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IMPROVING KENYA'S DOMESTIC HORTICULTURAL PRODUCTION AND MARKETING SYSTEM: CURRENT COMPETITIVENESS, FORCES OF CHANGE, AND CHALLENGES FOR THE FUTURE

VOLUME III:
HORTICULTURAL RESEARCH AND INPUT SECTOR REGULATION IN KENYA AND TANZANIA

By

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CIDA	Canadian International Development Agency
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
EU	European Union
FAO	Food and Agriculture Organisation
FPEAK	Fresh Produce Exporters Association of Kenya
GDP	Gross Domestic Product
HCDA	Horticultural Crop Development Authority
IBR	Institute for Biotechnology Research
ICIPE	International Centre of Insect Physiology and Ecology
IFAD	International Fund for Agricultural Development
IGAD	Inter-Governmental Authority
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KARI	Kenya Agricultural Research Institute
KBS	Kenya Bureau of Standards
KEPHIS	Kenya Plant Health Inspectorate Service
KFA	Kenya Farmers' Association
KFU	Kenya Farmers Union
KRA	Kenya Revenue Authority
KSC	Kenya Seed Company
MoALD	Ministry of Agriculture and Livestock Development
MRLs	Maximum Residual Levels
NCPB	National Cereals and Produce Board
NGOs	Non-Government Organizations
OPVs	Open Pollinated Varieties
PTA	Preferential Trade Area
QDS	Quality Declared Seed
SADC	Southern African Development Community
TAMPA I	Tegemeo Agricultural Monitoring and Policy Analysis
TFC	Tanzania Fertilizer Company
THRC	Thika Horticultural Research Centre
THRI	Tengeru Horticultural Research Institute
TOSCA	Tanzania Official Seed Certification Agency
TSC	Tanzania Seed Company
UK	United Kingdom
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WV	World Vision

Executive Summary

Kenya's horticultural sector (defined here to include fruit and vegetable production and marketing, but not flowers) has received a great deal of attention over the past decade due to the rapid and sustained growth of its exports to Europe. This impressive growth has undoubtedly contributed to increased rural incomes and reduced rural poverty in Kenya. Yet despite this growth, exports remain a small fraction of Kenya's overall horticultural sector. For the past decade, over 90% of all fruit and vegetable production was consumed domestically, and the domestic market accounted for over 90% of the total growth in quantity of fruit and vegetable production. While over 90% of smallholder farmers in all but the arid regions of Kenya produce horticultural products, fewer than 2% do so directly for export.

This overwhelming dominance of the domestic market, combined with slower growth experienced in the export sector over the past decade, the challenges that smallholders face to continue participating in the export sector, and the possibility of more rapid growth in domestic demand, all argue for a more active focus on the potentials and constraints of domestic horticulture in Kenya. Such a focus implies also the need to assess the competitiveness of local production and marketing against that of neighboring countries such as Tanzania and Uganda. This paper explores these key issues in three Volumes. The overall objectives of the three Volumes are to provide a broad diagnostic overview of the horticultural sector, to identify specific constraints that limit the system's performance, to make suggestions for selected policy and programmatic changes, and to identify key research that needs to be done to guide further investments to improve sector performance. Volume III – the present volume – focuses on horticultural research and input sector regulation, comparing and contrasting the system in Kenya with that in Tanzania. Volumes I and II focus, respectively, on horticultural production in Kenya and on domestic and regional marketing of horticultural products.

The paper is organized as follows. Chapter 1 provides background and briefly discusses the data and methods used in the report. Chapter 2 evaluates the market and regulatory system for vegetable seeds. Chapter 3 reviews the horticultural research and development systems in Kenya and Tanzania, while Chapter 4 looks at fertilizer and agrochemical inputs for horticulture. Finally, Chapter 5 presents conclusions and recommendations.

Market and Regulatory System for Seeds: Following liberalization in 1994, government in Tanzania has played a facilitating role in seed sector development, while the focus of Kenya's authorities is primarily on regulation and "policing". Community Based Seed Production, especially of the mang'ola red onion variety, and local varietal development more generally, appear to be major successes of this more flexible approach in Tanzania.

Horticultural Research and Development**:** Horticultural seed research in Kenya is plagued by understaffing. While Tanzania's research center has five vegetable breeders, a number of seed technologists, and a fully operational seed production unit, Thika Research Center in Kenya has one full-time breeder, no seed technologist, and no operational seed production unit.

Fertilizer and Agrochemical Inputs**:** Kenya Farmer's Association and National Cereals Produce Board (a parastatal) have both become active in the fertilizer sector since 2001. They charge lower prices than private companies and some suggest that their presence has reduced the prices these companies charge. This development needs to be watched quite closely to ensure that unsustainable government subsidies to NCPB or KFA do not undermine the notable success of fertilizer sector liberalization in Kenya.

Conclusions and Recommendations: Fresh fruit and vegetable production and marketing value chains are becoming increasingly important to a broad array of Kenyan consumers. These also hold potential market opportunities for important segments of the smallholder farming community. Expanding domestic and regional markets for Kenyan horticultural produce and integrating the country's smallholder farmers into profitable supply chains that satisfy these markets will require investment in three key areas: technical production constraints, "hard" and "soft" market infrastructure, and the legal and regulatory environment. Recommendations regarding the legal and regulatory environment (the focus of this Volume) touch on the current revision of the Seed and Plant Varieties Act of 1991, on the Horticulture Bill, and on issues of quality and food safety, farmer organizations, and intellectual property rights in seed varieties.