

COMMENTARY

QUALITY IMPROVEMENT OF THE KENYAN HORTICULTURAL PRODUCE THROUGH STANDARDS AND MANAGEMENT

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INTRODUCTION

Global trade especially between developed and developing nations has seen tremendous growth over the recent past. For example, agricultural imports by United States of America (USA) from developing nations have seen an increase of about 38.4% since 1995. Globalization of trade activities means that trade is no longer a domestic affair and trading partners must develop platforms for doing business in terms of regulatory requirements. Access of developing countries to export markets will continually depend on their capacity to ensure continued supply of high quality agricultural products that meet the requirements of importing countries. Building the trust and confidence of importers will allow the creation and maintenance of demand for their food products in world markets.

Being an agricultural nation, Kenya's main export commodities are agriculture-based. The Kenyan agriculture sector plays a valuable role of maintaining a strong economy. By contributing 29.3% of the nation's Gross Domestic Product (GDP), agriculture is literally the backbone of Kenya's economy. Over the past few decades, the sector has become very vibrant owing to the robustness of its key stakeholders trying to tackle issues related to food quality assurance in order to increase the base of existing markets and access other new and prime markets. However, like many developing nations, this has faced numerous challenges owing to the fact that the sector is highly fragmented and depends on a large number of small-scale traders along the entire chain. Fragmentation of activities at the production level means that farming is accomplished on small-scale basis. Large numbers of farmers poses a big challenge to the management of the farm-to-fork aspect of quality assurance for both domestic and export market.

For the last couple of years or so, European countries have closely monitored incidences of pesticide residues in peas and French beans from Kenya because of high levels of residues being detected in a number of consignments. From January 2013, the European Commission (EC) increased intensity of border controls and now 10 % of all imports are sampled for pesticide residues. In a survey conducted by the Europe-Africa-Caribbean-Pacific Liaison Committee (COLEACP) to assess the impact of these controls to Kenya, it was established that there has been a significant decline in export volumes to the European Union (EU) and sourcing from small-scale out-growers, who have traditionally been major producers of these crops, has significantly decreased. Long term effects can be even more catastrophic if a total ban is to be imposed on the horticultural produce. The horticultural sector risks suffering from the same fate suffered by the local beef sector. The EU was Kenya's major beef export arena in the 1970's with about 66% of the canned beef consumed in that region coming from Kenya. However, failures to create disease-free zones and meet hygiene conditions led to Kenya being banned from exporting to the EU. Such failures extend to loss of not just international but also regional markets, a fate suffered still by the Kenyan beef sector which lost a key market in Uganda

in 1997. If necessary measures are not taken, Kenya risks the winding-up of a thriving and successful horticultural export sector which is emulated by many other countries. It is thus necessary to look at the role of standards and management in ensuring quality horticultural produce in respect to the small scale farmers.

Strengths, weaknesses, opportunities and threats (SWOT) of the local horticultural sector

Like their counterparts with small acreage in China, Kenyan small- scale farmers are faced with the challenge of standardizing production practices because they cannot afford the costs associated with such activities. On the other hand, the majority of the farmers are not well educated and do not fully understand the key point of implementing standards. Because they lack economies of scale enjoyed by large-scale farmers, the farmers would further be constrained in efforts to adopt more sophisticated modern agricultural practices necessary to meet more stringent EU requirements. Ultimately, there is high risk that they will not be able to seize export market opportunities unless they are adequately informed, technically prepared and organized to meet this new challenge. Key institutions led by Kenya Plant Health Inspectorate Service (KEPHIS), the designated competent authority for horticulture, need to take up this facilitative role. These institutes include Kenya Bureau of Standards (KEBS), Kenya Agricultural and Livestock Research Organization (KALRO), Horticultural Crops Development Authority (HCDA), Pesticide Control Products Board (PCPB), and Fresh Produce Exporters Association of Kenya (FPEAK).

The development of relevant and enforceable standards is an essential component of food control systems. Kenya, unlike some countries where standards at the primary stages of production are inadequate, has formulated quite a lot of standards through public and private agencies. Nevertheless, the production system is continuously faced with the challenge of low enforcement of formulated standards evident in recent bans on French beans to the EU and detection of fruit flies in mangoes of Kenyan origin. In a trend where application of inputs at safe levels is almost mandatory, the effectiveness of all food control systems depends on full implementation of formulated standards.

At the farm level, farmers need to be aware that the past decade has witnessed nothing short of a revolution in the area of food quality assurance. Industries and regulatory bodies have moved from end product testing toward total quality management of the production process. The farm is the introductory point when it comes to implementation of preventive measures in the food chain. Emphasis on inspection and rejection of products at the final stage of the chain is a long gone affair and currently only acts as confirmatory process that preventive measures put in place are effective. End product testing, which in itself is a control measure, has been phased out with the adoption of total quality management system which emphasizes on the farm-to-fork approach. It should be noted that if the Kenyan farms act as a weak link in the food chain, then the

whole chain will undoubtedly collapse. The start of any chain plays a pivotal role in ensuring a strong chain. The farm-to-fork approach stresses that quality needs to be managed from the initial stages of raw material production to the final stages of food preparation for consumption. For the reason that farms are not sterile environments, lack of preventive actions at the production stage renders further efforts downstream futile. Therefore, implementation of preventive measures by local horticultural farmers is instrumental in ensuring that the entire food chain operates in an integrated way. After all, it is easier to prevent the entry of contaminants into the food chain than try to control them once they are in the chain.

Meeting the trade agreements, for instance the World Trade Organization (WTO) agreement on the application of Sanitary and Phyto-Sanitary (SPS) measures, is essential to increased confidence on Kenya's traded horticultural produce. Kenya is thus obliged to demonstrate that such measures have been put in place at the farm level. This is necessary if the produce is to remain competitive in the international market and get around the stiff competition from major rival horticulture producing countries, for example, Ethiopia and Colombia. Such measures though set internationally and looked upon as non-tariff barriers to trade, which act to prevent entry into markets, should be seen as catalyst to develop and manage local standards at the farm level. With agricultural production as the focal point of Kenya, it is not only essential that such measures are put in place but also adopted. Management of SPS measures is often seen as a daunting task and might consequently pose challenges to Kenya. Embracing collaborative and development cooperation with organizations such as the United Nations Industrial Development Organization (UNIDO) can help achieve desired effects. Such collaboration has been successful in West Africa, Egypt, Pakistan and Ivory Coast where UNIDO provided the necessary support.

Recently, great strides have been made globally where there has been a shift from command and control approach whereby the government acts as the auditor of the industry's own programs. The shift has been towards a more effective and efficient approach that stresses on the responsibility of private sector players. In turn, the sector players have developed their own private standards. Although these standards fall outside the WTO, they play a key role in governing respective markets. While their cost of compliance is high, the costs are less than assumed especially to the value of export. Such standards include Good Agricultural Practices (GAPs) which establish basic principles for farming amongst them soil and water management, crop and animal production, storage, processing and waste disposal. These standards have resulted in well-organized and managed supply chains in the developed countries evidenced by EUROGAP adopted by the European Union (EU) member countries and third party countries wishing to trade with EU. Adopting similar standards locally will maintain or even enhance the confidence of importing nations especially those with stringent standard requirements.

Lack of or poor implementation of standards, during the production process, results in food contamination problems, which weakens importers' confidence. Key drivers for adoption and implementation of standards at farm level can stem from both internal and external incentives. Internal incentives include increased benefits to the farmers resulting in terms of improvements in internal efficiency as well as reduced costs to the farmer by minimizing border controls and rejection of farm produce. On the other hand, external incentives for farmers include direct requirements imposed by major customers such as British Retail Consortium (BRC).

It is noteworthy to state that the tropical climate experienced in Kenya favours proliferation of pests. In addition, like in other developing countries, the water supplies used in the production process are frequently unsafe. Furthermore, some sectors of the food chain are routinely subject to more preventive action and oversight such as the slaughterhouses and dairies. In Kenya, these sectors are regulated through the Meat Control Act, Dairy Board Act and Public Health Act. This emphasis on other units of the chain results in neglect of the primary producers. While some outbreaks are accidental and unforeseen in the downstream of the chain, others could be predicted and avoided through proper control measures at the farm level. This successively reduces costs of regulation at subsequent points of the chain.

In the management of production activities at the farm level, a centralized model in the form of contract farming may be adopted. Contract farming represents a potentially important way in which the private sector can play a more active role in promoting production and cease relying on ad hoc purchases. Organized marketing systems reduce marketing and transaction costs, facilitate farmers' access to technology, inputs, credit and services, and mitigate production and market risks, and thus aid speeding up agricultural diversification and commercialization. In a case where market requirements necessitate frequent changes to the farm technology with fairly intensive farming practices, the permanent organization and maintenance of a production chain under a centralized model is vital. Because contract farming is flexible in structure, arrangements can be made to facilitate adoption and implementation of standards. This is especially important because industries that require stringent processing standards rely largely on the centralized model. If one of the requirements for signing an agreement between the private sector and the farmers is the adoption of standards and modern farming practices, with the facilitation of the private sector, then Kenyan horticultural farmers will have an edge in the market.

Education of farmers is crucial for successful on-farm quality assurance because farmers gain an understanding of why standards are necessary and why their application will improve compliance protocols and procedures. Increasing the knowledge base of horticultural farmers is a first step towards the implementation of a longitudinal integrated food chain with a well-coordinated post-harvest phase. Education can be

enhanced by strengthening the currently weak agricultural extension systems and streamlining them to effectively focus on the changing needs of quality management. The farmers are also victim to the insufficient attention that has been devoted to monitoring the requirements of standards. Another overlooked aspect of modern trade is the fact that the modern consumers are not static and their needs are constantly changing. It is then important to learn about their demands and how they influence standards formulation in other countries, align them with production processes and pass all this information to the farmer so that they are up to date with current trends.

If new standards are to be set or if the currently existing standards are to be revised, key considerations need to be taken into account. Standards should not discriminate against, rather encourage, diversified farming operations or conservational practices. For example, it has been reported in the USA that some of the standards, commonly called 'Super Metrics', that cater for water quality, manure, worker hygiene and animal control have raised concerns among farmers, sustainable agriculture and economic advocates and regulators. Proliferation of such standards, as each tries to out-do the next, makes food quality assurance a value added pre-competitive issue for the market place rather than a universal condition.

Success stories emanating from formalization of horticultural sectors through standards and management are numerous around the globe. Moroccan tomato processors and Peru mango producers are perhaps the best examples. In both countries, it was reported that less organized or less integrated farmers were disfavoured. In spite of this, after forward integration in form of being a member in a cooperative changed the cost of compliance for the farmers. Integration also tended to have other benefits such as direct access to information on buyer requirements. By emulating these two case studies, Kenyan farmers stand to reap big should they adopt better standards and better agricultural practices because they will be phasing out the structural problem currently being witnessed.

CONCLUSION

In conclusion, small-scale farmers need to be discouraged from acting as autonomous entities trying to do business alone and create well-organized clusters or even clusters that are networked or linked with large importing enterprises. They also require training and reorganization (for the few that are organized) for efficiency, quality and profitability. Resultant benefits will include individual farmers acquiring some advantage of large enterprises and become more competitive. This will allow them to adopt and implement standards and ensure that their produce is of high good quality that not only meets stringent requirements, but also surpasses them. Other returns will be comprised of reduced costs of rejection that are extremely high. With fewer rejections, tighter scrutiny of local produce will be subsided. This will also get rid of the currently unfavourable image of Kenya that has been portrayed by both national and international

media, which needless to say, takes time and effort to overcome. In the long run, the impression of Kenya in the global agricultural scene will greatly improve and prospects to do business will expand.

RECOMMENDATION

The key stakeholders, both private and public, need to critically analyse the horticultural value chain then develop appropriate policies to turn weakness into strengths and threats into opportunities then set appropriate standards along the entire value chain to implement the formulated policies. Finally, all activities downstream should be informed by market standards.

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