the code
  - b. Promoting the code (raising awareness and support) locally and internationally
  - c. Providing advice and training growers and exporters
  - d. Regular review of the standards
  - e. Quality assurance – of the Code and the systems [4,7]

In developing the Code, it would be necessary to ensure that it:

- a. Is compatible with national legislation and EU codes and standards
- b. Encompasses key environmental and food safety risks found in relevant farming systems
- c. Reflects the needs and priorities of different types of workers
- d. Caters for both small and large scale farms [7 ]

In implementing the Code, it may be necessary to develop a more formal institutional structure that is responsible for:

- a. Reviewing and promoting the Code
- b. Quality assurance and overseeing the implementation of the Code
- c. Training and auditing teams
- d. Deciding which growers get certified

Additionally, facilitation should be provided for:

- Policy makers to draft sensible regulations and for regulators to have the capacity to enforce those measures.
- Developing countries involvement when developing or revising standards so as to make their implementation more user-friendly and cost-effective.
- Adoption of a long term and strategic approach to international market access. Policymakers would need to work closely with the private sector to identify emerging challenges and opportunities and make appropriate regulatory changes while choosing suitable strategies and making needed investments.
- The private sector to work through industry organisations to advocate for effective public sector support and to implement programmes to build awareness, encourage adoption of good practices and codes of practice.
- Ensuring smallholders continued participation, there is a need for small producers to organise themselves and cooperate.

- Private collaboration needed to support smallholders to develop strong and efficient organisations and to assist them to make the necessary investments in technology, equipment and entrepreneurship development.
- Institutional infrastructure – a critically important factor for smallholders to maintain their competitiveness. Institutions play five potential roles in strengthening markets for products produced by smallholders: reducing coordination costs; lowering risks; enforcing contracts; enabling collective action and building human capital [ 4,7]

## **Conclusion**

Kenya's horticultural industry has been extremely successful in the recent past and its impressive growth is envisaged to continue. The role of an effective national quality assurance system or GAP in maintaining this growth cannot be overemphasized. It is through the development of the requisite systems and capacities as proposed that sustainable compliance can be achieved through adoption of strategic and proactive approaches. The nation's experts will need to keep abreast of shifting technical and commercial requirements in the chosen market, while anticipating future changes. Currently, the push is for the country to have an all-inclusive code of practice/quality standard for Kenya, to meet the requirements for both domestic and export markets. Ultimately, the customer is king and Kenyan producers will continue to strive to optimally meet their customers' requirements. However, the industry will keep on strategically building its capacity to achieve a single-tier national food quality system, with an all-inclusive food quality standard. Donor facilitation will be key in this; as will coordination of the various public-private sector players.

## References

- 1) Ministry of Agriculture Statistics. 2004. Kenya
- 2) Horticultural Crops Development Authority (HCDA). Export Statistics (1999-2004). Kenya.
- 3) Diop N and S Jaffee. 2005. Fruits and Vegetables: Global Trade and Competition in Fresh and Processed Product Markets. In: Global Agricultural Trade and Developing Countries, MA Aksoy and J Beghin (eds). World Bank, Washington DC.
- 4) Jaffee S. 2005. Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Countries. World Bank, Washington DC.
- 5) Caswell J. 2003. Trends in Food Safety Standards and Regulation: Implications for Developing Countries. In: Food Safety in Food Security and Food Trade. L. Unnevehr (ed.) International Food Policy Research Institute, Washington DC.
- 6) Mc Culloch N and M Ota. 2002. Export Horticulture and Poverty in Kenya. Working Paper no. 174. Institute for Development Studies, Brighton.
- 7) Ruth Nyagah. 2005. Personal Communication.
- 8) Government of Kenya. 2004. Strategy for Revitalizing Agriculture 2004-2014.
- 9) Henson SJ, Preibish KL and O Masakure. 2001. Enhancing Developing Country Participation in International Standards-Setting Organization. Department for International Development, London.
- 10) Dolan C and J Humphrey. 2000. Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry. *Journal of Development Studies* **37** (2).
- 11) 2005. Report on a Workshop to Explore Potentials of Setting up a Network of Horticultural Produce Exporters in Eastern and Southern Africa, Harare, Zimbabwe: 30 May - 1 June 2005.
- 12) KHDP (Kenya Horticultural Development Programme). 2005. Fact Sheet on the Status of Smallholders and EUREPGAP in Kenya. Presented at Annual EUREPGAP Buyers' Conference, Paris, France.
- 13) KHDP (Kenya Horticultural Development Programme). 2005. Monthly Updates.

## Annex 1

### Milestones in Kenya's GAP Development and Compliance

1996	Launch of 1 <sup>st</sup> Edition of FPEAK's Code of Practice
1997	Launch of 2 <sup>nd</sup> Edition of FPEAK's Code of Practice
2002	Revision of KS 1758 National Horticultural Code of Practice
2005	
January	<p>Launch of AfriCert, the first local certification company in East and Central Africa to be accredited to the ISO 65 scope.</p> <p>EUREPGAP Certification of first donor-supported smallholders</p>
February	<p>Visit by Mr Nigel Garbutt, EUREPGAP Chairman</p> <p><b>Key Outcomes</b></p> <ul style="list-style-type: none"> <li>• Establishment of a EUREPGAP Working Group responsible for developing Kenyan smallholder compliance guidelines, with its interim secretariat being housed at FPEAK.</li> <li>• FPEAK receives the go-ahead to proceed with benchmarking of KenyaGAP to EUREPGAP, following the laid out procedures</li> </ul>
March	Commissioning of Kenya National EUREPGAP Technical Committee
June	<p>KFC becomes first National Growers Association to achieve benchmark status with the EUREPGAP Ornamentals Scheme.</p> <p>The Kenya National EUREPGAP Technical Committee develops draft interpretive guidelines for smallholder compliance with EUREPGAP.</p> <p>Participation in a regional horticulture exporters workshop. Kenya nominated to coordinate the Secretariat. Areas identified for possible collaboration included: smallholder capacity building for EUREPGAP compliance, creation of an AfricaGAP, based on the KenyaGAP experience; and human resource development for quality assurance</p>
July	<p>Presentation on Kenyan smallholder progress towards EUREPGAP compliance with and certification by the Kenya National EUREPGAP Technical Committee to the EUREPGAP Committee on special invitation by Mr Nigel Garbutt, the EUREPGAP Chairman.</p> <p>The Committee (through FPEAK coordination) develops a Quality Management System (QMS) template for use by members. The QMS contains samples of documents and</p>

records required by a grower to comply with KenyaGAP, in anticipation of the national code being benchmarked against EUREPGAP.

Recommendation by stakeholders at a multisectoral Donor Horticulture Projects Coordination Workshop that coordination was required in streamlining donor support for EUREPGAP/KenyaGAP & SPS compliance and harmonization of existing compliance codes.

September

GRASP (Good Risk-based Agricultural Social Practices) Project launches pilot (field) tests of the GRASP Control Points and Compliance Criteria in conjunction with AfriCert and AfricaNow. This was followed by the first GRASP multisectoral Stakeholders' Workshop, to obtain Kenya's contribution to the improvement of the EUREPGAP Standard's chapter on Workers' Health, Safety and Welfare; a significant step in the Revision 2007 process.

The Ethical Trade Initiative (ETI) launches the ETI Smallholder Guidelines, for compliance with the ETI Code.

October

Strong participation in 6<sup>th</sup> Global EUREPGAP Conference by private sector, FPEAK, KHDP and AfriCert. Presentations made gave insights into the Kenyan experience so far and include:

- KenyaGAP - A National Scheme that Embraces Smallholders
- The Development of Good Agricultural Practices in Kenya
- Training and Certifying Smallholders to EUREPGAP in Kenya
- Lessons Learnt Working with Smallholders in Africa (Kenya case study)

Provision by KHDP of a fact sheet on the status of smallholders and EUREPGAP in Kenya for distribution to all delegates.

Commencement of EUREPGAP Smallholder Manual (a EUREPGAP document) testing pilot project, jointly through a partnership between the MOA, DFID, GTZ Kenya and GTZ, through the BSMDP, GTZ- Private Sector Development in Agriculture (GTZ-PSDA) and the Agricultural Trade Project, respectively.