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# Organic agriculture development strategies in Tunisia and Uganda: Lessons for African organics

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**Organic agriculture development strategies in Tunisia and Uganda: Lessons for African organics**

by

**Jelili Adegboyega Adebisi**

A thesis submitted to the graduate faculty

in partial fulfillment of the requirements for the degree of

MASTER OF COMMUNITY AND REGIONAL PLANNING  
MASTER OF SCIENCE

Co-majors: Community and Regional Planning; Sustainable Agriculture

Program of Study Committee:  
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Iowa State University

Ames, Iowa

2014

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**DEDICATION**

To the Almighty, to whom there is no comparison.

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**ABBREVIATIONS**

ACODE	Advocates Coalition for Development and Environment
APIA	Agence de Promotion des Investissements Agricoles
CBOs	Community Based Organizations
CBTF	Capacity Building Task Force on Trade, Environment and Development
CNAB	Commission Nationale de l'Agriculture Biologique
CRRHAB	Centre Régional des Recherches en Horticulture et Agriculture Biologique
CSOs	Civil Society Organizations
CTAB	Centre Technique de l'Agriculture Biologique
DGAB	La Direction Générale de l'Agriculture Biologique
EAOPS	East African Organic Products Standards
EPOPA	Export Promotion of Organic Products from Africa
FAO	Food and Agriculture Organization of the United Nations
FiBL	Research Institute of Organic Agriculture
FNAB	National Federation of Organic Agriculture
GIL	Groupement Interprofessionnel des legume
Hivos	Humanist Institute for Cooperation
ICROFS	International Centre for Research in Organic Food Systems
ICS	Internal Control System
IFAD	International Fund for Agricultural Development
IFOAM	International Federation of Organic Agriculture Movement



IRESA	Institution de la Recherche et de l'Enseignement Supérieur Agricoles
ITC	International Co-operative Alliance
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MAHRF	Ministry of Agriculture Hydraulic Resources And Fisheries
NGOs	Non-Governmental Organizations
NOGAMU	National Organic Agricultural Movement of Uganda
UTAP	Union Tunisienne de l'agriculture et de la Pêche
MOAN	Mediterranean Organic Agriculture Network
ODI	Oversee Development Institute
OECD	Organisation for Economic Co-operation and Development
OD	Organic Demark
OTP	Organic Trade Point
PACKTEC	Packaging Technical Centre
PGS	Participatory Guarantee Systems
RUCID	Rural Community in Development
SATNET	Sustainable Agriculture Trainers Network
UBoS	Uganda Bureau of Statistics
UNCTAD	United Nations Conference on Trade and Development
Ugocert	Uganda Organic Certification Limited
UNEP	United Nations Environment Programme
UOS	Uganda Organic Standards
WHO	World Health Organization

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## **ABSTRACT**

The core objective of this thesis was to draw lessons from the factors of success that underlie the development of Tunisian and Ugandan organic sectors to advance recommendations that can help spur the development of African organics. The study drew on secondary data obtained from an array of sources, supplemented with clarifying information obtained through phone discussions and email exchanges with organic stakeholders in the two countries. The study framed broad and specific questions aimed at identifying and explaining the roles played by different stakeholders, governmental and non-governmental, in fostering the development of the organic sectors in the two countries. Also, the questions enabled the study to identify and account for the roles of organic standards/regulations and certification, organic policies and action plans, organic market development and awareness creation, and organic research, training and extension service in the evolution of Tunisian and Ugandan organic sectors as the most successful in Africa and as one of the world's most highly ranked. Specific lessons included the need to create effective and well-structured institutions at all levels of the organic value chain. These include institutions that will serve as national organic umbrella bodies and other that will undertake activities and provide services such as organic certification and inspection, organic standards development and policy formulation, organic market development and awareness creation, organic research, training and outreach. A mix of state and market was also recommended as a way to advance the development of African organics.

## **CHAPTER 1**

### **INTRODUCTION**

#### Study Background

Organic Agriculture (OA) has been defined as a holistic food production and management system (Food and Agriculture Organization of the United Nations/World Health Organization (FAO/WHO), 2001; International Federation of Organic Agriculture Movement-Organic World Foundation (IFOAM- OWF), 2008) that promotes, enhances, optimizes and “sustains the health of soils, ecosystems, people and the planet” (IFOAM, 2009a, p. 1) as one indivisible whole (FAO/WHO, 2001; IFOAM-OWF, 2008). OA integrates biological and ecological processes and cycles adapted to local conditions. It relies on integrated pest management techniques, nutrient cycling and precludes the use of synthetic inputs, which can adversely affect the environment, agroecosystems, plants and humans (IFOAM, 2009a; IFOAM-OWF, 2008). OA also combines “tradition, innovation and science to benefit the shared environment,” and it also “promotes fair relationships and a good quality of life” (IFOAM, 2009a, p. 1.) among people and other living entities (IFOAM, 2009a; IFOAM-OWF, 2008).

The history of OA dates back to the early 20<sup>th</sup> century, when it took root in Germany and some English-speaking European countries (Lockeretz, 2007). Its evolution was in response to, and inspired by, agricultural scientists and farmers concerned about the adverse effects of synthetic farm inputs on soil, plant and human health as well as the consequences of industrialization and mechanization of agriculture (Kristiansen, 2006; Lockeretz, 2007; Paull, 2011a, 2011b). From this humble beginning, OA has undergone

drastic and remarkable growth, particularly since the mid-1980s, when it gained the attention of policy-makers, international organizations, non-governmental organizations (NGOs), farmers, environmentalists and consumers across the globe (Kristiansen, 2006; Knudsen et al., 2006; Stolze and Lampkin, 2009). With an estimated 8.9% per annum compound growth in organic land over the decade (Paull, 2011a), OA is now practiced in about 160 countries around the world (37 million hectares) (Willer and Kilcher, 2012). The reason for the remarkable growth has been attributed to growing global concerns about issues such as the environmental and health implications of high-input agriculture, food scares, growing demand for organically grown foods and the introduction of policy supports for agri-environmental initiatives and OA (Kristiansen, 2006; Stolze and Lampkin, 2009).

The exciting growth that OA witnessed since the mid-1980s is said to have largely taken place in developing countries and emerging markets in Oceania, Latin America, Asia and Africa (Kristiansen, 2006). Of the 160 countries involved in OA worldwide, more than 65% are developing countries (Reddy, 2010). Also, more than one-third of the world organically managed land (12.5 million hectares) and 80% of the world organic producers are reported to be located in developing countries (Willer, 2012). The rise in demand for organic produce in developed countries and the consequent inability of local organic producers to meet this demand has been identified as one of the major factors that accounted for the growth of OA in developing countries (Mbiha et al., 2008; Oelofse et al., 2010). Another factor that underlies this growth includes the promotion of OA in developing countries as a reliable development tool for addressing food security, and enhancing rural livelihood conditions and smallholders' productivity (Bakewell-

Stone 2006; Gibbon and Bolwig, 2007; Kristiansen, 2006; United Nations Conference on Trade and Development (UNCTAD), 2006; United Nations Environment Programme (UNEP)-UNCTAD, 2008). The ease of conversion to OA from traditional farming systems, the predominant form of agriculture in developing countries and the corresponding increase in productivity associated with such conversion have been pinpointed as important in precipitating organic growth (International Fund for Agricultural Development (IFAD), 2003; Kristiansen, 2006; Twarog, 2006). Other factors of growth include the social and cultural benefits for smallholders (e.g., safe and healthy production systems, building on indigenous knowledge and farming systems, empowering women), economic (export earning with premium prices domestically and internationally, selling of surplus produce) and environmental benefits (enhancing biodiversity, causing little/less pollution, enhancing soil fertility, mitigating erosion, limiting genetic contamination) that the adoption of OA is considered to foster in developing countries (UNCTAD, 2006). The same factors also seem to underscore the growth of OA in Africa (Parrott et al., 2003; Parrott et al., 2006a), where 3% of the world's organically managed land is said to be located (Willer, 2012).

In Africa, the growth of OA has been impressive but slow. From 0.05 million hectares in 2000, the number of hectares of organically managed land in Africa increased to 0.49 million hectares in 2005 and 1.08 million hectares in 2010 (Research Institute of Organic Agriculture (FiBL)-IFOAM-SOEL<sup>1</sup>, 2012 cited in Willer and Kilcher, 2012). The trade in export and local markets for organic products has also been on the rise, particularly in East Africa (Uganda, Kenya), Southern Africa (South Africa), and North

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<sup>1</sup> SOEL is an acronym for Foundation Ecology and Agriculture, Germany

Africa (Tunisia, Egypt) (Mbiha et al., 2008; Parrott et al., 2003; Twarog, 2006; Vossenaar and Jha, 2004). Also, the number of organic producers in Africa has grown to the extent that almost 34% (540,000) of the 1.6 million organic producers worldwide are said to be located on the African continent (Willer, 2012). Equally, OA is said to be increasingly promoted and adopted by development agencies, local NGOs, government agencies, African leaders and farmers as a means of empowering women, combating desertification and soil erosion, improving and sustaining soil fertility, enhancing food productivity, addressing poverty and alleviating food security challenges in Africa (EPOPA, 2008; van Elzakker et al., 2007; Parrott et al., 2006a; UNCTAD-UNEP, 2008; Vossenaar and Jha, 2004; Willer, 2012). Despite the impressive statistics and progress, the organic sector in most African countries is considered to be underdeveloped, and yet to optimize its potential, due to political and logistical constraints (Parrott et al., 2006a, 2006b). These constraints include unfavorable national policy environments that promote high-input agriculture, lack of integration of OA into national agricultural policy, inadequate government support, inadequate/dearth of organic extension agents, and underdeveloped local and regional markets for organic produce (AdeOluwa, 2010; Bouagnimbeck, 2009; Parrott et al., 2003; Walaga, 2005). Other factors constraining the growth of OA in Africa include lack of internationally recognized certification programs, little or no capacity to implement and operate certification services, high costs of certification charged by international certification agencies, and the lack of systematic documentation and dissemination of information on the benefits of OA (Walaga, 2005). Likewise, there are biophysical challenges to the adoption and development of African organics. These include low organic matter content, and poor fertility of most African

arable soils, the prevalence of pests and diseases, as well as weather related constraints such as droughts (AdeOluwa, 2010; Hine and Pretty, 2006; FiBL, 2012a).

Notwithstanding the challenges constraining the development of OA in Africa, some African countries have made considerable progress in developing their OA sectors. These include Egypt, Ethiopia, Uganda, Tunisia, Tanzania, Kenya, Sao Tome and Príncipe, and Sierra Leone (Parrott et al., 2006a). Among these countries, Uganda and Tunisia stand out. OA started in Uganda and Tunisia at comparably the same time in the 1980s as private initiatives (Ben Khedher, 2002; Ben Khedher and Belkheria, 2006; Jacobsen, 2009; Namuwoza and Tushemerirwe, 2011). The Ugandan and Tunisian OA sectors have since grown tremendously to the extent that they are regarded as the most developed organic sectors in Africa and among the best in the world (Willer and Kilcher, 2011). While Uganda has the most developed organic sector in Africa and ranks 13<sup>th</sup> worldwide, Tunisia's ranks second in Africa and 24<sup>th</sup> worldwide (Heinze, 2012; Oxford Business Group, 2010; Paull, 2011a, 2011b; Preißel and Reckling, 2010). Besides, the two countries have the highest certified organic production land in Africa. Of Africa's 550,000 certified hectares, Uganda alone has 228,419 hectares (58.47%), the highest in Africa. Uganda's total organic land is managed by 188,625 organic farmers, the second highest in the world, with each farmer cultivating about 1.2 hectares on average (Willer and Kilcher, 2013). Tunisia has a total of 178,521 hectares of organic production land, the second highest in Africa. About 2,396 organic farmers, with each cultivating about 74.51 hectares on average, manage Tunisia's organic production. Also, over the passage of time, the two countries have recorded remarkable feats in creating both domestic and international markets for their organic produce, thereby resulting in millions of dollars



generated per annum from organic exports. During the 2002/03 financial year, Uganda generated around \$4.6 million from organic exports. This increased to about \$15 million in 2006/2007 and subsequently to \$42 million during the 2010/2011 financial year (NOGAMU, 2010a; Willer, 2012). Tunisia has also recorded impressive achievements in this regard, a fact which became evident in the increase in export earnings of organic farmers over the years. In 2003, €3.3 million was earned by organic farmers from organic exports. This increased to €34 million in 2008 (Oxford Business Group, 2010) and again to €44 million in 2011 (Heinze, 2012; Willer and Kilcher, 2013). In addition, Tunisia and Uganda are among the eight African countries that have developed their own national organic certification standards (IFOAM, 2008). However, to develop what is ranked as Africa most developed OA sectors, the two countries followed different pathways. While private stakeholders under the coordination of the National Organic Agricultural Movement of Uganda (NOGAMU) are the main driver of the Ugandan OA success story (Muwanga, 2008; Namuwoza and Tushemerirwe 2011; Opolot et al., 2006), government is the key factor for OA success in the Tunisian experience (Ben Khedher, 2001; Kilcher and Belkhiria, 2011; Parrott et al., 2003). The different strategies adopted by these countries and the measurable success achieved by Uganda and Tunisia in developing their OA sectors as the best in Africa and as one of the leading organic sectors worldwide suggest that other African countries stand much to gain by learning from the two countries' experiences to develop their organic sector.

### **Problem Statement**

Against the backdrop of the Ugandan and Tunisian OA success stories and the differing pathways they followed to attain this feat, this research sought to study and

draw development lessons from the strategies used by the two countries to develop their organic sectors to advance action plan and policy options to foster the development of OA in Africa. To achieve this objective, the following three major questions are addressed:

1. Who are the main stakeholders promoting OA in Uganda and Tunisia and what are their roles in fostering the development of the sector?
2. What are the main drivers of change and the strategies that have inspired the growth of Uganda and Tunisia OA sectors?
3. What lessons can be learnt from the Ugandan and Tunisian OA development experience to foster the development of OA in Africa?

The first research question is important because studies have shown that the development of a country's organic sector derives from the activities and partnerships among a diverse group of stakeholders. This may broadly include private stakeholders, government agencies and international development organizations (Michelsen et al., 2001; UNEP-UNCTAD Capacity Building Task Force on Trade, Environment and Development (CBTF), 2010; Vossenaar and Wynen, 2004; Walaga and Hauser, 2005). Therefore, identifying the major OA actors in Uganda and Tunisia as well as their roles in facilitating the growth of the sector will provide a good entry point to understanding the development of OA in the two countries. The second research question will provide insights into the strategies and policies employed by Uganda and Tunisia to develop their respective organic sectors. The insights from the first two questions will provide the information needed to answer the third research question. In other words, based on the insights from the Ugandan and Tunisian OA experiences, we will develop a set of

recommendation on how other African countries can emulate Uganda or Tunisia in developing their OA sectors.

To gain adequate insights and make in-depth deductions from answering the first two major research questions, the following sub-questions will be addressed.

- 1a. What were the goals of the major actors involved in advancing the growth and development of OA in Uganda and Tunisia?
- 1b. How did the stakeholders promote and advance OA?
- 1c. How did these stakeholders develop their organizational capacity and mobilize human and financial resources to promote and encourage the adoption of OA?
- 1d. What were the alliances formed by these stakeholders? How did this impact the development of OA in the two countries?
- 1e. What were the constraints faced by these stakeholders and the challenges of OA in these countries? How did they overcome these constraints?
- 2a. What specific policy reforms facilitated the development of OA in Uganda and Tunisia?
- 2b. What specific organic policy instruments and institutions were put in place in Uganda and Tunisia; how were they created and what were their roles in facilitating the development of OA in the two countries?

### **Study Significance**

Many studies and commissioned reports have demonstrated that OA offers a viable and reliable development option that can be harnessed by African countries to address the problems of food security, low agricultural productivity, poverty, deprived

rural livelihood conditions and other related challenges (Bakewell-Stone 2006; Bennett and Franzel, 2009; Gibbon and Bolwig, 2007; Halberg and Muller, 2013; Hine and Pretty, 2006; IFOAM, 2008; Jacobsen, 2009; UNEP-UNCTAD, 2008). However, due to some constraints earlier articulated, the organic sectors in most parts of Africa are largely underdeveloped. As a consequence, the benefits associated with the development of OA in Africa are yet to be manifested (Parrott et al., 2006a, 2006b). This study was aimed at advancing action steps and policy options that can help facilitate the development of OA in Africa. Therefore, as its foremost significance, this research will contribute to the emerging body of literature on how the potential of OA in Africa can be discovered in order to exploit its benefits.

The other significance of this research is that its design can be a case study for other African countries to learn from the OA development experience of Uganda and Tunisia (Heinze, 2012; Oxford Business Group, 2010; Paull, 2011a; Preißel and Reckling, 2010). To this extent, this study will provide an in-depth understanding about the strategies that both countries used to develop their OA sectors. Also, it will offer insights into the stakeholders that are promoting and advocating for OA in the two countries, their strategies and the networks they have fostered for the development of OA. Lastly, the study will provide insights into the role of institutions and policy instruments in the development of OA, particularly in Uganda and Tunisia.

### **Thesis Structure**

Following this introductory chapter is the literature review. It is divided into sections. The first section is a review of the approaches to OA development and the second explains the key concepts used in this study. Chapter 3 presents the research

methodology by expounding on the types and sources of data for the study as well as the methods of retrieval. It also includes a discussion of the methods used in analyzing the data. Chapters 4 and 5 respectively explain the development of OA in Uganda and Tunisia. Chapter 6 advances lessons for African organics by drawing on the discussion in chapters 4 and 5, and also presents the conclusion.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

#### **Introduction**

The first part of this chapter reviews the four major approaches used by different countries to develop their OA sectors. It begins with a discussion of the rationale classifying the approaches to OA development into these four categories and is followed by a review of each approach and their relevance to this study. The second part of this chapter provides definitions and a brief explanation of the key concepts used in this study.

#### **Approaches to OA Development**

Studies have identified different approaches used in fostering the growth and development of OA in the developed and developing countries (Crucefix, 1998; Dimitri and Oberholzer, 2006; Lockeretz, 2007; OECD, 2003; Parrot and van Elzakker, 2003). As synthesized from these studies, these approaches can be broadly categorized as follows: (1) Market-Oriented Approach (2) Policy-Driven Approach (3) Private/Non-governmental Stakeholders-Driven Approach, and (4) Government-Driven Approach. Before explaining each of these approaches, it is necessary to point out each of them are influenced by a number of factors, among which is the rationale associated with the uptake of OA. For example, one of the factors why OA is promoted in developing countries is because of its potential to help address food security and increase income of smallholders. The market-oriented approach to OA is one of the ways this objective is being achieved as it offers opportunity for farmers to access premiums for their products

at the international organic niche markets (Bakewell-Stone, 2006; International Centre for Research in Organic Food Systems (ICROFS), 2010; Panneerselvam et al., 2013; Preißela and Reckling 2010). The lack of government support for, or government's vested interest in using OA to realize some of its developmental plans may also influence the approaches adopted to foster the development of an organic sector. The foregoing explains why, on the one hand, the non-governmental/private stakeholder approach is most associated with places where OA receives little or no government support (Institute of Natural Resources (INR), 2008; Parrott and Marsden, 2002; Pophiwa, 2012b). On the other, in countries such as China and Czech Republic, OA is state-facilitated for reasons ranging from environmental protection and poverty reduction to export revenue generation (Crucefix, 1998; Egelyng et al., 2013; IFAD, 2005; Paull, 2007). Relatedly, the use of policy approaches to advance OA development is founded on some of the following rationales. First, OA is considered to provide a range of environmental and social public goods, and a number of other benefits to society which cannot be taken care of by the market; these benefits, it is held, cannot be compensated by the food prices for organic products. Second, the organic sector is considered to be an "infant industry" requiring supports to nurse it to maturation and make it competitive (Dimitri and Oberholzer, 2006; OECD; 2003; Padel and Lampkin, 2007). Lastly, as indicated in a later part of this chapter, the policy approach is also used to encourage the adoption of OA, particularly by small scale farmers, and to foster the development of the organic sector (UNEP, 2011).

There is one more point to be noted about the four approaches to OA development. The policy-driven and market-oriented approaches, as it is subsequently

shown in this chapter, are approaches used by private stakeholders and government to facilitate the development of OA. In this sense, it can be said that the non-governmental/private stakeholder-led and government-facilitated approaches are the two major pathways to OA development. Following this brief exposition is a review of each of the four approaches to OA development.

### **The Market-Oriented Approach**

The market-oriented approach is also known as the export-driven or consumer-driven OA development approach (Bakewell-Stone et al., 2007; FAO, 2013). This approach is demand-focused because it primarily responds to increasing market demand for organically grown foods and products in developed countries, mainly in the EU, US and Japan. It is also export-oriented and mainly dominated by commercially-oriented organic farmers. It may also involve thousands of small-scale organic farmers and government agencies such as the Ministry of Agriculture. A more important stakeholder involved in the market-oriented approach are the intermediaries such as export traders and companies, donor agencies, development organizations and organic producer' organizations (Bakewell-Stone et al., 2007; Dimitri and Oberholzer, 2006; ICROFS, 2010; Scialabba, 2000; United Nations, 2002). Most of the intermediaries are located in developed countries. Their major role is to identify specific consumer demands for organic products in developed countries and work with organic farmers, mostly in the developing countries, to meet that demand (Hauser and Delve, 2007). Hence, in the market-oriented approach, the intermediaries often decide independently of the organic farmers, the crops to be produced, the organic sector to be developed, and the markets to



be targeted (Hauser and Delve, 2007). Also, since the market-oriented organic development model mainly responds to consumers' organic food needs, consumers also have a strong impact on what is to be produced and how the sector is developed (FAO, 2013).

Another important role of the intermediaries is that they provide farmers access to organic farm inputs that include, but are not limited to, organic fertilizers and improved varieties. They also provide value-added services and trainings that increase farmers' knowledge of organic production, enhance their productivity and market orientation (ICROFS, 2010). This includes providing organic farmers with capability building trainings on diverse aspects of organic production methods and organic technologies, farm management skills, extension services and market-oriented advisory services (Hauser and Delve, 2007). Another defining element of the market-oriented approach is that the organic certificate may be held by the intermediaries. This arrangement can change the power dynamics in the production chain to favor the traders and exporters who own the organic certificate and make decisions concerning what is to be produced by an organic farmer (Hauser and Delve, 2007).

One more important feature of the market-oriented approach is that it is mainly focused on certified organic production and mostly involves a wide range of cash crops and specialty crops. These include, but are not limited to organic coffee, cotton, cocoa, cowpea, sesame, spices, vanilla, date, and olive. In addition, the market-oriented approach involves the use of policy instruments to foster the development of local and export markets for organic produce (Dimitri and Oberholzer, 2006; ICROFS, 2010; Organization for Economic Cooperation and Development (OECD), 2003). Such policy

instruments include organic standards and labeling schemes (OECD, 2003). These market-oriented policy instruments can be developed by government agencies, marketers, or non-governmental organic stakeholders to serve two major purposes. First, they inform and guarantee local and foreign consumers that a particular produce labeled organic has met all the specific requirements that make it organic. Second, they guarantee compliance with the import requirements of other countries (Dimitri and Oberholzer, 2006; OECD, 2003).

The market-oriented approach is used in nearly all the OECD countries (OCED, 2003). It is also increasingly being promoted and adopted in most countries in the developing countries and more intensely in Africa because of its potential to improve the livelihood conditions of African smallholders through export earnings (Hauser and Delve, 2007; IFOAM, 2003). In developing countries and in Africa in particular, the market-oriented approach is mostly promoted by the donor community, marketers, development agencies and organic producer' organizations such as Export Promotion of Organic Products From Africa (EPOPA), IFOAM and FAO (Hauser & Delve, 2007).

Studies such as the one conducted by Pineau (2009, cited in ICROFS, 2010) has shown that this approach to OA development is capable of increasing the diversity of crops grown by organic farmers and can enhance farmers' food security conditions in Africa. For example, in Burkina Faso, Pineau (2009) reported that alongside organic cotton production, organic farmers involved in export-oriented organic farming were able to grow rotation crops and other related crops such as shea (*Vitellaria paradoxa*), pulses (*Cajanus cajan*), fonio (*Digitaria exilis*), and sesame (*Sesamum indicum*). Also, in Benin and Mali, ICROFS (2010) reported that export-oriented organic farmers that are

supported by Helvetas, a Swiss international cooperative, were also involved in the production of organic pineapples, mangoes and other fruit crops.

This approach seems to be contributing to the development of local food processing industries in Africa and creating more employment opportunities. For example, EPOPA initiated and supported exported-oriented organic farming projects in East African countries that have facilitated the development of small local food producing plants (EPOPA, 2008) and has also contributed to the increase in the number of certified organic producers. For example, Helvetas-supported export-oriented organic projects in Burkina Faso, Senegal and Benin led to the certification of about 14,000 small-scale organic producers between 2002 and 2009 (ICROFS, 2010).

The market-oriented approach has many drawbacks. One is that it discriminates against organic producers who are tied to one intermediary company or agent who decides what the farmers should produce and also holds the certification rights (Hauser and Delve, 2007). When the ownership of the certification is possessed by a company, it may be challenging for organic farmers to market their other organically grown crops, particularly in international markets (Bakewell-Stone et al., 2007). It also exposes organic producers to exploitation and risk because of their total reliance on one company for market access (Bakewell-Stone et al., 2007). Additionally, a breakdown of the farmers-intermediary trade relations may place the organic producers in jeopardy, as they may be faced with the challenge of securing another market for their products (Bakewell-Stone et al., 2007). Finally, the market-oriented model is likely to foster less attention on the preservation of ecosystems and may contribute to undermining the defining attributes that distinguish OA from other food production systems (Scialabba, 2000).

The emergent understanding from the review of literature on the market-oriented approach to OA development is instructive for this study. The review shows that, in Africa, the market-oriented approach is increasingly being promoted and adopted by public and private organic stakeholders, including development organizations. The review also indicates that the market-oriented approach is export-oriented and characteristically focuses on certified organic operations. The review further shows that the export market is the major driver of the OA in Africa and other developing countries. In addition, it also highlights that market-oriented policy instruments such as organic standards and labeling schemes are used by public and private organic stakeholders to create domestic and export markets. Just like other African countries, the Ugandan and Tunisian organic sectors are largely export-oriented and mainly driven by the demand from developed countries (Ben Khedher, 2012; Bolwig, 2012). Taking note of the foregoing, this study explores and accounts for the use of different market-oriented services, market-related instruments, such as organic and certification schemes and the appropriation of market-oriented OA model in stimulating the development of the Ugandan and Tunisian organic sectors.

### **The Policy-Driven Approach**

The policy-driven approach mainly involves the use of different policy instruments to stimulate the growth and development of the organic sector. This may entail the use of enforcing policies (OECD, 2003) or regulatory instruments such as national organic regulations and standards, which are used to define the “legally enforceable definitions of organic production” in a country (Padel and Lampkin, 2007, p. 96). Typically, such legal policy instruments would also specify the standards for organic

processing and outline the national procedures for organic inspection, certification and accreditation, organic labeling requirements and guidelines as well as permitted inputs and practices (Padel and Lampkin 2007; Stolze and Lampkin, 2009; Vogl et al., 2005). For example, the Chilean Organic Law sets forth the national procedure for organic product certification and labeling, authorizes and regulates certification agencies in the country and specifies sanctions for violations (Parra 2008). In Costa Rica, a national guarantee system that serves as national organic regulations, spells out the minimum baseline standards that certification bodies must observe for a product to be certified organic. The national guarantee system also stipulates the procedures for the accreditation of certification bodies and the legal entities that can carry out such accreditation.

Studies have documented the importance of regulatory standards to the development of OA. For example, a ten-country case study<sup>2</sup> commissioned by IFOAM indicated that the availability of a national organic legal policy instrument provided an entry point for farmers to adopt OA and spurred the development of domestic organic markets (Källander and Rundgren, 2008). The study also revealed that the absence of such regulatory frameworks hindered the uptake of OA and the development of the organic sector in some of the case study countries.

The policy-driven approach may also involve the use of financial policy instruments by organic producers, exporters and importers, and government to foster the development of OA (Daugbjerg et al., 2011; Michelsen, 2003; Moschitz and Stolze, 2010; Stolze and Lampkin, 2009; OECD, 2003). This may take the form of providing financial incentives such as tax reductions and exemptions from import duties for

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<sup>2</sup> The study covers five countries from developing economies, two from emerging economies and three from more developed economies.

equipment and supplies associated with organic production (Carey, 2008). It may also assume the form of subsidizing inspection and certification costs or offering free certification for organic farmers by government, development agencies, or organic exporters and importers (Källander and Rundgren, 2008; Padel and Lampkin 2007; Stolze and Lampkin, 2009). For example, to facilitate the uptake and conversion to OA, like most European countries, Denmark financed conversion costs by introducing conversion subsidies and area support payments. The latter is a conversion incentive payment that is based on the payment of €142 per hectare in the first two years of adoption of OA, and €14 per hectare in the later three years (Daugbjerg et al., 2011). Similar subsidy and incentive policies have been implemented in less industrialized countries such as Argentina and Hungary (FAO, 2013; IFAD, 2003). Studies have documented that subsidy measures, particularly area support payments and organic regulations, are the key public policy measures spurring the development of OA in Europe (Daugbjerg et al., 2011; Stolze and Lampkin, 2009; Offermann et al., 2009).

Generally, the use of financial policy instruments to facilitate the development of the organic sector entails the application of different economic incentives and disincentives which are predicated on price mechanisms and market considerations (Stolze and Lampkin, 2009). The foregoing highlights the difference between financial policy instruments and legal policy instruments which mainly operate through state political power and authority in the form of license or prohibitions (Michelsen, 2003; Stolze and Lampkin, 2009).

The third category of policy instruments is the communicative policy instrument, which involves the use of research, information and communication-related policy

support to stimulate the growth and development of OA (Michelsen, 2003; Padel and Lampkin 2007; Stolze and Lampkin, 2009). This may also involve free private or government-supported organic extension programs, advisory services, training and organic educational programs (Padel and Lampkin 2007). Taken together, communicative policy instruments involve the use of organic research to facilitate the development of the organic sector. This approach also entails using different communication instruments to create awareness about the importance of adopting OA and to sensitize the general public regarding purchasing organic produce and investing in the development of the organic sector (Padel and Lampkin 2007). Unlike legal policy instruments which are based on state political power and authority, and financial policy instruments which are informed by market considerations, as noted by Stolze and Lampkin (2009), “communicative instruments are based on mutuality and social norms of civil society and involve some kind of interaction between the regulator and the regulated citizens” (p. 239).

A mix of all three categories of policy instruments – legal, financial and communicative - is often applied to foster the development of an organic sector (Schmidt, 2012). The three categories of policy instruments may be being targeted at either the demand or supply side of the organic sector or both. The key goal of supply-side policies is to encourage farmers to adopt OA while that of the demand-side is to increase the demand for organic produce (Daugbjerg, 2011). The effectiveness of either depends on a number of factors which Källander and Rundgren (2008), Sanders et al. (2011) and UNEP-UNCTAD (2008) outlined as follows. First, the policies need to be formulated and implemented through a participatory process involving extensive consultation,

collaboration and communication with all organic stakeholders. Second, the policies need to be founded on clear objectives and a holistic appraisal of how existing agricultural policies may constrain the development and competitiveness of the organic sector. Third, policy coherence should be ensured by connecting general agricultural and specific organic policies with one another and to a strategic framework or action plan which provides direction for the overall growth of the organic sector. Fourth, the policies should be responsive to the interests of all organic stakeholders and need to be communicated to the public in an effective way that fosters trust and instills confidence that the policies will make the organic sector functionally competitive. Finally, the policies need to be backed up with a strong political will and an effective sector performance data collection mechanism to allow for the evaluation of the effectiveness of the policies and necessary review.

The preceding review of literature has shown that there are three regimes of policy instruments associated with the policy approach to OA development. These include the regulatory, financial and communicative policy instruments. The review further indicates that any of, or a mix of, the three policy instruments are necessary for stimulating the development of an organic sector. Furthermore, it was also highlighted that either private or public stakeholders could develop and apply any or a mix of the three regimes of policy instruments to foster the uptake and growth of OA. In addition, the review also enumerated some of the conditions that are imperative for designing an effective OA supporting policy. The foregoing explains this why study explores the role of different private and state-led policies in facilitating the development of Ugandan and Tunisian organic sectors. Also, the review provides the backdrop that helps articulate the



reason why specific policies supporting the organic sectors in the two countries have succeeded or need improvement.

### **Non-Governmental Stakeholder-Driven Approach**

The growth and development of OA in a country may be inspired by the activities of national and local NGOs, farming communities and organic movements which may operate in conjunction with international development agencies (Crucefix, 1998; Parrott et al., 2003). This is the prevalent means of fostering the development of OA in Africa and generally, in developing countries with little or no governmental support for their organic sectors. For example, in African countries such as Egypt, Ghana, Kenya, Nigeria, South Africa, Uganda and Zimbabwe, organic farming is promoted by local NGOs, farming communities and organic movements (local and international) to address food security issues, socioeconomic challenges facing farmers and agro-environmental issues constraining smallholders' agricultural productivity (Källander and Rundgren, 2008; Parrott et al., 2003). Similarly, in West African countries that include Senegal and Burkina Faso, in collaboration with international development agencies like EPOPA, local NGOs are responsible for spearheading the adoption of organic farming systems and the development of their organic sectors. They also engage in providing capacity development trainings on diverse aspects of organic production systems and in developing local certification standards with a view to reducing the cost of external certification (Kristiansen, 2006). As observed by Wynen and Fritz (2007), such organizations and movements often establish networks that agitate for the development of OA by influencing the direction of general agriculture policies and lobbying governmental bodies to remove obstacles hindering the development of the organic

sector. They also undertake various promotional, educational and sensitization activities that bring OA to the attention of the public, policy makers and mainstream agriculture industries (Wynen and Fritz, 2007). The main strengths of this approach include the following: i) it is based on 'farmers first' strategy and effective in facilitating the adoption of organic farming among smallholders; ii) it is focused on addressing explicit contextual local issues such as food security and rural livelihood challenges by using available local resources (IFAD, 2003; Parrott and Marsden, 2002); and iii) it is found to be effective in facilitating the diffusion of organic and sustainable agriculture farming technologies and in delivering capacity building trainings for organic operators (The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), 2002). However, its major weaknesses include the shortage of resources, particularly, financial and technical know-how, as well as the tendency to foster over-reliance on pioneering organic organizations (Crucefix, 1998; Parrott and Marsden, 2002).

The development of the organic sector may also be inspired by the activities of private sector stakeholders that include commercial producers and processors. This is the situation in Argentina, one of the world's leading organic countries, where commercial producers and processors are the main stakeholders fostering the development of the organic sector. Their activities and influence led to governmental support of the development of the Argentine organic sector (Crucefix, 1998; FAO/International Trade Centre (ITC)/Technical Centre for Agricultural and Rural Cooperation (CTA) (FAO/ITC/CTA), 2001). This said, there is one major issue with the private sector-driven organic sector development. It is typically focused on commercial organic production.

Therefore, a high possibility exists that it may undermine some of the defining principles of organic production such as the preservation and conservation of ecosystems.

### **Government-Driven Approach**

There are also occasions, however, rare, whereby the development of a country's organic sector is mainly state-driven. This is the situation in fewer countries like China, Serbia, Slovakia and Tunisia (Crucefix, 1998; UNEP-UNCTAD, 2008). In most of the countries however, OA often starts with non-governmental stakeholders' initiatives before the government develops an interest in the sector and become the key player in facilitating its development. This was the case with Tunisia, whereby, OA started in the country in the 1980s as individual producers' operations involving five to six farmers. It was not until 1997 that the Tunisian government became the main actor in supporting and promoting the development of the country's organic sector (Ben Khedher, 2004; Carey, 2008). Relatedly, in Serbia, it was an NGO known as Association Terra that started propagating the adoption of OA in the country before it became state-driven (Marz et al., 2013). In each of these countries and other places where OA is state-driven, the motivations for state involvement include reducing agrochemical imports, environmental protection, natural resource conservation and management, and employing the socio-economic potentials of OA as a means of generating foreign revenue, alleviating rural poverty and enhancing farmers' livelihood conditions (Crucefix, 1998; Källander and Rundgren, 2008; Marz et al., 2013; UNEP-UNCTAD, 2008).

The state-facilitated approach may involve different governmental entities taking the lead in fostering the development of the sector. This is the case with China where

several government institutions, agencies and ministries work together as the main stakeholders driving the country's organic sector. These entities were responsible for creating the Chinese national organic regulations and standards, domestic and international markets for Chinese organic produce, and in developing national organic policies that include different forms of subsidy packages (Källander and Rundgren, 2008). The state-driven approach may also involve establishing units within the Ministry of Agriculture or trusting the latter with the task of working with private stakeholders to foster the development of the sector. This is the situation with Serbia, where the Ministry of Agriculture collaborates with donor agencies, local NGOs and private sector stakeholders to coordinate the country's organic sector development through means that include creating national organic regulations, introducing subsidies targeted at certification costs, facilitating organic companies and organic educational activities (Källander and Rundgren, 2008). Also, as it is with Slovakia and Serbia, the state-facilitated approach to OA may entail drawing national strategy and action plans to help drive and coordinate the development of the organic sector (Lehocká and Klimeková, 2008; Marz et al., 2013). Generally, the government-facilitated approach to OA development has mostly been export-oriented. It usually involves setting up supportive organic institutional structures, employing different policy instruments such as national organic legislations/standards, supply- and demand-sides subsidies, providing specialized OA extension services and trainings, and supporting OA research to drive the growth of the sector (Crucefix, 1998; Källander and Rundgren, 2008; Marz et al., 2013; UNEP-UNCTAD, 2008).

A main challenge with the government-facilitated approach to OA development is that it may place too much control in the hands of government officials, who may not consult with private stakeholders when making important decisions. As it is with the Serbian experience, this may lead to the lack of coordination of projects and activities among private and public organic stakeholders, hence, the possibility that the development of the sector may be constrained or rendered unsustainable (Crucefix, 1998; Källander and Rundgren, 2008). However, to help overcome this challenge, and for governments to effectively help foster the sustainable development of an organic sector, UNEP-UNCTAD, 2008 (2008, p. xi) outlined the following as the conditions of success. First, the role of the government in the organic sector development should be that of an enabler and not a controller. Second, the state should create a permanent consultative body, institutional structures, or organic offices within government ministries or agencies that should partner with private stakeholders to advance and sustain the sector's growth. Third, the government should collaborate with private stakeholders to develop and implement action plans, programs, projects, and coherently structured policies that are responsive to the diverse needs and constraints of the sector; the action plans should outline the measurable targets to be achieved. Fourth, the state should facilitate the development of organic standards that are adapted to local socio-economic and agronomic conditions, and which also, should facilitate international market access. Fifth, the state should create an investment-supportive environment and initiate programs that can foster domestic OA market development and access to international markets.

### **Connecting the Four Approaches to OA Development**

The four major approaches to developing OA—the market-oriented, policy-driven, private stakeholders-led and government-driven approach—may not be entirely mutually exclusive. For instance, as indicated earlier and illustrated by many studies, private stakeholders and government may use the market-oriented approach to achieve some of their objectives of promoting and advancing organic sector development (Hauser and Delve, 2007; IFAD, 2005; ICROFS, 2010; OECD, 2003). Similarly, the policy-driven approach is applied by both private stakeholders and government to facilitate the development of an organic sector (Michelsen, 2003; Stolze and Lampkin, 2009). In addition, the development of an organic sector may result from the combined activities of private and public stakeholders, local and foreign-based. This may include local NGOs and government entities, local producers and processors and international organic development agencies such as EPOPA and IFOAM which are actively involved in developing OA in Africa (Santucci and Antonelli, 2004). Studies have also shown that building a sustainable organic sector requires an integrative and multidimensional approach involving active public and private stakeholders' participation (Källander and Rundgren, 2008; UNEP-UNCTAD, 2008). Despite Uganda's organic sector being private stakeholder, and Tunisia's, government-facilitated, the foregoing implicates the need to explore the impact of the involvement of different public and private stakeholders, policy instruments and market orientation on the development of the organic sector in the two countries. It also underscores the need to consider the synergies of the different approaches to OA development when advancing recommendations on how African organics can be developed based on the derivable lessons from the Ugandan and Tunisian

OA experience. Table 1 presents a summary of the main ideas for each of the 4 broad approaches – definition, rationale, stakeholders, and examples of countries where implemented.

**Table 1:** A Summary of the Main Ideas Underlying the Four Broad Approaches to Organic Agriculture Development

<b>Market-Oriented Approach</b>			
Features	Rationale	Stakeholders	Countries where Implemented
<p>Demand focused</p> <p>Specifically focused on certified organic products</p> <p>Uses legal and financial organic policy instruments like organic standards and conversion subsidy support</p>	<p>To enhance farmers' livelihood conditions, especially smallholders, through premiums accessed at national and international organic markets</p> <p>To improve food security among rural and farming households</p> <p>To foster the uptake of certified organic operations</p>	<p>Government agencies</p> <p>NGOs</p> <p>Commercial farms</p> <p>Agribusinesses</p> <p>Smallholders</p> <p>Organic producers' organizations</p> <p>Organic exporters</p> <p>Marketers</p> <p>Development and donor agencies like EPOPA, IFOAM, and FAO</p>	<p>United States</p> <p>Nearly all OECD countries. In many parts of the developed world.</p> <p>Increasingly being promoted in developing countries that include China, Tunisia, Uganda, and Burkina Faso.</p>
<b>Policy-Driven Approach</b>			
<p>Legal policy instruments (organic standards and legislation)</p>	<p>To specify standards and procedure for certified organic operations, organic inspections and the accreditation of certification companies</p> <p>To give assurance to consumers that an organic product has complied with all requirements</p> <p>To facilitate the entry of organic products into international organic export markets</p> <p>To foster the adoption of certified organic operations</p>	<p>Governments</p> <p>NGOs</p> <p>Organic exporters</p> <p>Importers</p> <p>Development and donor agencies</p>	<p>Mostly in developed countries</p>



Table 1 continued

<p>Financial Policy Instruments</p> <p>(Financial incentives, subsidies, grants, tax breaks, exemption from import duties, etc.)</p>	<p>To facilitate the adoption and conversion to organic food production systems</p> <p>To spur and support the development of markets for the organic sector</p> <p>To promote and support investment in the sector</p>		
<p>Communicative Policy Instruments</p> <p>(research, information, and training)</p>	<p>To create organic markets and increase consumers' awareness about the importance of consuming organic products.</p> <p>To encourage conversion to OA</p> <p>To stimulate investment in the organic sector</p> <p>To support and foster research and human capacity development in different aspects of organic agriculture</p>		
<p><b>Non-Governmental/Private Stakeholder-Driven Approach</b></p>			
<p>Based on the 'Farmer First' strategy</p> <p>Leverages on local and agro-ecologically sensitive resources</p> <p>Commercially-oriented</p>	<p>Focused on addressing explicit local challenges among farming households such as food security</p>	<p>Local civil society organizations (CSOs)</p> <p>Organic movements</p> <p>Development organizations</p> <p>Commercial producers and processors</p>	<p>Prevalent in developing countries, including Uganda, Egypt, Ghana, Senegal, and Croatia.</p> <p>Argentina</p>

Table 1 continued

<b>Government-Driven Approach</b>			
<p>Uses a broad mix of the three policy instruments- legal, financial and communicative</p> <p>May involve national actions and organic policies</p>	<p>To reduce agrochemical imports</p> <p>For environmental protection, natural resource conservation and management</p> <p>Foreign revenue generation, rural poverty alleviation and enhancement of farmers' livelihood conditions</p>	<p>Several government agencies (e.g., Ministry of Agriculture and Standards Organization)</p> <p>CSOs</p> <p>Donor agencies</p>	<p>China, Tunisia, Serbia, Slovakia and China.</p>

## **Organic Agriculture – Clarifying the Key Concepts**

There are many terms and concepts associated with OA. As it is with OA itself, most of them do not have formal and universally established definitions (FAO/ITC/CTA, 2001; Jacobsen, 2009; Ogunbanwo, 2011). The reasons for this include the lack of a unanimous approach to OA practical details, and the multifarious conceptions of the basic character and scope of the organic food production system (Dabbert et al., 2004; Radford, 2011; USDA 1980). As indicated by IFAD (2005), another related reason is because “organics lend themselves to the inherent variations of a particular place and set of conditions” (p. xiii). Against this backdrop, it is imperative to define and explain the key OA terms and concepts as applied in the context of this study. To start with, IFOAM and USDA definitions of OA are provided to buttress the points made earlier. The USDA defines OA thus:

Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles, and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, or enhance ecological harmony. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people (USDA, National Organic Standards Board (NOSB), <http://www.nal.usda.gov/afsic/pubs/ofp/ofp.shtml>).

IFOAM defines OA as follows:

Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved (IFOAM, <http://www.ifoam.org/en/organic-landmarks/definition-organic-agriculture>).

The IFOAM and USDA definitions indicate that an organic production system is based on scientific agro-ecological principles. However, the USDA definition seems to

put more emphasis on the use of inputs, management practices and the health benefits of organic products, in effect, portraying OA more as a marketing tool than a production system (von Sehlen 2007). This is not the case with IFOAM's whose definition appropriates the holism of the entire production system that defines an organic food production system.

- a) **Organic Standards:** These are regulations set forth to ensure that organic products, food and non-food, are produced, processed and distributed according to certain practices that emphasize agro-ecological principles of reliance on naturally-based nutrient and pest management tactics, recycling of nutrients, and avoidance of synthetics, including genetically modified organisms (GMOs) (Organic Trade Association (OTA), 2013). These regulations provide a list of accepted and prohibited methods and substances to be used in producing, processing and handling organic crops and livestock (FAO, 2009). In this study, organic standards refer to any national, regional and international standards put in place to specify and guarantee that what is considered organic are produced, processed and handled according to certain regulations, practices and methods.
- b) **Certification:** Formal and documented procedures by which a third party ensures that organic standards are followed (FAO, 2009; IFOAM, 2009b). Therefore, in this study, certification refers to any national, regional and international organic certification systems that certify that organic standards are followed.
- c) **Smallholder Group Certification:** This is a single certification of small-scale farmers registered within a group with similar organic farming practices who

market organic products collectively (FAO, 2009). This study adopts this definition.

- d) **Certification Body:** An organization performing certification. Sometimes referred to as the certifier or the certification agency (FAO/ITC/CTA, 2001). In this study, a certification body is any private or public national, regional or state agency that conducts organic certification.
- e) **Certification Label:** A label or symbol indicating that compliance with standards has been verified (FAO/ITC/CTA, 2001). Any label used in identifying an organic product is referred to as an organic certification label in this study.
- f) **Certified Organic Food Products:** Food products that have been verified to have been produced in accordance with specified standards for organic production and processing (FAO/ITC/CTA, 2001).
- g) **Certified Organic Agriculture:** Refers to agricultural systems and products that have been managed and produced in accordance with specific standards or technical regulations and that have been inspected and approved by a certification body (FAO, 2009). This study refers to certified OA as any farming operation that has been certified organic by any accredited certifying body.
- h) **Non-Certified Organic Agriculture:** According to FAO (2009), non-certified organic agriculture refers to organic agricultural practices by intent and not by default; this excludes non-sustainable systems which do not use synthetic inputs but which degrade soils due to lack of soil building practices. In this study, any farm production and management systems that are intentionally and voluntarily carried out to fulfill the requirements of organic production, but which are not

certified organic is referred to as non-certified organic agriculture. In countries like the United States, there is no such thing as “non-certified organic”.

- i) **Conventional Agriculture:** Refers to a high input farming method that relies on high external-energy-inputs and technologies to increase productivity. It involves the use of synthetic farm-inputs such as fertilizers, pesticides, hormones and antibiotics (Connor, 2008; Gianessi, 2009).

### **Conclusion**

This chapter has presented a review of the four major approaches to OA development and defined the key terms applied in the context of this study. The review provides the necessary backdrop and an entry point to explore and explain the development of the Ugandan and Tunisian organic sectors. It also underscores the necessity of combinations of approaches and engaging public and private stakeholders when rendering recommendations for the development of African organic agriculture based on the derivable lessons from the Ugandan and Tunisian OA experiences.

## **CHAPTER 3**

### **METHODS OF DATA COLLECTION AND ANALYSIS**

#### **Data Sources**

This study is based on a review of existing literature and secondary data on OA in Uganda and Tunisia. As explained below, the data used in this study were obtained from different sources, and were supplemented by information acquired through personal communication with organic stakeholders in Uganda and Tunisia.

A broad range of published and unpublished data on OA in Uganda and Tunisia are relevant for this study and can be broadly categorized into four categories. The first category provides general information on OA in the two countries, including the history and the development of OA as well as sectorial performance information (organic agriculture land, total organic production and exports, total organic export value). The second type supply specific and fairly detailed information on the major organic stakeholders (local and international) in the two countries, their goals and roles in facilitating the development of OA. The third category provides information on the policy reforms, policy instruments and institutions that were put in place to spur and support the growth of their OA sectors. To varying degrees, these references also included details on how the OA supporting institutions and policy instruments are created in Uganda and Tunisia. The fourth category of data consists of those that provide information on organic market development, and the promotional, research and educational activities that are in place in the two countries to drive their OA sector.

The references consulted included journal articles, strategy papers, commissioned studies, as well as country reports on OA in Uganda and Tunisia. Most of these are electronically accessible through a Google search. Some of the data, particularly on Uganda, are also available in unpublished dissertations/theses on OA. These were obtained electronically through a Google search as well.

Another source of information were the websites of the some of the major organic stakeholders in Uganda and Tunisia, including the websites of the National Organic Agricultural Movement of Uganda (NOGAMU)<sup>3</sup> and the Technical Centre of Organic Agriculture (CTAB) in Tunisia.<sup>4</sup> NOGAMU and CTAB are the two main organic institutions in Uganda and Tunisia. The NOGAMU website has information on the organization's OA activities, including the electronic copies of its quarterly publication, NOGAMU Bulletin, and its newsletter, Bio Market Place. The volume 33 of the NOGAMU bulletin was very useful for this research as it contained information on NOGAMU's activities, how the organization was founded as well as issues connected to the emergence of organic sector in Uganda. The newsletters also provided information on Uganda's organic sector performance over the years. The CTAB website also has a rich information database covering all aspects of Tunisia's organic sector, including electronic

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<sup>3</sup> The following are some of the other web links of the organizations where information was obtained about OA in Uganda. Rural Community in Development (RUCID) : <http://www.rucid.org.ug/activities.htm>; Sustainable Agriculture Trainers Network (SATNET): <http://www.satnet.org.ug/>; Kulika Uganda: <http://www.kulika.org/>; Caritas Kampala: <http://caritaskampala.org/>; Caritas MADDO: <http://caritasmaddo.com/>.

<sup>4</sup> The following are some of the web links where information on OA in Tunisia was obtained. Interprofessional Group of Legumes (GIL): [http://www.gil.com.tn/en/staticPage?label=attributions\\_16](http://www.gil.com.tn/en/staticPage?label=attributions_16); [www.iort.gov.tn](http://www.iort.gov.tn).



copies of laws, decrees and orders establishing Tunisian organic regulations, certification and inspection systems, subsidy packages and specialized OA institutions in the country.<sup>5</sup>

A significant part of the information used in this study also came from publications by specialized international organizations and institutions that support the developments on OA in different parts of the world, such as UNEP-UNCTAD, UNDP, FAO, IFAD, International Food Policy Research Institute (IFPRI), IFOAM, EPOPA and FiBL, Switzerland. These sources of information are available electronically and in hard copy format.

To identify and gather data used for this research, a literature review of existing studies and documents on OA in Uganda and Tunisia was at first undertaken. This provided a good understanding of the nature of the available data on OA in the two countries and the possible places where further information can be sourced. More importantly, the literature review made it possible to identify and compile a database and where possible, the contacts, of some of the key local and international stakeholders, who are involved in facilitating the development of OA in Uganda and Tunisia. The review also provided this study with preliminary background information on the institutions and strategies adopted in the two countries to advance their organic sectors.

Afterward, a more focused electronic and library search for additional information was embarked upon by using the database that has been compiled as a guide. The focus of this search was twofold. This includes, identifying the goals, programs and strategies adopted by the stakeholders to promote the development of OA in the two countries. The second objective was to obtain information on how the two countries created the key

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<sup>5</sup> Specialized OA institutions are dedicated public establishments created by the Tunisian government with an exclusive focus on different aspects of the organic sector.

institutions, markets and policy environment that spurred the development of their organic sector. In addition, some authors whose articles could not be accessed electronically were also emailed.

Finally, phone conversations and email correspondence were exchanged with some of the organic stakeholders in Uganda and Tunisia. This was with a view to seeking clarificatory information on some issues not well addressed in the literature and to request for some documents that were not electronically accessible. The information that was received through email exchanges and phone conversations are referenced as personal communication. In Uganda and Tunisia, 13 stakeholders were emailed and phoned, out of which, 10 responded. These sources of information are cited as personal communications. The determination to contact those stakeholders was based on a number of factors. This includes the insight obtained from the literature about their central roles in the evolution and development of OA in Uganda and Tunisia. Another factor that informed their selection is that some of the stakeholders, particularly, Alastair Taylor and Mohamed Ben Khedher have authored a number of authoritative and scholarly studies on the organic sectors in the two countries. This positioned them as competent authorities from whom information can be sourced on issues related to OA in Uganda and Tunisia. The last criteria is their access to information about OA in Uganda and Tunisia owing to their previous and present roles as heads and high ranking member of NOGAMU and CTAB, the leading organic organization and institution in the two countries.

The question posed to the stakeholders in Tunisia, mainly revolved around the activities and relationships among different public and private establishments involved in the country's organic sector. Some of these questions included the following. (1) What

are the activities of the National Federation of Organic Agriculture towards promoting OA in Tunisia? (2) What is the working relationship between the National Federation of Organic Agriculture and the specialized OA institutions in the questions?. The first two and the following questions were addressed to other Tunisian organic stakeholders contacted for clarificatory information: (3) What is the role of the National Commission for Organic Agriculture in the preparation of development plans and policy documents for OA in Tunisia?; (4a) How does the Directorate General of Organic Agriculture (DGAB) gather information about OA in Tunisia?; (4b) Is the same responsibility carried out by the National Commission for Organic Agriculture? Questions 3 – 4b were exclusively directed to the Director of the DGAB.

In the case of Uganda, among others, the following are some of the questions addressed to the organic stakeholders. (1a) Could you help identify the persons that introduced OA to Uganda?; (1b) What was their motivation? (2a); It is reported in the literature that some organic crops such as Bourbon vanilla beans (*Vanilla planifolia*), groundnuts (*Arachis hypogaea*), matooke (*Musa paradisiaca*) and cowpeas (*Vigna unguiculata*) are not actually part of the value chain development for which NOGAMU creates a market- what are the reasons for this?; (2b) Is it because of the export-orientation of OA in Uganda?; (2c) What are the regional and domestic markets for these non-traditional products?; (3) How does NOGAMU go about membership recruitment?; (4) What are some of the strengths and weaknesses of NOGAMU?; (5a) What are the activities of your organization in promoting OA in the country?; (5b) How does your organization connect with NOGAMU and other pro-organic groups in the

country?; Questions 5a and b were addressed to the pro-organic civil society organizations which were contacted.

The data collection process was not without challenges. Among these was the difficulty of assessing information on Tunisia's organic sector, which is written in languages other than English. This has meant having to secure the service of translators who assisted with the translation of information written in Arabic, French and Italian to English. The CTAB also assisted in translating some of such documents. The accuracy of the translation was ensured through backward translation from English to the original language of the translated texts. A related language challenge was faced when I had to communicate by phone and through email with some of the organic stakeholders in Tunisia. Again, the service of interpreters who are literate in French, Arabic and English was secured to help with some of the email exchanges and telephone conversations. Scheduling challenges arising from the time difference between the United States, Tunisia and Uganda was also encountered when I was trying to talk to the organic stakeholders in the two countries. Most of the time, especially in the case of Tunisia, phone conversations were scheduled between 3- 4 am, Eastern Time. To keep to such phone conservation schedules, I had to pass the night over at the interpreters' residents. There were occasions as well when neither phone calls nor emails were replied, especially, when I was trying to get supplementary information and some organizational documents from NOGAMU officials.

### **Data Analysis**

This study uses institutional analysis as its analytical tool. Institutions, as defined by North (1990) and applied in this study, "are the rules of the game in a society, or more

formally, are the humanly devised constraints that structure political and social interaction” (p. 3). This study further adopts the conception of institutions as organizations (Hodgson, 2006).<sup>6</sup> As the rules and norms of the game, institutions (training systems, political and legal systems, education system, market mechanisms, and policies) may pose either barriers or provide incentives and resources needed to carry out certain actions (Scott, 2005; Jackson, 2010). This explains why institutional analysis focuses on the identification and explanation of the roles of institutions in enabling or constraining the realization of certain actions (Helmke and Levitsky, 2004). One of the specific objectives of this study was to identify and explain the roles of different institutions in the development of the Ugandan and Tunisian organic sectors. For this and other reasons articulated thereafter, institutional analysis provides a means of achieving that specific objective.

Institutional analysis also focuses on the actors operating within an institutional context. Accordingly, it specifies that the interests of the actors, their resources and the strategies that they deploy in achieving their goals and to also overcome their constraints be identified and analyzed (Ingram et al. 1984, cited in King et al., 2006). The major governmental and non-governmental OA stakeholders in Tunisia and Uganda were identified, along with their goals, roles and the strategies that they use to facilitate the development of their organic sectors. This analysis also identified the challenges that constrained the OA stakeholders from achieving their objectives and how those were mitigated. The information obtained from any or a combination of the following data

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<sup>6</sup> Some writers consider the definition of institutions as organizations to be different from North’s (1990). However as aptly argued and clarified by Hodgson (2006), such interpretation of North’s definition may not be necessarily valid. North (2002), cited in Hodgson (2006, p. 19) stated that, “organizations are special institutions. I think for certain purposes, we can consider organizations as institutions”.

collection techniques can be used for an institutional analysis - literature review, focused-group discussions, key informant interviews, and questionnaires (Larsson et al., 2013; Matsuert 2002; Noelting, 2006; Sinha et al., 2000). This data requirement also makes institutional analysis well suited to this study.

Institutional analysis has been used by many studies to explain the development of OA (Egelyng et al., 2013; Michelsen et al., 2001; Morin, 2007; Moschitz et al., 2004; Larsson et al., 2013). These studies found that the development of an OA sector depends on a supporting and growth spurring institutional environment. The institutional analysis of the development of an organic sector broadly involves the investigation of the social context within which OA evolves. It also entails the examination of the role of policy instruments in fostering the development of an organic sector (Egelyng et al., 2013; Egelyng and Høgh-Jensen, 2006; Michelsen et al., 2001; Noelting, 2006). Furthermore, it requires explaining the creation of markets for organic products and the impacts of the activities and self-organization of different organic stakeholders in fostering the growth and development of an organic sector (Michelsen et al., 2001; Egelyng et al., 2013). In addition, it requires analyzing the role of research, education and extension services in the development of OA (Egelyng et al., 2013). Overall, institutional analysis as applied in these studies is based on the following analytical components: sector's key stakeholders and institutionalization; policy and action plans; regulatory framework and certification bodies; organic market initiatives and awareness creation; and OA research and training. This study data analysis is based on these analytical dimensions.

The aspect of the analysis on sector's key stakeholders and institutionalization involves identifying the actors that are involved in the Ugandan and Tunisia's organic

sectors and their characterization as governmental (ministries, government agencies and specialized public OA institutions) and non-governmental (national organic coordinating bodies, pro-organic NGOs, Community Based Organizations (CBOs) and international development organizations). The stakes of the actors, their roles, and alliances, in addition to the activities and programs that they undertook, were determined and used to explain their contributions to the development of OA in the two countries. Furthermore, the challenges faced by the key organic stakeholders and the mechanisms devised to address them were identified and used to explain how such impacted the growth of the organic sector in Tunisia and Uganda. Finally, the social contexts under which OA became established in Uganda and Tunisia through, for instance, the creation of the coordinating umbrella bodies, was used to illustrate how OA became institutionalized in the two countries.

The dimension of the analysis on policy was centered on determining the legal and financial instruments created to support the development in the two countries. These include national OA policy and action plans, subsidy packages, tax breaks, grants and other forms of financial supports. The effectiveness of those policy measures was then accounted for by taking note of how their underlying objectives and outcomes translated to the growth of OA in the two countries, through, for example, increasing the number of organic operators, organic farmland and organic product diversification. Relatedly, the dimension of the analysis on regulatory frameworks and certification bodies was focused on establishing the availability of national and regional organic standards/legislation in the two countries. This included public and private-initiated organic regulatory frameworks. Attention was also given to the existence of other forms of organic quality

assurance systems, such as the participatory guarantee systems. The reasons for creating the regulatory frameworks, the processes involved in doing that, and their impacts in facilitating, among others, trade in certified organic products was used to implicate their roles in stimulating development of OA in Tunisia and Uganda. The other part of the analysis centered on establishing how organic certification and inspection was carried out in the two countries. Here, attention was paid to the role of foreign certification bodies and the development of local organic certification capacities and their consequential impacts.

The domain of the analysis on organic market initiatives and awareness creation involved identifying and accounting for the effectiveness and drawbacks of various measures, market infrastructures and information dissemination mechanisms, and programs and activities undertaken in the two countries to create local and export markets for their organic products. Finally, the locus of the analysis on research and extension services was centered on identifying and assessing OA human development capacity programs, and extension and outreach services conducted by private and public stakeholders in the two countries. Also, it extended to the institutionalization of OA research and education to support the sector. Note was taken of the factors that facilitated and limited the success of such efforts in supporting the development of the organic sectors in the two countries. Finally, using the above analytical dimensions, a comparison of Tunisian and Ugandan OA development experiences was undertaken to derive lessons that can help advance Africa organics.



## **CHAPTER 4**

### **ORGANIC AGRICULTURE DEVELOPMENT EXPERIENCE IN UGANDA**

#### **Introduction**

This chapter explains the development of Uganda's organic sector. It begins with a brief insight into the historical context of the evolution of Uganda's organic sector and a discussion of the sector's performance over time. The second section explains the several roles of NOGAMU in stimulating the development of OA with a focus on training and extension services, organic market creation, organic policy development, standards and certification. The next three sections discuss the roles of local civil society organizations, development agencies and government in the development of Uganda's organic sector. This is followed by a discussion on organic research in Uganda. The last section summarizes the discussion in the chapter.

#### **Uganda's Organic Sector: Historical Overview and Sector Performance**

Agriculture dominates the Ugandan economy, employing over 66% of the population, and contributing 22.9% of the total GDP (Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), 2011; Uganda Bureau of Statistics (UBoS), 2012). More than 95% of the Ugandan farming population are smallholder subsistence farmers cultivating an average holding of less than 2 hectares (Muwanga, 2006, 2008; Tumushabe et al., 2007; UBoS, 2009). Due to poverty and other factors, most of these farmers cannot afford synthetic farm inputs such as fertilizers and pesticides (Forss et al., 2008; Muwanga, 2006; UBoS, 2009). This has resulted in a limited application of synthetic farm inputs whose estimated average national use is less than 1kg/ha/year. (FAO, 2007,

cited in EPOPA, 2008; UNEP-UNCTAD, 2008). The average national agrochemical use of less than 1kg/ha/year indicates that most Ugandan farmers have never used synthetic farm inputs (EPOPA, 2008; UNEP-UNCTAD, 2008). It also suggests that agriculture in the country for most farmers has largely been organic by default (Forss et al., 2008). The civil war that broke out in the country also played a role in this as a ban was placed on the importation of all forms of chemicals. This deprived Ugandan farmers of any access to synthetic farm inputs for about two decades (Forss and Lundström, 2004).

The dearth and the limited use of synthetic farm inputs, coupled with declining agricultural productivity, arising in part from many unsustainable traditional farming practices paved the way for the deliberate promotion and adoption of organic farming principles in Uganda in the late 1980s (Walaga et al., 2005; UNEP, 2010). Accordingly, Walaga et al. (2005) stated, “since the late 1980s, Ugandan civil society organizations have been working with resource-poor farmers to reverse declining farm productivity by developing sustainable farming systems based on organic agriculture principles” (p. 9). These organizations include religious and non-religious NGOs as well as community based organizations (CBOs). Development organizations such as the United Nations Development Programme were also part of this advocacy (EPOPA, 2008; Forss et al., 2008; Walaga, 2005; Kansangaki, 2005; Walaga et al., 2005). The Ugandan civil society organizations (CSOs) and their collaborating partners felt that the adoption of organic-based sustainable farming system, which included ecological farming would offer a reliable means of enhancing Ugandan degraded soils, addressing environmental issues such as erosion and keeping insect pests and diseases under control. Equally, they found

such a food production system to be suitable to the Ugandan farmers' socioeconomic conditions as it leverages on local resources and indigenous knowledge without the use of synthetic farm-inputs to increase productivity and farmers' income earnings (EPOPA, 2008; Kansangaki, 2005; Walaga et al., 2005).

In the late 1980s, when some of the Ugandan CSOs were promoting organic farming-like sustainable farming systems<sup>7</sup>, some Ugandans, including Proscovia Nankya and Samuel Nyanzi<sup>8</sup> (Kazozi, 2005; Nankya pers. comm., 2013; Nyanzi, pers. comm., 2013), who studied the art of organic farming in the United Kingdom introduced OA into the country (Jacobsen, 2009; Nyanzi, 2011). Unlike the civil society organizations, these Ugandans were specifically promoting an organic food production system. This heralded the beginning of non-certified OA in Uganda as the operations were not certified. However, in 1993, certified organic farming took root in Uganda when some European-based commercial companies cognizant of European market demand for organic cotton seized the opportunity and argued that agriculture in Uganda was already organic by default and suitable for certified production (Forss et al., 2008; Opolot et al., 2006; Parrott et al., 2003; Taylor, 2006; Walaga et al., 2005; Waniala, 2004). Another account suggests that it was in 1994 that certified organic production started in Uganda when the Lango Organic Cotton Promotion (LOFP) scheme took root (EPOPA, 2008; Gibbon, 2006; Taylor, 2006). To this effect, Gibbon (2006) states, “certified organic export

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<sup>7</sup> Organic farming-like sustainable farming systems is not entirely based on the core principles of organic agriculture. It involves blending some elements of organic food production systems with other forms of sustainable farming practices that are not organic.

<sup>8</sup> Proscovia Nankya and Samuel Nyanzi learned the art of organic agriculture at Emerson College, United Kingdom. Although at Emerson College, Proscovia Nankya and Samuel Nyanzi majored in Biodynamic Agriculture, they studied organic farming as well. Upon the completion of their programs, they returned to Uganda to start their own organic farms and also worked with Catholic Archdiocese of Kampala, as well as farmers, to teach and spread the art of organic food production (Nankya pers. comm., 2013; Nyanzi, pers. comm., 2013).

production in Uganda dates from 1994 when, with support from Swedecorp, the Swedish certification body Krav approved the LOFP scheme and when the fruit and vegetable exporter Suntrade ... gained certification” (p. 5). However, evidence provided by Waniala (2004) seems to suggest that 1993 is the accurate year that certified organic operation began in Uganda. Accordingly, Waniala (2004) documented that in 1993, Uganda’s pioneer organic export company, Suntrade Limited (now African Organic Limited) exported 100 tons of certified organic horticultural products from Uganda to some European countries. Suntrade Limited trades in fresh and dried organic fruits and vegetables, vanilla (*Vanilla planifolia*), ginger, and chilies. Tumushabe et al. (2006) also provided supportive evidence in favor of 1993 as the year certified organic operations started in Uganda.<sup>9</sup>

Following the success of the LOFP project, which resulted in the production and the exportation of organic cotton and sesame oilseeds the Swedish International Development Agency (SIDA) started the EPOPA program in Uganda in 1995 (Forss et al., 2008; van Elzakker and Leijdens, 2000). The EPOPA’s objective is to promote and facilitate the production and exportation of organic products from Africa by working with small scale farmers. The launching of EPOPA in Uganda in 1997, coupled the creation of NOGAMU in 2001 marked the beginning of organic sector in Uganda. To this effect, Forss et al. (2008) write:

when EPOPA started in 1995, there was no organic sector in Uganda. A few exporters had started pilot projects in cotton and sesame, but that was all. There

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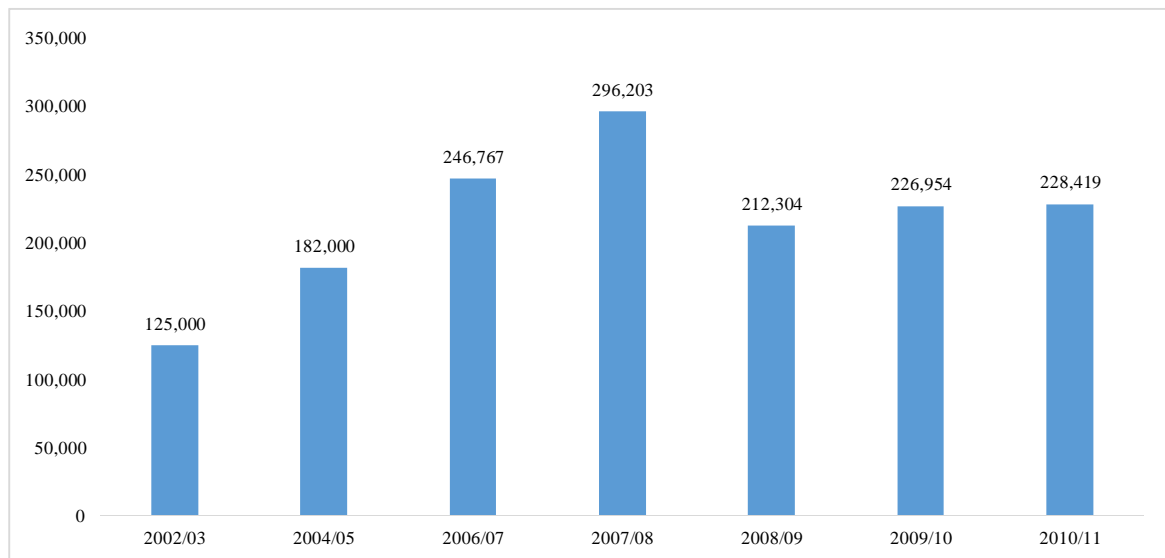
<sup>9</sup>It is essential to clarify the exact date that certified organic operations took root in Uganda because it helps understand the roles of different stakeholders and the broader social context within which organic farming took root in Uganda. In this sense, one is able to highlight the role of the private sector in the evolution and development of certified organic agriculture in Uganda.

were no organizations of organic sector stakeholders, no policy documents, no recurring training program, no certification facilities (p. 32).

The emergence of EPOPA and NOGAMU has also accelerated the expansion and diversification of organic production in the country (Forss and Lundström, 2004; Gibbon, 2006; Namuwoza and Tushemerirwe, 2011; Walaga, 2005). Also, since the creation of these two institutions, particularly a decade from 2001, Uganda's organic sector has been growing to the extent of recording impressive annual double digit growth rate in all areas. For example, from two organic crops (coffee and cotton) in the 1990s, Uganda has since the early 2000s, been producing a wide range of certified organic crops for export and local consumption, including: assorted organic fruits (pineapple, apple bananas (*Musa acuminata* × *M. balbisiana*), jackfruit (*Artocarpus heterophyllus*), mango, papaya and passion fruit); organic vegetables (broccoli, lettuce, and potatoes) spices (garlic, onions, leeks (*Allium ampeloprasum*), rosemary (*Rosmarinus officinalis*), etc.); organic oil crops (sesame, oyster nut); and processed products (dried apple bananas, dried mangos, dried pineapples, wines and juices, Moringa (*Moringa oleifera*) leaf and powder) (Namuwoza and Tushemerirwe, 2011; NOGAMU, 2011; Taylor, 2006; Walaga, 2005; Walaga and Kakinda, 2002).

Also, as shown in Fig. 1, since the early 2000s, certified organic land has tremendously increased in Uganda – between 2002/03 and 2006/07, certified organic land increased from 125,000 ha to 246,767 ha – a 97% growth rate. From 2006/07 to 2007/08, Uganda's organic land increased by another 20%. However, between 2007/08 and 2008/2009, the organic land in the country decreased from 296,203 ha to 213,304 ha. This was due to the government's interference in the sector through a directive demanding that organic cotton production be reduced. The backdrop for the government

decision is associated with the mass conversion to organic cotton production during the year 2007/2008 in the east and northern regions and a corresponding drop in yield in the year that followed. The mass conversion, the government argued, was not backed up with adequate extension services and training on organic production techniques, pest and disease management. As a result, this led to poor yields recorded during the year in question and consequently, government's intervention calling for organic cotton produced to be downscaled in the affected regions. Since the decline, the land in organic production in Uganda has been on a gradual increase as there are now 228,819 ha of certified organic land in the country (FiBL and IFOAM, 2013; Kasita, 2008; Namuwoza and Tushemerirwe, 2011; NOGAMU, 2010a).

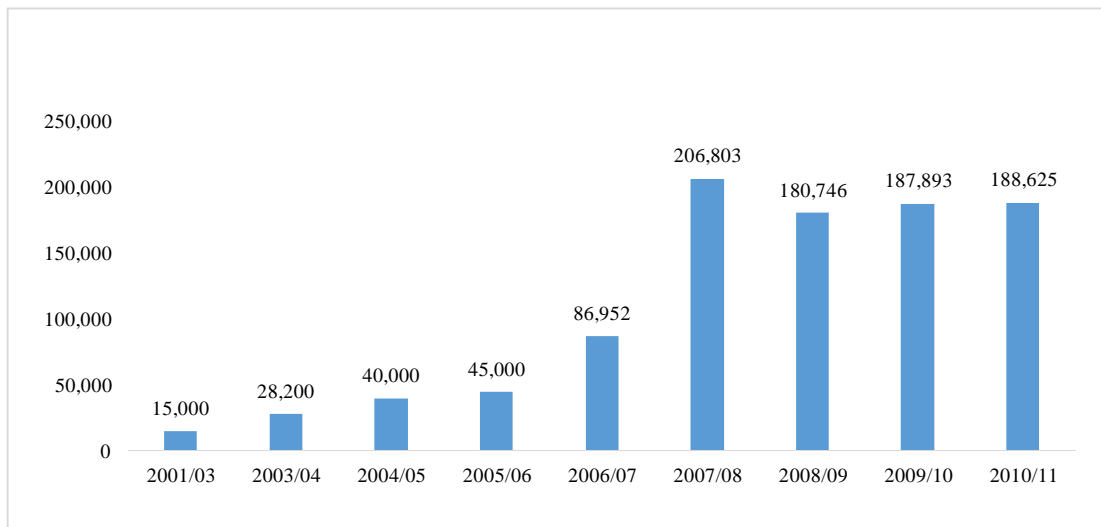


**Fig. 1.** Total Area (hectares) under Organic in Uganda

Source: (FiBL-IFOAM, 2013; NOGAMU, 2010a; Namuwoza, pers. comm. 2013).

Similarly, the number of organic farmers in Uganda has been on the increase. As shown in Fig. 2, from 15,000 in 2001/03, organic producers in Uganda increased to 45,000 in 2005/06 and further to 206,746 in 2007/2008 before declining to 180,746 in

2008/09, the same period when organic land in the country decreased by 30%. Before the decline, which was informed by the reasons earlier stated, Uganda's organic sector was growing at an average annual growth rate of 159.84%. Following the decline, that is, from 2008/09 until now, the number of organic growers in Uganda has been on the increase at an average annual growth rate of 4.36%. Presently, Uganda has 188,625 organic farmers (most of whom are smallholders), the world second largest that is next in rank to India's 400,551 organic producers (Willer and Kilcher, 2012).

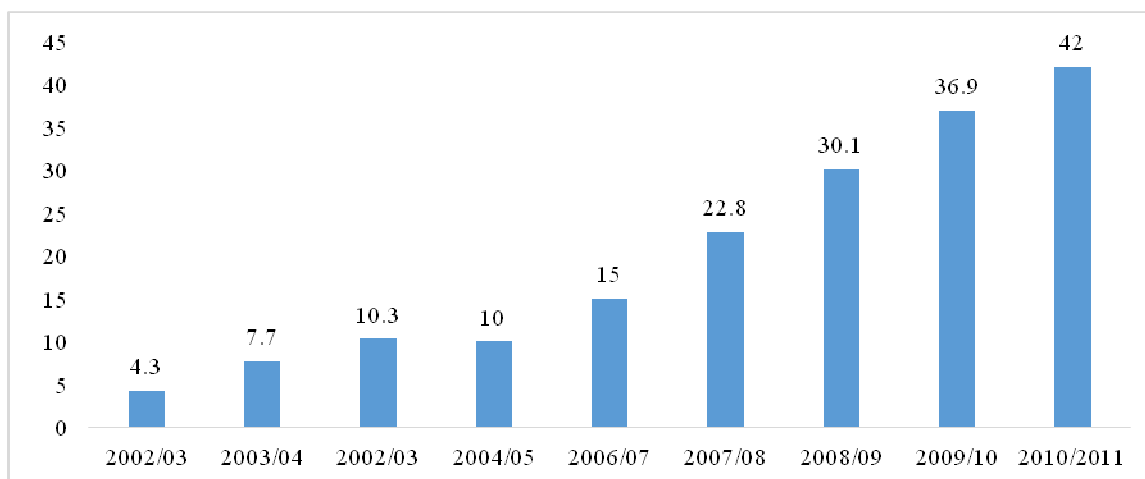


**Fig. 2.** Total Number of Certified Organic Farmers in Uganda

Source: (Namuwoza, pers. comm. 2013; NOGAMU, 2010a).

In addition, as indicated in Fig. 3, Uganda's export earnings from organic products have been on the increase as well (NOGAMU, 2010a; NOGAMU, 2011; Willer and Kilcher, 2012). It is essential to highlight that there is no evidence linking the growth in Uganda's organic sector to the performance of the country's economy or its agricultural sector. Instead, the growth in Uganda's organic sector has been attributed to

the growth in international markets and trade for organic products over the past one decade (Namuwoza and Tushemerirwe, 2011; Opolot et al. 2005).



**Fig. 3.** Uganda's Value of Organic Exports in Million US (2002-2011)

Source: (Namuwoza and Tushemerirwe, 2011; Namuwoza, pers. comm. 2013; NOGAMU, 2010a).

Finally, the remarkable growth and development in Uganda's organic sector, which is evidenced by the preceding sector performance data has been attributed to the activities of some key private stakeholders and collaborating development agencies. In the next section, these stakeholders are identified. Their goals, roles, strategies and how they created the institutional and policy environment that favored the development of Uganda's organic sector are also explained.

### **NOGAMU: The Institutionalization and Development of Uganda's Organic Sector**

NOGAMU has been identified as the principal actor that inspired the accelerated growth and development of Uganda's organic sector (Forss and Lundström, 2004; Hine and Pretty, 2006; IFOAM, 2009c; Muwanga, 2008; Namuwoza and Tushemerirwe, 2011; UNEP-UNCTAD; 2008; Taylor, 2006; UNEP-UNCTAD CBTF, 2010; Walaga et al.,



2005) To this effect, Namuwoza and Tushemerirwe (2011) note, “the key institution behind the growth of the organic sector in Uganda is NOGAMU” (p. 117) Also, in its report on organic Agriculture in East Africa, UNEP-UNCTAD CBTF stated, “the development of the organic agricultural sector can be linked to the strong local organic movement, the National Organic Agricultural (NOGAMU)” (p. 13). NOGAMU is an umbrella organization which unites producers, processors, exporters, NGOs and other institutions and organizations that are involved in the promotion and development of the organic sector in Uganda (NOGAMU, 2013a). Beyond being an umbrella organization, NOGAMU is one of two institutions put in place by the country’s non-governmental organic stakeholders to foster the development of their organic sector (Forss et al., 2008).

NOGAMU was established in 2001. Its formation owes its origin to ideas conceived by Uganda’s organic stakeholders in the 1990s (NOGAMU, 2011). According to Patrick Sesegujja, one of the organization’s founding fathers, NOGAMU’s birth owes to an idea that emanated from a road side discussion involving some organic farming trainers in the 1990s. In this regard, Sesegujja (2011) notes, “it all started as a by-the-way in the course of talking about our work... Out of that simple road side discussion, we agreed to meet and talk about coming together to promote organic farming and ... eating organic food” (p. 12). Betty Nabanja, NOGAMU’s first Secretary offers a similar but a slightly different account of how it all started. By her account, it was in 1991 when there was a request to convert to organic production that a need was felt for “all existing organic satellite groups to come together and have a center at Mamanve” (Nabanja, 2010, p. 9). Elaborating on Nabanja’s account, Proscovia Nankya, NOGAMU’s first Executive Secretary, who also is one of the Ugandans who introduced organic farming into country,

said that the challenges facing the organic sector birthed the idea of a coordinating body. Accordingly, she notes, “we conceived the idea of forming an organic organization after undergoing a number of challenges in the sector” (Nankya, 2010, p. 9).<sup>10</sup> One of the challenges was the government’s ill-disposition to OA. Uganda’s government felt the adoption of OA will compound the food security crisis in Uganda. Also, the promoters of OA in Uganda lacked scientific evidence and intellectual grounding to counter the government’s opposition (Nankya, 2010).

Alastair Taylor, NOGAMU’s first Chairman, adds another dimension to the ideas that led to the birth of NOGAMU. Taylor suggested that the need to have an organization that could stimulate organic production and marketing led to the formation of NOGAMU. Taylor further linked the birth of NOGAMU to a workshop that was sponsored by USAID to promote certified organic crop exports in Uganda in the late 2000. During the workshop, Taylor noted, one of the speakers, Fritz Planner, proposed that it was time to have a coordinating body to promote organic farming and marketing in Uganda. This proposal led to a series of meetings involving NGOs promoting sustainable agriculture discussing how the umbrella body would be formed (Taylor, 2010).

Suntrade Limited, an organic exporting company in Uganda that trades in fresh and dried organic fruits, vegetables and value-added organic products also played a role in the formation of NOGAMU (Muwanga, 2010). Noting the role of Suntrade, Muwanga, NOGAMU’s Chief Executive Officer stated, “during one of their annual external

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<sup>10</sup> Proscovia Nankya’s account was referring to the effort made by her, Samuel Nyanzi, one of the pioneers of organic farming in Uganda, and Betty Nabanja to start an organization that can cater to the needs, and advocate for the interests of organic farmers in the country.

inspection meetings by IMO,<sup>11</sup> the directors of Suntrade invited other stakeholders to discuss opening up an NGO” ( p. 8). Muwanga adds, “that meeting was attended by an IMO inspector. In the meeting, a task force was instituted to organize a meeting of all stakeholders” (p. 8). It was at this meeting, which held in 2000 that an interim committee which consisted of nine members drawn from different NGOs and CBOs associated with sustainable organic agriculture in Uganda was set up to see NOGAMU launched in 2001 (Muwanga, 2010). Kulika Charitable Trust, Uganda (henceforth, Kulika), an NGO that trains farmers in sustainable organic agriculture also played a supportive role in the establishment of NOGAMU. Kulika, a local NGO that is supported by Norway and Sweden (Rudaheeranwa et al., 2003) provided the office space where the interim committee held a series of meetings (Nyanzi, 2010; Taylor, 2010). With about 100 stakeholders, including 10 founding organizations consenting to the formation of NOGAMU at Kampala City Hall as the coordinating body for Uganda’s organic sector, NOGAMU was birthed on January 15, 2001 (Forss et al., 2008; Nyanzi, 2010; Waniala, 2004). The office space donated by Kulika was maintained as the organization’s office until 2002 when NOGAMU secured its own office through funding from the Humanist Institute for Cooperation (Hivos), a Dutch aid NGO (Muwanga, 2010; Taylor, 2010).

From the preceding discussion, it is evident that the creation of NOGAMU resulted from the efforts and interest of arrays of stakeholders. These include individuals, groups (NGOs and CBOs), organic export companies and development organizations that were dedicated to the growth of OA in Uganda. The discussion has also outlined the motivations underlying the formation of NOGAMU, including the need for an

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<sup>11</sup> The Institute for Marketecology (IMO) is one the international organic certification bodies operating in Uganda.

organization that was dedicated to stimulating and promoting organic farming and food consumption in the country. Another motive was for a body to serve as an umbrella coordinating body to unite all organic stakeholders, advocate for their interests, and develop ways to help address the challenges constraining the development of organic farming. One more motive was the need to have a coordinating organization that can stimulate markets, particularly export markets, for the country's organic products. Taken together, the preceding discussion helps understand why the vision of NOGAMU is framed thus: "to attain increased incomes and improved livelihood through adoption of organic agriculture" and its vision "to coordinate and promote organic agricultural development, networking and marketing." NOGAMU's objectives are:

1. To build capacity and promote training, research, extension and education in organic agriculture in Uganda.
2. To promote local and export marketing of organic products from Uganda.
3. To develop and increase the application of organic standards and promote certified organic production in Uganda.
4. To increase awareness and attract support for organic agriculture in Uganda (NOGAMU, 2013a).

To attain the following objectives, NOGAMU seems to recognize the need to build a strong, quality, committed and broad membership base with a foothold in all parts of Uganda and among all organic stakeholder groups in the country, particularly, smallholders (Taylor, pers. comm. 2013). With the following in mind, the first interim central committee put in place during NOGAMU's nurturing stage consisted of nine members drawn from nine different organizations. This enabled NOGAMU to achieve

spread, develop the capacity to mobilize members across groups and gain a foothold among existing groups that are interested in organic production (Muwanga, 2010). Also, to gain footing in all corners of Uganda, NOGAMU forged strategic alliances with designated like-minded organizations (NGOs, CBOs) that are located in different parts of the country. Amongst others, this includes Caritas Kampala<sup>12</sup> in the central, Lango Organic Farming Promotion in the north, Restless Development and Students Partnership Worldwide in the east, and Sustainable Agriculture Trainers in the west (Muwanga, 2008; NOGAMU, 2013a; Taylor, 2006). Also, to foster membership mobilization from all corners of Uganda, a room was provided for inclusive and regional representation in the management of NOGAMU. This demanded having the country divided into four broad regions, north, central, east and west with each having one place in the central committee of seven people that runs the affairs of NOGAMU. Regional representatives were elected by regional members. This guaranteed regions and members a full sense of representation in NOGAMU, hence, aiding in the mobilization of more members (Taylor, per. comm. 2013). Taylor further noted that as NOGAMU grew stronger, so did the regional representation to the extent that they had their individual focal points within strong organizations in their regions. This development positioned the focal points to promote NOGAMU to the people, groups and businesses with which they came into contact (Taylor, per. comm., 2013).

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<sup>12</sup> Caritas Kampala is a Catholic, faith-based NGO that is located in Kampala, Uganda's capital and largest city and the majority of its members are peasant farmers and small traders. Caritas Kampala is involved in socio-pastoral activities aimed at improving the livelihood conditions of its members and the poor in Kampala. One of the ways that Caritas Kampala uses to achieve its aims is by promoting the adoption organic farming. The OA promotional activities of Caritas Kampala are explained in a later part of this chapter. For more information on Caritas Kampala see, <http://caritaskampala.org/about-us/>.

Additionally, NOGAMU also structured its membership drive on three distinct membership categories – individual membership; small farmers' organizations and CBO's corporate membership; and large farmers' organizations, big export companies and NGO's corporate membership (NOGAMU, 2013b). As explained later, programs were put in place to meet the needs of all of these membership categories (Muwanga, 2010). This also enabled NOGAMU to draw members across a broad spectrum to the extent that the organization has members representing processors, exporters and producers, extensionists and researchers (Taylor, 2006).

Another aspect of NOGAMU's membership recruitment strategy is to make itself attractive to small-scale farmers. To do this, NOGAMU adopted what Muwanga (2008) described as a “deliberate policy of ensuring farmer influence on the directives and direction of the organization” (p. 173). In this regard, NOGAMU created committees involving farmers as members. Farmers were also permitted to vote for the Centre Committee that runs the organization (Taylor, 2006).

Reward mechanisms were also devised to retain existing members and draw new ones to the organization. This includes sending quarterly newsletters to all registered members of the organization. The newsletter is a way of strengthening the linkage between NOGAMU and its members (Forss and Lundström, 2004); it also serves as a means of updating members about NOGAMU's activities and providing useful information that can enhance members' organic farming operations (Taylor, 2010). Other reward mechanisms put in place by NOGAMU include conducting trainings for registered members at subsidized rates and providing them with market information and linkages, internationally and domestically (Nansimbi, 2010; NOGAMU, 2013b; Taylor,

per comm. 2013). In addition, NOGAMU has been able to sustain its membership and made itself attractive to new members by basing its activities on the needs of its members and stakeholders in Uganda's organic sector (Taylor, 2008). While stressing this, Muwanga (2010) submitted, "there are two things that make NOGAMU successful. First our activities are designed from the real needs of the members. The program is relevant to our target group. Secondly, NOGAMU has established a solid governance system and accountable secretariat" (p. 8).

The NOGAMU's membership recruitment strategy seems to be effective. In 2001, NOGAMU's membership consisted of about 20 individuals and less than 10 member organizations. By mid-2005, NOGAMU had 300 individual members and 80 corporate members (NOGAMU, 2013b; Taylor, 2006). As of 2013, the organization has more than 565 individual members and 325 corporate members representing over 200,000 small scale farmers (NOGAMU, 2013b). As at 2008, more than 90% of organic businesses in Uganda were reported to be members of NOGAMU (Guijt and Woodhill, 2008).

Also, to make the organization well positioned to achieve its stated objectives, NOGAMU realized the need to develop and sustain a succession of dedicated, visionary and accountable leadership. To accomplish this, first, NOGAMU developed a transition program requiring board members to be elected every two years by the General Assembly. This is strictly followed, hence, paving way for a smooth and credible leadership transition. Second, the board was broken down into four strategic committees to allow for inclusive and participatory leadership. These are the executive committee, assets and finance committee, audit committee, and nominations and program committee. Third, a mechanism was put in place to recruit and retain experienced personnel to help

manage and coordinate the day-to-day activities of NOGAMU. Fourth, a system that fostered financial accountability and responsible leadership was developed. This involves consulting with members on financial matters, keeping detailed records of all incomes and expenses and having the organization's finances audited by certified auditing companies. The audit committee helps in determining the selection of auditors (Nkuba, 2010; Muwanga, 2010; Nankya, 2010; Taylor, 2010). The following factors enabled NOGAMU to establish a credible and highly stable strong organization that operates on good governance, sustainable transition and financial accountability. They also assisted NOGAMU in developing the organizational capability needed to spearhead the development of the Uganda's organic sector (Nkuba, 2010; Taylor, 2010). A solid governance system, accountable secretariat, recruitment and the retention of competent personnel at the secretariat, Muwanga (2010) notes, constituted the second factor that makes NOGAMU a success story and the best organic movement in Africa, according to its administrators.

The above values upheld by NOGAMU also assisted the organization in mobilizing the financial resources needed to achieve its objectives. NOGAMU has had to rely more on funding secured from external sources. Self-funding via annual subscription and income generated from consultancy services and certification constitutes just 6% of its annual budget. About 67% of NOGAMU's funding comes from Hivos<sup>13</sup> with other

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<sup>13</sup> Hivos, is a Dutch aid international development organization. Hivos works with indigenous civil society organizations in developing countries to, among others, undertake programs that can lead to improvement in the livelihood conditions of men and women. One of the means adopted by Hivos to achieve this objective is to support organic agriculture because it is considered to be a sustainable food production system that can allow smallholders to increase their productivity and income through premium prices associated with organic products. It was based on this reason that Hivos developed a project named Hivos Organic Agriculture Program in East Africa 2000-2006. To execute this project, Hivos worked with local NGOs and umbrella organic coordinating bodies in East Africa by providing them with funding and other



donor and international organic agencies such as EPOPA and the German Development Service (DED), contributing the remaining 27% (Forss et al., 2008; Forss and Lundström, 2004). NOGAMU's first funding was \$1000 secured from Hivos. This was used to get the organization registered and rent an office (Nankya, 2010; Taylor, 2010). To be able to access further funding and secure the trust of donor agencies, NOGAMU has had to demonstrate financial accountability. Accordingly, Nankya (2010) stated, "the funders had also promised more funding if the resource envelope was well utilized and accounted for" (p. 9). With a proper justification of how the first fund was utilized, like other funding sources, Hivos committed to more funding support for NOGAMU. To this effect, Hivos provided funding support for NOGAMU's 3-year strategic plan which was implemented between October 2002 and November 2004. Satisfied with how the funding was used, Hivos offered to sponsor NOGAMU's second and third strategic plans spanning 2005-2008 and 2009-2012 (Forss et al., 2008; Hivos, n:d). The strategic plans which described what NOGAMU intended to achieve have also contributed to the organization's ability to secure funding (Taylor, 2010). It is important to point out that to develop the strategic plan, NOGAMU held a four-month countrywide consultation with its members. This was mainly done through input seeking regional consultative workshops (NOGAMU, 2004). Again, this highlights the place of participatory decision making in running the affairs of NOGAMU.

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forms of support needed to stimulate market-oriented organic farming that will enable smallholders to access premium prices at international organic markets. The funding support that NOGAMU received from Hivos seems to come under the organization's East African organic agriculture project. For details about the program, see Guijt and Woodhill (2008). For further information about Hivos, see, <http://www.hivos.org/about-hivos>.

The preceding discussion has focused on how NOGAMU developed their organizational capacity and mobilized human and financial resources. Subsequently, attention will be focused on how NOGAMU aided the development of the country's organic sector. This will be elaborated vis-a-vis NOGAMU's main activity areas: (1) training, research and extension; (2) marketing; (3) policy and advocacy; and, (4) standards and certification (NOGAMU, 2013a).

### **Training, Research and Extension**

Organic farming is knowledge-intensive. It requires adequate training in organic production methods, agroecological processes, insect, pest and disease management techniques, and post-harvest handling and processing techniques to ensure conformity with the established organic certification standards. Also, it requires adequate extension supports and supportive research activities to make it productive. (Gionvannuci, 2007). However, in Uganda, the majority of those who are involved in organic farming and agriculture generally are small scale farmers with either low literacy levels or lack of formal education (Pali et al., 2007; Pophiwa, 2012a). NOGAMU saw this as a big challenge that could obscure the manifestation of the potentials of organic farming in Uganda and slow down the growth of the organic sector (Pophiwa, 2012a). To address this problem and other related ones, NOGAMU developed a series of complementary capacity building training programs covering different aspects of organic production and post-harvest handling for organic farmers, exporters and producers. These include skill acquisition trainings, advisory services and the provision of technical supports for farmers on organic production of different crops, soil water and fertility management, pest and weed control, and post-harvest handling in an organic production system

(Muwanga, 2008; NOGAMU, 2013c; Pophiwa, 2012a). Also, to enable farmers to produce according to organic export requirements, NOGAMU developed and conducted trainings for farmers and extension officers on organic standards, internal quality control, internal quality management and organic certification (NOGAMU, 2013c, 2013d; Pophiwa, 2012a; Tenywa, 2010). Furthermore, empowerment sessions such as trainings on the marketing of organic products, locally and internationally as well as the processing of organic products are also organized by NOGAMU. As a result of NOGAMU's training on agro-processing, the number of processed organic products in local markets has increased from few to more than 20 products. Also, the number of farmer groups and individuals involved in agro-processing of organic products has increased from 10 to more than 40 between 2003 and 2011 (Nansimbi, 2010; Tenywa, 2010).

NOGAMU's trainings are conducted in different modes. This includes workshops and seminars, exchange visits, farmer field schools and extension services at the grassroots, regional and national levels (Forss and Lundström, 2004; NOGAMU, 2004, 2010, 2013; Pophiwa, 2012a). The trainings may be organized either by NOGAMU alone or in conjunction with other local NGOs such as Kulika, Send A Cow, Sustainable Agriculture Trainers Network (SATNET), and Participatory Ecological Land Use (PELUM). Sometimes, NOGAMU has also partnered with donor agencies and international organic development organizations like EPOPA, Hivos, and Organic Demark (OD) to organize trainings. This was the case with the collaborative Farmer Field Schools training programs organized by NOGAMU, SATNET and OD for organic farmers in western Uganda from February 2009 to January 2011 (NOGAMU, 2010b). Likewise, in 2008, in conjunction with the International Trade Centre (ITC), NOGAMU

organized training for four groups of smallholders made up of several hundred of farmers. The training which also incorporated the provision of certification support was to help build the beneficiaries' capacity to access international organic market (ITC, 2008). On other occasions, NOGAMU has teamed up with local export companies to conduct trainings aimed at ensuring compliance with organic standards (NOGAMU, 2013c, 2013d; Pophiwa, 2012a). Furthermore, NOGAMU also works in partnership with local institutions like the Uganda Martyrs University and Makerere University to arrange trainings for farmers and students and to encourage the conduct of research that can foster the development of the Uganda's organic sector (Muwanga, 2008; UNEP-UNCTAD CBTF, 2010; Walaga et al., 2005). As a case in point, with the assistance of Hivos, NOGAMU partnered with Makerere University to train farmers and interns on the processing of dried fruits (Muwanga, 2008).

To make its trainings effective, NOGAMU ensures that they are based on trainees' needs. NOGAMU achieves this objective by doing what Sekyewa et al. (2013) called bottom-up research needs assessments of trainees. One way this is done by NOGAMU is to conduct surveys of farmers in order to determine their knowledge gaps in organic production with a view to determining how best such can be addressed. To this effect, in 2006, NOGAMU conducted a countrywide survey of organic farmers in Uganda. Among others, the survey was aimed at assessing farmers' understanding of organic pest and disease management, weed, soil fertility and post-harvest management in an organic production system. Based on the outcomes of the survey, NOGAMU was able to determine real practical issues confronting organic farmers in Uganda and specific training programs were designed to attend to those problems. Also, the outcomes enabled

NOGAMU to determine research interventions that need to be initiated to address those problems (Sekyewa et al., 2013). It is also interesting to note that NOGAMU's determination of farmers' training needs is largely influenced by market considerations. Acknowledging this point, Jane Nalunga, NOGAMU's training officer stated that the trainings conducted by the organizations are structured to meet market requirements. This is to enable beneficiaries of NOGAMU's trainings, access and maintain markets for their organic products. Therefore, to achieve this aim, NOGAMU consults with and also makes a determination with organic marketers regarding the training areas to be focused on (Nalunga, 2009, cited in Jacobsen, 2009; Guijt and Woodhill, 2008). Therefore, it can be said that NOGAMU's training activities has been mostly effective because it is based on the farmers' training needs and market requirements.

In addition to organizing trainings, NOGAMU has also produced documents which serve as training and producers' guides on different aspects of organic production. These documents, which are sold through NOGAMU's marketing department at affordable prices to interested persons, include organic production manuals for crops such as cocoa and apple banana and trainer's guides on organic coffee and cotton production, pest and disease management but to mention a few. Also, context specific and specialized focused group services in different areas of organic production, alongside consultancy services are provided by NOGAMU to individual farmers, groups and companies (NOGAMU, 2013c).

Despite the strides made by NOGAMU in carrying out training and advisory services covering different aspects of organic farming, the organization is still struggling to fill the skill gaps in the areas of organic soil fertility management, post-harvest

operations and pest and disease management (Strietska-Ilina et al., 2011). This seems to be occasioned by a number of factors, one of which is the number of trainers NOGAMU is able to employ. NOGAMU has two permanent staff trainers, and has had to rely on contract trainers and its member organizations to carry out training activities. Since NOGAMU mainly survives on external funding support, there is a limit to the number of contract trainers the organization can recruit to meet the farmers' training needs in the areas earlier identified. Another reason why NOGAMU is struggling to fill the gaps in those training areas seems to be associated with the number of qualified organic trainers in the country. There are not too many qualified organic trainers in Uganda. NOGAMU and other organic stakeholders whose roles are explicated in a later part of this chapter have been using a 'train the trainer' approach to mitigate this challenge. Yet, the challenge remains as there is still a need for more qualified organic trainers to attend to farmers' training needs (Jacobsen, 2009). As it is subsequently highlighted, there seems to be a little that NOGAMU and other pro-organic groups in the country can do to address this problem without government support because producing a large pool of qualified trainers requires a lot of funding.

### **NOGAMU and Market Creation for the Organic Sector**

NOGAMU is involved in the creation of both domestic and international market opportunities for Uganda's organic products. On the domestic level, NOGAMU engages in the establishment of exclusive organic shops to promote and create local organic market outlets. These shops sell fresh and processed organic food products that include vegetables, fresh and dried fruits, spices and organic juice of different kinds (Muwanga, 2008; Nansimbi, 2010; Rundgren and Lustig, 2007) from small scale farmers who are

NOGAMU's members. They serve as a means of raising awareness about organic produce locally, linking consumers with producers and as a way of providing market-orientation training for producers supplying the shop (Muwanga, 2007a; Rundgren and Lustig, 2007). The first shop was set up in Kampala in 2002 with the support of German Development Service (DED) (Forss et al., 2008; Nansimbi, 2010; Ssegujja, 2010). NOGAMU's organic shop has increased to five (Hivos, n:d; Tenya 2007). The new shops were established by NOGAMU in conjunction with some of its member organizations in other regions. This was with a view to increasing domestic organic outlets and market access to organic produce (NOGAMU, 2013d). Since those producing for the shops are smallholders, a means was developed to ensure stable supply of produce. This involves identifying and mobilizing small scale growers of organic produce with high market demand into production groups that are supported and trained to produce collectively for local and international markets (Rundgren and Lustig, 2007).

Other local marketing arrangements initiated by NOGAMU include direct sales and market linkages to institutions, restaurants, supermarkets and parks (Muwanga, 2008; NOGAMU, 2012). Equally, to further promote the local consumption of organic produce, expand and improve local market access to organic food items, NOGAMU introduced an organic basket home-delivery scheme. This scheme enables patrons to place orders twice a week for their organic produce of choice through email or by telephone to be delivered to their doorsteps as a box of organic produce (Muwanga, 2008; Tenywa, 2007, 2011). Before the introduction of the home-delivered organic basket scheme, the annual earnings from NOGAMU's organic shop was estimated at UGX 170,000 in 2003, UGX 2 million in 2004 (Rundgren and Lustig, 2007; Taylor, 2006) and UGX 26 million in 2005

(Muwanga, cited in KK, 2011).<sup>14</sup> However, after the home-delivery scheme was initiated in 2005, Muwanga (2011) notes, “we have had a remarkable increase in local organic food sales’ (cited in KK, 2011). Explaining further, Muwanga adds, “sales then increased to 36 million shillings in 2006, 59 million shillings in 2007 and 73 million shillings in 2008.” The turnover further went up by 28% in 2009 when NOGAMU’s organic shop generated UGX 93.4 million in annual income (Tenywa, 2010). Acknowledging the effect of the home-delivered scheme, Derrick Tenywa, NOGAMU’s Domestic Marketing Officer asserted, “over 70% of shop organic sales are through this initiative because of its convenience” (p. 3). The foregoing seems to suggest that NOGAMU’s domestic market development strategies and in particular, the home-delivery scheme, has contributed massively to increasing the local demands for organically grown produce in Uganda. The increase in local demand for organic products in Uganda has also been attributed to NOGAMU’s promotional activities. This includes the printing and distribution of informative organic product brochures, leaflets, advertisement placement in major newspapers, printing of branded organic promotional-T shirts and hosting of promotional talks on television and radio. Added to this, NOGAMU also developed a customer database. This is used in reaching out to new and prospective patrons to notify them of organic produce that are in stock and their associated prices (Muwanga, 2008; NOGAMU, 2012; Rundgren and Lustig, 2007).

Furthermore, NOGAMU helps identify existing local markets for organic produce and links up local organic growers to such markets. On other occasions, NOGAMU would organize small scale organic growers into focused production groups, provide

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<sup>14</sup> UGX = Ugandan Shilling equivalent to ---USD, March 2014.



them with the necessary supports and training to meet the requirements of such markets. This is also one of the approaches NOGAMU uses in mobilizing small scale farmers to produce for international markets. To guarantee targeted markets for the product in demand, NOGAMU made it a policy to work with exporters from the time of identifying the product in demand until the sale is effected (Muwanga, 2007a; NOGAMU, 2013c; Rundgren and Lustig, 2007; Tenywa, 2010).

Internationally, NOGAMU also provides market linkages for local organic exporters. To do this, one of the strategies adopted by NOGAMU was to profile, identify and link local organic export companies with appropriate import companies. Similarly, NOGAMU participates in regional and international organic promotional fairs to create market linkages for its member companies and Uganda's organic sectors generally (NOGAMU, 2010b). One of such fairs was BIOFACH 2007 that held in Nuremberg, Germany, February 15-18, 2007. According to Namuwoza (2007), through the fair, NOGAMU was able to establish new business relations with about 50% of the 300 participants who visited the organization's stand. NOGAMU's participation in the fair also enabled many participants to discover that the quality of Uganda's organic fruits and spices, particularly pineapples and apple banana, were superior to those produced in different parts of the world, according to NOGAMU This led to the placement of immediate orders for those products (Namuwoza, 2007).

In addition, NOGAMU also facilitates visits between organic export companies and local organic growers in order to establish market linkages (Namuwoza, 2011). A case in point was the five-day buyers' tour that NOGAMU co-organized with the International Trade Centre (ITC) and the Uganda Export Promotion Board (UEPB). The

tour created an avenue for local producers and exporters to network and developed business relationships with seven visiting European organic marketers. One of the immediate gains of this tour is that during the tour, one of the visiting European organic marketers filed an application for an organic products import permit (ITC, 2008).

It is also with a view to creating international market linkages for Uganda's organic produce that with the support of EPOPA that NOGAMU established Organic Trade Point (OTP) in 2006 (EPOPA, 2008; NOGAMU, 2013d). The OTP is an online one stop center and a database that provides local organic farmers and exporters and importers who are interested in Uganda's organic produce necessary market information access. The OTP which is linked with major international market information portals is also a focal point for determining produce availability and their seasonality as well as the local growers' productive capacity (Namuwoza, 2011; NOGAMU, 2013d). The effort leading to the creation of the OTP seem to date to the first two years of NOGAMU's establishment, when a database capturing Uganda's organic activities and stakeholders' was developed. NOGAMU went about this by collecting data on number of organic farmers in the country, organic production volumes, export figures and premium prices received by farmers during short-term consultancy services offered farmers by NOGAMU. Farm visits are also organized as part of the data collection drive. In addition, NOGAMU conducts an annual survey of Ugandan's organic sector aimed at collecting baseline information about the sector's growth and status (Ogunbanwo, 2011; Tumushabe et al., 2006; Walaga et al., 2005). With this, NOGAMU was able to develop an annually updated inventory database, which provides information about organic farmers, volume of organic crops harvested, exported and sold domestically, organic

importers and exporters. Since the OTP also contains related information, it can be said that the database facilitated the development of the OTP.

Despite NOGAMU's strides in creating markets for the country's organic products, the organization pays less attention to chain development for some staple crops that Nankya (2011) describes as "non-traditional" organic commodities. These crops include beans, matooke, groundnuts and cowpeas; they are grown by Ugandan organic farmers that include NOGAMU members (Nankya, 2011). The "non-traditional" organic commodity crops are considered unable to compete well in the international organic export market where most of Uganda's organic exports are being sold.<sup>15</sup> For this reason, they are not included as priority crops that NOGAMU focuses most of its market development efforts on. The priority crops mainly include those identified as having a huge demand on the export/international markets (Namuwoza, pers. comm. 2013; Tenywa, pers. comm. 2013). Although it is economically reasonable that more effort be committed to marketing the priority crops, at the same time, this may undermine the gains recorded by Uganda's organic sector. For example, if for any reason the premium prices associated with the priority crops are no longer attractive, this may negatively impact Uganda's organic sector because of its predominant export-orientation. For this reason, NOGAMU may have done better by investing more energy to create markets for the non-traditional organic commodities. In so doing, Uganda's organic sector may be well prepared to withstand any possible shock which could arise from losing some international organic niche markets. This concept becomes more reasonable given the

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<sup>15</sup>According to Namuwoza (pers. comm., 2013), presently, a small percentage of the non-traditional commodity crops are sold at NOGAMU's exclusive shops, large supermarket chains and farmers markets. Namuwoza further mentioned that the biggest portion of these nontraditional crops are sold in the major conventional markets.

fact that the non-traditional organic commodities are in high demand, locally and regionally (Kenya, Tanzania, Rwanda, Burundi, Sudan, Central and South African region) markets where they serve as major food crops and source of revenue generation (Tenywa, pers. comm. 2013).

### **Policy, Advocacy, Standards and Certification**

Prior to the formation of NOGAMU, there was no effort to develop a national organic policy in Uganda. As indicated by Mussimbe et al, (2005), Walaga et al. (2005), and UNEP-UNCTAD (2008), without an explicit national organic policy, it may be difficult to develop a country's organic sector to its full potential. An explicit national organic policy helps with the mobilization and investment of government financial and institutional resources needed to drive the development of an organic sector. This includes investment in research, extension, and education. With a national organic policy, government bilateral relationships can also be mobilized to create markets for a country's organic products. It also helps in harmonizing OA with a country's overall agriculture development plan (UNEP-UNCTAD, 2008; Walaga et al., 2005). Realizing this fact, together with its member organizations, NOGAMU advocated for and lobbied the Ugandan government to facilitate the development of a national organic policy. NOGAMU's led advocacy began to yield results when in May 2004 the MAAIF set up a committee which was entrusted with the responsibility to develop a national organic policy for the country (Forss and Lundström, 2004; Taylor, 2006). A draft version of the national organic policy document which was developed through active private stakeholders' participation was released in July 2009. The draft document had since been under review for final approval (PELUM Uganda, 2010). Among others, the national

organic policy document commits to government funding of OA research, technology development and dissemination. It also provides for government's involvement in providing trainings and extension services to organic farmers and in creating marketing avenues for the country's organic produce domestically, regionally and nationally (PELUM Uganda, 2010).

To develop the policy document, the MAAIF set up a 26-member committee drawn from public institutions and pro-organic private stakeholders. The process went through an extensive participatory process, including workshops and nationwide stakeholders' consultative meetings with the private sector and local government. Studies on different aspects of organic agriculture were also commissioned by the MAAIF in partnership with NOGAMU and ACODE. The studies were conducted by a sub-committee drawn from the main committee. The studies led to the development of concept papers that guided the policy drafting process. The MAAIF did not provide the financial support needed for the committee to function. It was NOGAMU and the Advocates Coalition for Development and Environment (ACODE)<sup>16</sup> that mobilized the financial support from Hivos to get the drafting of the policy started (Musiime et al., 2005; Muwanga, 2008; Taylor, 2006; Tumushabe et al., 2006).<sup>17</sup>

Another policy-related effort pioneered by NOGAMU is the development of Uganda Organic Standards (UOS). This became necessary because the lack of a national organic standards was constraining the development of Uganda's organic sector (Walaga,

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<sup>16</sup> ACODE is a Uganda NGO that is dedicated to conducting research and undertaking advocacy research on good governance, trade, environment, sustainable development, and science and technology. For more details about ACODE, see <http://www.acode-u.org/>.

<sup>17</sup> For details on how the process unfolded and some of the concept papers that provided the background for the policy making process, see, Musiime et al. (2005); Tumushabe et al. (2006).

2012a). This effort was also in line with one of NOGAMU's objectives, to increase the application of organic standards and to promote certified organic production in Uganda. Among others, the UOS is meant to increase the quality of the Uganda's organic products, their accessibility and competitiveness in the international organic market (Muwanga, 2007b). It is also meant to serve as the basis for organic certification in the country and as a tool that will guide the activities of organic stakeholders that includes but is not limited to policymakers, producers, extension workers, exporters and researchers (UOS, 2006).

NOGAMU initiated the process leading to the creation of the UOS by establishing an organic standards development committee in 2002. The committee members were drawn from private organic stakeholders in the country. Its membership also included the Uganda Bureau of Statistics (UBoS) and the Ministry of Agriculture, Animals, Industries and Fisheries (Muwanga, 2008; Taylor, 2006). The committee also involved international stakeholders such as EPOPA which provided both technical advice and financial support for the development of the standards (EPOPA, 2008; Taylor, 2006; Walaga, 2012b). To develop a draft of the UOS, the committee held a series of countrywide consultative input-seeking processes for a period of two years. This involved a wide range of participants such as farmers, exporters, importers, and organic certification companies. The consultative process took the form of input-seeking workshops during which oral inputs were sought from participants. Also, countrywide regional input seeking meetings were held to gather oral inputs and ensure that all stakeholders were given a voice in the development of the standards. In addition, a major stakeholders' meeting attended by 100 participants was held in Kampala to bring all thoughts together (Muwanga, 2007b, 2008;

Taylor, 2006; UgoCert, 2008). Furthermore, the UOS went through a process of participatory revision before the final draft was produced. In this regard, two drafts of the UOS were sent to participating partners for reviews and suggestions. This was with a view to ensuring that all the necessary issues were addressed (Taylor, 2006; UgoCert, 2008).

In 2004, the final draft of the UOS was released and adopted by the Ugandan government as the country's national organic standards. One of the reasons that the government adopted the UOS is attributed to the involvement of the Uganda National Bureau of Standards (UNBS) and the MAAIF in the process (Taylor, 2008). The extensive consultative process involving a broad spectrum of stakeholders through which the UOS was created has also been cited as another reason for the UOS adoption by the government and for the success of the process (Muwanga, 2008). To ensure that the standards meet international certification requirements and enhance the competitiveness of Uganda's organic sector in international markets, the UOS was based on EU regulations and IFOAM Basic Standards. Specifically, IFOAM standards were referenced to regulate the inputs that are permitted in organic production and food processing. Likewise, to connect the UOS with local realities, the IFOAM Basic Standards, which constituted its foundation were adapted to Uganda's agro-ecological conditions (Namuwoza and Tushemerirwe, 2011; Taylor, 2006; UgoCert, 2008).

Additionally, to ease the certification challenges encountered by Uganda's organic farmers, in 2001, a local certification company, the Uganda Organic Certification Limited (UgoCert) initiative was initiated by NOGAMU and registered in 2004 (Muwanga, 2008; Namuwoza and Tushemerirwe, 2011; UNEP-UNCTAD CBTF,

2008).<sup>18</sup> UgoCert is the second institution put in place to drive the development of Uganda's organic sector. UgoCert and NOGAMU have been identified as the two key institutions constituting the core of Uganda's organic sector (EPOPA, 2008; Forss et al., 2008; Gibbon, 2006). Prior to the creation of UgoCert, certification was exclusively done through third parties, which are foreign-owned (Ogunbanwo, 2011). This includes the Swedish KRAV,<sup>19</sup> ECOCERT, IMO, BCS, and the Soil Association (Gibbon, 2006; Namuwoza and Tushemerirwe, 2011; Ogunbanwo, 2011). UgoCert is recognized and internationally accredited by the International Organic Accreditation Services, EU Standards, IFOAM and ISO-65 as a third party certifier (Ogunbanwo, 2011). It has contributed immensely to easing certification challenges faced by smallholders in the country (Gibbon, 2006; Guijt and Woodhill, 2008; Muwanga, 2008). In 2010 alone, UgoCert was able to locally certify 36,758 farmers (Ogunbanwo 2011). This feat seems to be associated with the fact that the creation of UgoCert has led to a reduction in certification costs payable by Uganda's organic operators by 20-30% and the convenience of having a local certifier (Gibbon, 2006; Guijt and Woodhill, 2008; Walaga, 2012b). UgoCert has also enhanced the entry and penetration of Uganda's organic produce into international markets (Gibbon, 2006; Pophiwa, 2012b), in the same way it has help introduced what Gibbon (2006) describes as, "greater competition into the market for international certification services" in the country" (p. 36).

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<sup>18</sup> The impetus for creating a local certification body was said to have developed from a training conducted by KRAV and IMO for local inspectors in 1995. However, due to the absence of a coordinating body then, the idea did not translate into reality. For details, see, Walaga, 2012b.

<sup>19</sup> KRAV ceased operations in Uganda in 2003-04. This was attributed to the company's withdrawal from offering international certification services. For details, see, Gibbon, 2006.



To set up UgoCert, NOGAMU opted for what Walaga (2012a) describes as the low cost model. To this extent, NOGAMU relied on local inspectors who were earlier trained by KRAV and IMO as local certifiers in the 1990s (Walaga, 2012b). They also harnessed the experience of local people who have acquired the technical capacity in certification through their involvement in the international agencies' certification services in the country. Also, there were those who have acquired the capacity to oversee internal control systems, a means put in place to conduct group certification of smallholders in the country (Forss and Lundström, 2004; Walaga, 2012b). This provided another pool of a local human resource base needed to develop a local certification body. Additional human capacity building trainings for certification and inspection staff were also conducted by EPOPA (Forss and Lundström, 2004; Muwanga, 2008). Likewise, EPOPA and Grolink AB, an international OA consultancy service provider also provided technical supports to aid the establishment of UgoCert (Ecoprofiles, 2013; Forss and Lundström, 2004; Walaga, 2012b). With the foregoing, the human capacity and the technical foundation needed to start a local certification company were developed. Financial support covering the establishment and accreditation cost, office acquisition, furnishing and having it equipped with the necessary communication systems was also provided by EPOPA (Walaga, 2012b). This made it possible for UgoCert to start operation in 2004, the year it was officially registered.

After UgoCert commenced operation, EPOPA was also involved in getting the institution international recognition and in generating businesses needed to sustain it. To this effect, EPOPA persuaded Europe based certification agencies to allow UgoCert to undertake their inspection works in Uganda (Walaga, 2012b). EPOPA's efforts in this

regards may be connected with the fact that, in Uganda, UgoCert is competing with certification and inspection companies which are highly regarded, particularly in Europe. UgoCert also struck a deal through memorandums of understanding with some international certification bodies that are associated with Uganda and the surrounding countries' organic sector to help certify their patrons (Forss and Lundström, 2004; Gibbon, 2006; Walaga 2012a). Also, UgoCert broadened its certification services to go beyond UOS by offering certification based on other standards that includes the USDA National Organic Program (NOP) standards and Japanese Agricultural Standards (JAS). This has enabled UgoCert to attend to the varying certification requirements of the markets that its clients are producing for (Ogunbanwo, 2011). Arrangements were also put in place to continually develop existing human capacity and create a new pool of technical capability to sustain UgoCert's operations and the country's organic sector generally. In this regard, UgoCert partnered with EOPOA and Grolink to develop in-house capacity enhancing training programs for UgoCert staff and inspectors. It is in view of this that a bachelor's degree in organic certification and a master's in agro-ecology are now being offered in Uganda Martyrs University (Forss and Lundström, 2004; Walaga, 2012a).

Besides UgoCert, NOGAMU also initiated and supports group certification of smallholders. This system was in practice before UgoCert was established and it is the widely practiced means of certifying organic farmers in Uganda due to its cost advantage. Group certification involves mobilizing and organizing smallholders into a homogeneous organic crop producing group consisting of at least 30 farmers. Instead of having individual farmers in the group certified, the whole group is certified together as a unit. In

this way, the group pays for one certification cost (Lockie et al., 2006; Pophiwa, 2012b; Preißel and Reckling, 2010; Walaga, 2003). Compliance to certification requirements is ensured through a management system known as Internal Control System (ICS). The ICS is aptly described by Walaga (2003) as a:

documented quality assurance system that allows the external certification body to delegate the annual inspections of individual group members to an identified body or unit within the certified operator. As a consequence, the main task of the certification body is to evaluate the working of the ICS (p. 6).

NOGAMU trains and provides technical support to farmer groups to enable them to develop the capacity to develop and implement the ICS<sup>20</sup> which is the heart of the group certification system. Likewise, NOGAMU also trains the farmer groups and exporting companies that work with them to arrange for group certification on internal quality management systems (NOGAMU, 2013d). In addition, NOGAMU also introduced, promotes, supports and assists farmers to certify their operators through participatory guarantee systems (PGS) (NOGAMU, 2013d, 2013e; Pophiwa, 2013b). NOGAMU worked with IFOAM to develop an internationally accepted PGS for farmers in Uganda. Like the ICS-based group certification system, the PGS is a documented system of quality assurance-oriented certification systems. Unlike the ICS-based certification which is focused on accessing export markets, the PGS is locally focused and more flexible as it requires less paperwork. The PGS offers a good stepping stone for transitioning into the ICS-based certification and producing to meet international export organic requirements (IFOAM, 2013).

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<sup>20</sup> For details about the ICS, see Lyons et al. (2013), van Elzakker and Eyhorn (2010).

One more policy-related effort, however, at the regional level was also undertaken by NOGAMU. This involved NOGAMU partnering with EPOAPA, UNEP-UNCTAD CBTF, IFOAM and the national agriculture movements in Kenya and Tanzania to develop the East African Organic Products Standards (EAOPS) (CBTF-IFOAM, 2007, IFOAM, 2007; NOGAMU, 2013; Muwanga, 2008; UNEP, 2007). The EAOPS was adopted in 2007. It is the second regional organic standard to be adopted in the world after the European Union Organic Standards (UNEP, 2007). The EAOPS was developed in order to facilitate trading of organic products across the East African region by easing trade barriers that may arise from compliance issues. Before the EAOPS was developed, there were many unharmonized private standards in the region. Each of the standards has different compliance requirements to be met for their markets to be accessed. Another reason why the EAOPS was developed is because regional standards offer a reliable means of penetrating international markets (IFOAM; 2007; Muwanga, 2008; Ndungu, 2010; NOGAMU, 2013e; Taylor, 2006; Twarog, 2008; UNEP, 2007).

The process involved in the development of the EAOPS is well documented.<sup>21</sup> As a highlight, the EAOPS was created from an intensive country and regional level multi-stakeholder inclusive consultation and collaborative process. The actors involved in the process included NGOs and government representatives from participating East African countries. The national organic bodies of Kenya, Tanzania, Uganda, Burundi and Rwanda, and partner international institutions earlier mentioned were also involved. The EAOPS drawn on existing standards in participating East African countries, IFOAM

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<sup>21</sup> See Twarog (2008, 2011); UNEP (2007); Ndungu (2010); IFOAM (2007); UNEP-UNCTAD CBTF (2010).

Basic Standards and Codex Alimentarius Guidelines for Organic Production and Processing (Carey and Guttentstein, 2008; CBTF-IFOAM, 2007, IFOAM, 2007b; Ndungu, 2010; UNEP, 2007). The process also leveraged on existing local capacities, expertise and organic agriculture structures in the participating countries. All of these and the market-orientation of the EAOPS have been identified as some of the reasons why the process was successful (Twarog, 2011; UNEP, 2007). Among others, the success of the EAOPS has also been highlighted in terms of helping to foster and consolidate collaboration among participating private and public organic stakeholders, locally, regionally and internationally. This seems to be one of the gains that accrued from the involvement of a broad range of public and private stakeholders in the process leading to the development of the EAOPS. Furthermore, the EAOPS is said to have assisted in improving the perception and deepening the understanding of the participating public stakeholders on the potentials of OA (Carey and Guttentstein, 2008; Global Organic Market Access (GOMA), 2011). Finally, the EAOPS is reported to have helped participating East African countries develop a common platform through which organic trade activities are conducted in the region (GOMA, 2011).

Besides policy and standards development, NOGAMU is also involved in advocacy activities aimed at protecting the organic sector from harmful government policies. A classic example is the decision of the Uganda Ministry of Health to apply Dichlorodiphenyltrichloroethane (DDT) to control malaria on a large scale. NOGAMU collaborated with their partner organizations to resist the use of the DDT by presenting data on the health, environmental and economic effects of such decision. NOGAMU also held public forums to discuss the issue and educate the public about the contention

against the use of the DDT. Together with EPOPA, NOGAMU developed alternative malaria control measures that the government can use (EPOPA, 2008; Forss et al., 2008; Muwanga, 2008; Taylor, 2008). Other advocacy related activities embarked upon by NOGAMU are those aimed at capturing the attention of policymakers and changing their negative disposition to organic farming. This includes the organization of special organic farm visits mainly targeted at government stakeholders and researchers. Another means that was devised to influence government stakeholders is to get them involved in organic farming and environmental related fairs and exhibitions. It was also with this objective in mind that NOGAMU initiated a decentralized annual national organic day celebration. This annual event is held in the four regions of Uganda on the same day. NOGAMU's regional member organizations are in charge of organizing the event in their regions. The decentralization has helped deepen the effects of the annual events as it helps focus and engage the attention of the public and government stakeholders in all the four regions of the country (Ogunbanwo, 2011; Walaga et al., 2005).

As highlighted above, NOGAMU's led OA advocacy campaigns and lobbying efforts have yielded some results. At the same time, despite NOGAMU's strong linkage with local CSOs, the organization seems to fall short of the required capacity needed to launch successful advocacy campaigns against some government actions and policies which seek to compromise and pose threats to the growth of the organic sector. A case in point is the DDT spray by the Ugandan Ministry of Health which led to the loss of the certified status of thousands of hectares of certified organic farmlands (Taylor, 2008). There is also an emphatic policy shift towards the use of biotechnology in farming in Uganda, a move which is seen as paving the way for the massive introduction of

genetically modified organisms (GMOs) in the country (Organic Demark (OD), 2011; Rwakakamba, 2013; Ssekyewa, 2005). Among others, it is feared that the introduction of GMOs poses contamination risks to organic farms and further that it may undermine the competitive advantage which the country's organic sector presently enjoys at international organic niche markets (Rwakakamba, 2013). In addition, there is also increasing government support for the use of pesticides in Uganda (PELUM Uganda, 2010). To successfully lead advocacy campaigns against GMOs and increasing governmental support for pesticide use, and to persuade the government to accelerate the approval of the draft organic policy, a need exists for NOGAMU to strengthen its collaborative relations, advocacy and lobbying capacity. As suggested by OD (2011), this would require that NOGAMU expands and strengthens its networking with like-minded groups such as those that are engaged in environmental sustainability, land rights, social capital and empowerment advocacies; strengthens its organizational capacity and improves its knowledge base on how to initiate and partner with other local CSOs to develop an effective and unified advocacy campaigns on issues such as GMO and increasing pesticide use, and, finally, increases its public sensitization campaigns and engagement of government institutions on the benefits of sustainable food production systems.

### **Local Organizations and the Development of the Organic Sector**

Uganda has more than 100 local CSOs, consisting of faith and non-faith-based NGOs, as well as CBOs that are directly and indirectly involved in promoting the development of OA in the country (IFOAM, 2003; Luyia, 1997 cited in Parrott and Marsden, 2002; Muwanga, 2008; Pophiwa, 2012a; Taylor, 2006; UNEP-UNCTAD,

2008, 2010; Walaga, 2005; Waniala, 2004). The major organizations among the pro-organic local CSOs include Kulika Uganda, RUCID, SATNET, Caritas Uganda, ACODE and PELUM (Parrott and Marsden, 2002; Taylor, 2006, UNEP-UNCTAD, 2008, 2010; Waniala, 2004). Generally, the areas of interventions of all the CSOs include capacity building trainings on organic farming techniques, provision of extension services, organizing farmers for organic production and setting up organic farming enterprises for smallholders. They are also involved in awareness creation for OA, provision of production and market support, lobbying and advocacy campaigns for organic and sustainable farming friendly policies. Taken together, their activities have created the environment that enhanced the adoption of organic production systems and human capacity development that drove the development of Uganda's organic sector (Pophiwa, 2012; Taylor, 2006; UNEP-UNCTAD, 2010). Earlier on, the roles of some of the local NGOs in the evolution of organic agriculture in Uganda and in the establishment of NOGAMU were highlighted. In this section, in line with the study's objectives, the goals and strategies adopted by some of the major local organizations are explained.

### **Kulika Uganda**

Founded in 1993, Kulika Uganda can be considered one of the founding blocks of NOGAMU and OA in Uganda (Pophiwa, 2012b; Taylor, pers. comm., 2013). Kulika Uganda is an independent daughter organization of Kulika Charitable Trust, UK (forthwith, Kulika UK). The latter is a grant-making NGO that was established in the United Kingdom in 1981 by Patricia Brenninkmeyer, a Briton who lived and worked with The Child Welfare and Adoption (CWAS) in Uganda as a child care social worker between 1960 and 1970 (Jones, 2001; Ka Tutandike, 2013). While in Uganda, Patricia



Brenninkmeyer noticed that the country had a huge skill gap and dearth of exemplary personalities needed to initiate and undertake community development and nation building activities (Mugisha, n:d). Patricia Brenninkmeyer later established Kulika UK to provide vocational and academic scholarships to East African students, particularly Ugandans. This was with a view to help beneficiaries develop their individual potentials, improve their livelihood conditions and contribute to the development of their country. Since the mid-1980s, when stability returned to Uganda after cycles of wars, Kulika UK started to intensify the focus of its activities in Uganda. Also, following recommendations by the beneficiaries of Kulika UK's scholarship programs who returned to their home country, Uganda, the organization started the training of Ugandan small-scale farmers on sustainable agriculture practices.<sup>22</sup> To this effect, in 1991, the Kulika Sustainable Agriculture Program was launched to train smallholders on sustainable farming systems in order to help increase their productivity, income earning and livelihood conditions. In 1993, as part of the process to mainly focus Kulika UK's activities on Uganda alone, Kulika Uganda was established as a daughter organization of the Kulika UK (Jones, 2001; Ka Tutandike , 2013). In 2004, Kulika Uganda became autonomous of Kulika UK. In 2005, Kulika UK ceased to exist. With this, the activities of Kulika became completely focused on Uganda (Ka Tutandike, 2013). Like its now defunct parent body, the vision of Kulika Uganda is to enhance livelihood conditions in Uganda. Its mission is to promote skills and technologies that can help empower rural communities in the country. Kulika Uganda (henceforth, Kulika) programs are targeted at small scale farmers and indigent

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<sup>22</sup> The Ugandan beneficiaries who advised Kulika Charitable Trust to include the training of small-scale farmers on sustainable agriculture felt that doing that will help farmers improve their food security and livelihood conditions. For further details, see Jones (2001).

students who are awarded scholarships in support of their academic pursuits (Kulika, 2013a).<sup>23</sup>

To achieve its objectives, Kulika mainly specializes in providing sustainable organic agriculture training to farmers using the method of training the trainers (Kulika Uganda, 2013b, 2013c; Pali et al., 2007; Pophiwa, 2012). The train the trainers approach integrates experiential learning, practical work, on-farm experimentation, demonstrations, and farmer-to-farmer extension (Kulika Uganda, 2013b). Usually, it involves organizing small scale farmers into a group of about 20 and providing a thorough training for one or two individual members selected from the group. Upon the completion of the training process, the trained member(s)- ‘Key Farmer Trainer’- then goes back to train his/her group (Pali et al., 2007; Pophiwa, 2012a).

An example that illustrates the train the trainer model is the Kamuli Coffee Project that Kulika organized to train smallholders for the organic export market in central eastern Uganda. The project involved 3,512 farmers across a sub-county of 9 parishes who were divided into 141 groups consisting of 25-30 members. From each group, Key Farmer Trainers (KFK) were selected and provided comprehensive training in organic coffee production, farm planning and management marketing, appropriate technologies, and vegetable production. Guided by Kulika trainers, the KFKs went back to train their groups. Kulika also provided 177,000 disease-free coffee seedlings for the farming groups to enable them to increase their productivity. The Kamuli Coffee Project produced positive results among which was the increase in the farming groups’ productivity by 740%. In addition, as of 2010/2011, the project led to the organic

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<sup>23</sup> For more information about Kulika Uganda, see <http://www.kulika.org/about-us.html>.

certification of 3,288 farmers out of the 3,512 farmers who went through the program. With this, the certified farmers were able to access premium prices in international markets, thereby, increasing their earnings and livelihood conditions (Kulika Uganda, 2013c). In different parts of Uganda, Kulika has successfully undertaken several related organic production training and empowerment projects involving hundreds of smallholders as beneficiaries. This includes the Nakasongola Food Security and Rights Fulfillment Project (benefiting 140 households in 7 groups) and the Livelihood Improvement Project for Women in Kaberamaido 2006-2011 (benefiting 674 farmers in 44 groups).<sup>24</sup>

### **Sustainable Agriculture Trainers Network (SATNET)**

SATNET is a regional bonding organization that was established by some CBOs and NGOs to coordinate the development of sustainable organic agriculture in the six districts of the Rwenzori region, western Uganda. SATNET is made up of 39 member organizations and it is NOGAMU's regional representative in western Uganda. It helps coordinate and monitor NOGAMU's activities in western Uganda and collaborates with NOGAMU on pro-organic campaigns (Guijt and Woodhill, 2008).

SATNET contributes to the development of Uganda's organic sector in the following ways. First, in conjunction with NOGAMU, SATNET runs promotional campaigns on the radio to educate the public on different aspects of organic farming. The radio talks which are broadcast on three stations in western Uganda discuss issues such as organic pest and disease management, marketing of organic produce, organic crop

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<sup>24</sup>For details on these projects and other related ones undertaken by Kulika, see [http://www.kulika.org/index.php?option=com\\_content&view=category&id=37&Itemid=62](http://www.kulika.org/index.php?option=com_content&view=category&id=37&Itemid=62).

production and certification (Samuel and Elias, 2007; SATNET, 2007). Second, SATNET is involved in establishing market avenues for small scale organic farmers in western Uganda to sell their produce. To do this, through member organizations, SATNET organizes small scale organic producers into marketing groups, trains them on market development and management and thereafter, create avenues for them to market their produce collectively as groups. This arrangement has enabled some of the participating farming groups to develop better bargaining power in the export market due to the volume of produce being traded. Likewise, it has made it possible for some of the marketing groups to establish direct market linkages with exporting companies. Owing to the demand generated by the marketing scheme, some participating farming groups have expanded their operations to include new products and value addition, through food processing. In addition, SATNET is also involved in facilitating the registration of farming groups as cooperatives and sometimes as companies as this is a requirement for transacting business with some international business establishments and donor agencies (Longino, 2008).

SATNET also works with member organizations to promote and set up farmer-initiated, owned and supported organic enterprises such as bee keeping, rice production, fruit and vegetable production (Longino, 2008; Joles, 2008). SATNET also organizes capacity building trainings through its member organizations such as the Joint Effort To Save the Environment (JESE) (Jones, 2008). Also, SATNET provides financial support to its member organizations to conduct trainings. For example, Kabaraole United Organic Farmers Association (KUOFA) was supported with UGX 800,000 to train

members on bee keeping technologies in order to help increase their productivity and income level (Samuel and Elias, 2007; SATNET, 2007).

### **Rural Community Development in Uganda (RUCID)**

RUCID was established in 1994 by Samuel Nyanzi and Proscovia Nankya,<sup>25</sup> both of whom were founding members and former executives of NOGAMU (NOGAMU, 2010b; Taylor, pers. comm. 2013). Nyanzi and Nankya were the first set of Ugandans to be trained in certified organic farming. Both of them were trained in organic production at Emerson College, United Kingdom and at the Kenya Institute of Organic Agriculture (Nyanzi pers. comm. 2013). RUCID is one of the principal founders of NOGAMU and has since been maintaining its corporate membership status in NOGAMU (Nansimbi, 2010; Nyanzi, pers. comm. 2013). RUCID was founded with the objective of developing agriculture in Uganda to address food security and improve farming household livelihood conditions. RUCID undertakes a number of activities and programs to foster the development of Uganda's organic sector. This includes the organization of trainings and consultancy services for farmers, farmers groups and extension workers. Depending on the context, RUCID's trainings may take the form of seminars, community workshops, exposure visits and central workshops. RUCID also runs an apprenticeship training program which is mainly focused on the practical skills acquisition on organic production techniques. RUCID also operates a Training Center for Organic Farming where trainees are accommodated throughout the duration of their training programs. The center is also used in running a residential 1.5– year certificate and a 2-year diploma program in

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<sup>25</sup> Samuel Nyanzi was a two-term chairperson of NOGAMU between 2006-2010 while Proscovia Nankya was the first Vice-Chairperson of NOGAMU.

organic and sustainable agriculture. RUCID's trainings and consultancy services have benefitted hundreds of organic farmers in Uganda and NGOs that are promoting OA in Uganda, among which is Kulika (RUCID, n:d).<sup>26</sup> One of the earliest beneficiaries of RUCID's trainings are Elija Kyamuwedo, the late CEO of Kulika and Joseph Kizza who established one of the most successful organic training centers in Uganda. Kulika's sustainable training program was also set up by Samuel Nyanzi and Proscovia Nankya, RUCID'S founders (Taylor, pers. comm. 2013).

RUCID also provides extensive outreach service to organized farmers' groups and undertakes a 3-days-a-week farm support program for small scale organic farmers. The outreach program covers Mubende, Mityana and Kiboga, three towns in Central Uganda. The farm support program is a form of a farm visit program aimed at engaging and providing advisory support to smallholder organic farmers (Nyanzi, pers. comm. 2013; RUCID, 2013). RUCID also provides market linkages to farmers by connecting them with Tropical Ecological Foods Uganda, Ltd. RUCID also promotes market related activities by incorporation into its training programs, modules on food processing and preservation to enable farmers add value addition to their operations (RUCID, 2013).

### **Caritas Uganda**

Caritas Uganda is the socio-pastoral wing of the Catholic Church in Uganda. It is one of the faith-based organizations that promote sustainable organic agriculture development in Uganda. This is in line with its objectives of supporting targeted households to improve their agricultural productivity and food security through the

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<sup>26</sup> For further details see <http://www.rucid.org/activities.htm>.

promotion of commercialized sustainable agriculture and improvement of natural resources management. Caritas Uganda has branches spread across all regions of the country. One of these is Caritas MADDO which is located in Southern Uganda. The mission of Caritas MADDO is to stimulate sustainable development in Masaka and one of its objectives is to foster food security and increase incomes among poor households through sustainable agribusiness. The organization is also committed to advancing environmental conservation at the household level (Caritas MADDO, 2013). One of the means that Caritas MADDO uses to achieve these and other related objectives is by promoting the adoption of agroecological and sustainable farming systems (Caritas MADDO, 2010). To this extent, Caritas MADDO offers training to farmers in Masaka on how to prepare compost and organic liquid fertilizers. The organization also encourages and provides support for smallholders to start small scale organic fertilizer production enterprises (Caritas MADDO, 2010). The organization has also embarked on awareness creation campaigns by organizing exhibitions on organic agriculture and sustainable agriculture systems as a whole. In addition, Caritas MADDO engages in providing market linkage to farming households that are receiving their support (Caritas MADDO, 2008).

Caritas Kampala is another wing of the Catholic Church; it is located in Kampala the capital of Uganda. Caritas Kampala promotes sustainable organic agriculture by organizing smallholders into viable productive groups that are well trained and supported to start organic production enterprises. As NOGAMU's partner organization, Caritas Kampala uses its sustainable agriculture program called SAP to promote organic farming in the central region (Caritas Kampala, 2013a, 2013b, 2013c). The objective of the SAP

is to contribute to improvement in household food security and income earnings by leveraging on local resources and urban agriculture.<sup>27</sup> SAP involves setting up farmers into groups to start an organic production enterprise. The groups are provided with seedlings, extension services and capacity building trainings on project management, value-addition and organic production techniques. SAP has received more than € 2 million funding support from Misereor, a Catholic charitable foundation that is funded by the German Federal Ministry for Economic Cooperation and Development. Caritas Kampala has also implemented other organic agriculture schemes such as the Katuka Program which has now been transformed into a productive organic coffee farmer co-op (Caritas Kampala, 2013b; International Co-operative Alliance, 2013). As it is with Caritas MADDO and Caritas Kampala, other branches of Caritas Uganda which are located in different parts of the country undertake organic farming promotion activities. These include Caritas Kiyinda Mityana, Caritas Lugazi and Caritas Kasanesis.

### **St. Jude Family Project**

St. Jude Family Project (henceforth St. Jude) is one of the CBOs facilitating the development of Uganda's organic sector. St. Jude was founded by a Ugandan couple, John and Josephine Kizza, in the 1980s, when they started farming a 3-acre organic farm (UN Habitat, 2010). John and Josephine Kizza started their careers as secondary teachers in a government-owned school in Kampala. Due to poor remuneration, they retired from the teaching profession to set up a trading business which mainly involved buying and selling food and other related items (Goh and Goh, 2010). Following a circumstance

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<sup>27</sup> For details about the program, see, Caritas Kampala, 2013c; <http://caritaskampala.org/sustainable-agriculture-program-sap/>.



occasioned by the civil war that broke out in Uganda sometime in the 1980s, the couple started a family farm named St. Jude Farm, on 3.5 acres of land in Masaka District, southern Uganda; the farmland was inherited by John Kizza from his grandfather. Their farm operations started as a piggery and gradually diversified to include cows, poultry and organic farming. The decision to add the organic component came about after Josephine Kizza undertook a series of training programs in organic farming. This included a 3-hour workshop training on organic compost making which she attended in Kampala, Uganda, in 1991 and a 2-year extensive training in organic farming she received in the United Kingdom between 1991 and 1993 (Foundation for Sustainable Development (FSD), 2013; Goh and Goh, 2010; Daily Monitor, 2013).<sup>28</sup> The trainings motivated the Kizzas to ‘go organic’ and to start using their farm as a demonstration plot where farmers can be trained on the art of organic production systems (FSD, 2013). The couple later obtained a degree in organic farming from one of the universities in Denmark (Kasozi and Austin, 2005). From this humble beginning, St Jude has been transformed into an established CBO that is committed to human capacity building training aimed at enhancing the livelihood conditions of vulnerable groups through organic farming.

St. Jude’s target groups include local farmers, rural households, orphans and youth groups (Michael and Misusera, 2006; Pophiwa, 2012; UN-Habitat, 2010). The beneficiaries of St. Jude’s training also include farmers from different parts of Africa

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<sup>28</sup> The training program that Josephine Kizza undertook in the United Kingdom was sponsored by Kulika Charitable Trust, UK. For details on this and how the Kizzas started a career in farming and their adventure into organic agriculture, see Goh and Goh (2010); Daily Monitor (2013). “Farmer develops her model farm into agricultural college. *Daily Monitor*. Retrieved April 15, 2013, from <http://www.monitor.co.ug/Magazines/Farming/Farmer-develops-her-model-farm-into-college/-/689860/1673372/-/vv51dwz/-/index.html>; Foundation for Sustainable Development (FSD). (2013). st. jude family projects. <http://www.fsdinternational.org/node/1560>.

(Kazozi and Austin, 2005). St. Jude runs a training center, St. Jude Organic Farming Training Centre. The center provides training in the practical and theoretical aspects of organic farming. The center's trainings cover 17 organic food production project areas. Among these are organic fruits, vegetable and poultry production, organic mushroom farming and organic beekeeping. The center also provides training on soil, pest and weed control management techniques in organic production systems, water conservation and harvesting, and value-addition. No fewer than 20,000 farmers have been trained in organic farming by St. Jude (Kazozi and Austin, 2005; Michael and Misusera, 2006; UN-Habitat, 2010). Of these, as of 2010, 147 have been certified growers of processed organic foods and dried fruits for the international market (UN-Habitat, 2010). Like most of the pro-organic CSOs in Uganda, St. Jude is supported financially by the UN and AusAid.

### **International Development Agencies and Uganda's Organic Sector**

International development organizations such as EPOPA, Hivos, ITC, DED, UNEP-UNCTAD, CBI, and IFOAM have been identified as some of the principal factors of success of Uganda's organic sector. The activities embarked upon by these organizations and through their bilateral relations with local organic stakeholders, and institutions, particularly NOGAMU, are considered to have provided the impetus and support that stimulated the development of Uganda's organic sector. Their activities widely include the provision of financial and technical support, capacity building through training and consultancy, supporting the establishment of organic production enterprise and the creation of international market linkages for Uganda's organic producers and exporters (Taylor, 2006; Twarog, 2011; UNEP-UNCTAD CBTF, 2010).

Among the development partners, EPOPA has been identified as the most important actor whose several roles have contributed enormously to the rapid growth of Uganda's organic sector (Bolwig, 2012; Forss et al., 2008; Parot et al., 2003; Taylor, 2006). Formally established in 1997 by the Swedish International Development Agency (SIDA), EPOPA's objective is to enhance African smallholders' livelihood conditions by developing and facilitating the exports of organic products from Africa (EPOPA, 2006). To achieve this objective in Uganda, EPOPA adopted a number of intervention strategies. One of these was to partner with local organic stakeholders to set up organic production enterprises with market orientation. The first organic enterprise that EPOPA help established in Uganda was an organic cotton farmer's co-op, the LOFP scheme (EPOPA, 2008; Forss et al., 2008; Parot et al., 2003; Taylor, 2006). To help establish LOFP, a project which included 266 villages (Parrott et al., 2003), EPOPA partnered with Lango Farmer's Cooperative Union (LCU) and Agro Eco, a Dutch organic consultancy company which provided technical inputs (Malins and Nelson, 2002). LCU is a regional cooperative in the Lira region, northern Uganda which deals in cotton processing and marketing (Malins and Nelson, 2002; Walaga et al., 2005). EPOPA provided project management and certification support, capacity building trainings, extension and research support, market linkages and helped LCU with both interest-free and commercial loans (Malins and Nelson, 2002). The LOFP scheme has been adjudged a huge success, even after EPOPA withdrew its support in 1999. The number of participating farmers in the LOFP scheme increased from 200 that started in 1994/95 (Malins and Nelson, 2002) through 5,100 in 1996/97, to 27,000 in 2007 (Oversee Development Institute (ODI) (2009). Correspondingly, the total turnover made by the participating farmers increased

from (Guijt and Woodhill, 2008). Besides LOFP, a list of other successful organic enterprises which EPOPA assisted to set up in Uganda is shown in Table 2. As shown in the table, EPOPA has facilitated the establishment more than 20 of organic enterprises in Uganda. The table also indicates that EPOPA's intervention in Uganda's organic sector transcends the traditional cash crop sector as it has helped with the establishment of certified organic fruits and vegetable operations.

Moreover, EPOPA is also engaged in the institutional development and capacity building of Uganda's organic sector stakeholders. For example, EPOPA supported the development of UgoCert, Uganda's local certification body by offering technical assistance, organizational support and certification capacity building trainings for Ugocert staff. Likewise, EPOPA organizes capacity building trainings and other related supports for NOGAMU, and local organic exporters. This includes organizing organic sector development and project management training courses, organic export seminars, in-project trainings, and provision of technical assistance on how to start internal control systems (EPOPA, 2006, 2008; Forss et al., 2008; Gibbon, 2006). In addition, EPOPA also helps with international market linkages for organic exports through a number of means. This includes the organization of buyers' tour and linking buyers with export markets. Relatedly, EPOPA is involved in creating organic marketing companies like Aforex and in facilitating marketing related promotional activities, by, for example, sponsoring participation in organic fairs and in establishing a market contacts database (EPOPA, 2008). Other market related support offered by EPOPA are those that help subsidize certification, thus, creating room for entry of resource poor smallholders into certified organic production (Gibbon, 2006). To access international markets, Uganda's

organic sector greatly relies on EPOPA and the Dutch facilitated CBI (Forss et al., 2008; Muwanga, 2008). Furthermore, EPOPA has supported the development of UOS and plays a supportive role in advocating against anti-organic policies in Uganda (EPOPA, 2008).

Other development partners have contributed in a related way like EPOPA. For example, Hivos has provided funding support for local organic producer groups, UgoCert and local organic CSOs like SATNET, PELUM, Centre for Organic Farming (CIOF), and LOFP. The funding support is meant for facilitating organizational development, organic farmers' training, market development and awareness creation (Guijt and Woodhill, 2008). Also, UNEP and UNCTAD have been supporting the organic sector in Uganda in the areas of research, organic policy making capacity building and by helping to unite the ranks of organic stakeholders in the country through means that include a stakeholders conference (Guijt and Woodhill, 2008; Tumushabe, 2006). The Dutch-facilitated CBI also helps in securing entry of Uganda's organic products into EU markets by working with exporters that are NOGAMU's members (Forss et al., 2008).

**Table 2:** Overview of EPOPA Initiated Organic Enterprise Projects in Uganda (1994-2008)

<b>Area/District</b>	<b>Crop/Product</b>	<b>Total Number of Participating Farmers</b>
Nakasongola	Fish	43
Luwero	Coffee	446
Mubende, Luwero, Masaka	Fruits	96
Mubende, Luwero, Masaka	Dried fruits	
Lira	Shea nuts	300
Arua	Honey	59
Wakiso	Vanilla	680
Wakiso, Kayunga, Mbará	Fruits	105
Wakiso, Kayunga, Mbará	Dried fruits	
Mukono	Vanilla	283
Mukono	Cardamom	As above
Wakiso, Luwero, Mukono, Kayunga	Fresh fruit	106

Table 2 continued

Wakiso, Luwero, Mukono, Kayunga	Dried fruit	
Kaborole, Mityana	Lemon grass	240
Palisa, Kaberamaido, Kumi	Hibiscus	264
Apach, Oyam, Lira	Cotton	16,000
Apach, Oyam, Lira	Sesame	
Kapchorwa, Nebbi, Bushenyi	Coffee	15,300
Mount Elgon	Coffee	6,500
Kaberamaido, Apach, Oyam, Lira	Sesame	7,800
Bundibudgyo	Cocoa	4,180
Bundibudgyo	Vanilla	
Kasese	Dried pineapple	1,800
Masaka	Bark cloth	132
Mukono, Wakiso	Vanilla	51
Total		54,385

Source: EPOPA, 2008, p. 35.

### Uganda's Organic Sector and Government's Role

The Ugandan government is not one of the main drivers of OA sector development in the country. However, some of the policies and activities of the government have indirectly and directly contributed to the sector's success. One of these is the liberalization, economic policies that the government implemented in the late 1980s and early 1990s. This benefitted the OA sector as it allowed foreign and local private enterprises and individuals to invest and partner with one another to foster the growth of the sector (Walaga, 2005). Another related policy is the NGO Act (1999) which recognized NGOs as agents of nation building and empowered them to mobilize resources from within and outside the country to achieve their nation-building objectives. This created a favorable environment for pro-organic NGOs and CBOs to spring up in the country (Walaga, 2005).

There are government actions that have directly benefited the growth of the country's organic sector. This includes the inclusion of Boovevil/shares, a major investor

in the country's organic sector, as a member of the Presidential Investor's Roundtable. The roundtable is chaired by Yoweri Museveni, the President of the country and it is Uganda's major investor forum. It has recognized OA as an alternative development pathway to be supported and has also encouraged pro-organic policies and subsidy regimes (Tumushade, 2007; UNEP-UNCTAD, 2010). In a similar vein, a Presidential Initiative for Organic Farming for Youth in Busoga Sub-Region was launched in August 2012. The project is dedicated to the growing of organic mushroom, vegetable and poultry with a view to improving the livelihood conditions of youth in the sub-region (State House of Uganda, 2012). In addition, in recognition of the role of organic exports in the economy and to foster competition among organic stakeholders who are producing for export, the Uganda Export Promotion Board introduced Best Organic Exporter and Organic Fruits and Vegetable Exports Awards. These awards are one the special awards categories within the President's Awards for Exports (Forss et al., 2008; Muwanga, 2008). Also, as earlier pointed out, the government also supported and adopted UOS and the regional EAOPS. Through MAAIF, the government also supported the creation of a national organic policy for the country (Pophiwa, 2012b; UNEP-UNCTAD CBTF, 2010).

However, there are still some actions of the government, which are seen as obstacles to the realization of the full potential of the country's organic sector. This includes the government support for conventional agriculture through agrochemical input subsidies and the promotion of GMO foods. The government has also favored the use of DDT to control malaria, an action which led to the loss of the certification status of 15,000 organic farms. Moreover, the government has not demonstrated adequate political will to support the organic sector by, for example, expediting the approval of the final

draft copy of the country's national organic policy that was released in 2011, or by creating action plans to guide the development of the organic sector. Likewise, there are no government-funded research, organic extension services and incentives for 'going organic.' This has limited the resources invested in the sector to those that private actors are able to mobilize (Forss et al., 2008; Jacobsen, 2009; Taylor, 2008; UNEP-UNCTAD, 2010; Walaga, 2005).

### **Organic Agriculture Research and Supporting Institutions**

Uganda does not have OA-government-funded research. This has been attributed to the government's skewed support for conventional farming systems. However, there are two universities in the country offering courses and conducting research on OA. These are the privately-owned Uganda Martyrs University (UMU) and the stated-owned Makerere University (MU). The UMU runs a distance learning degree program in organic agriculture and also organizes organic farming education programs for primary school teachers in partnership with the UK-based NGO, Seeds for Africa. Short-term courses in organic agriculture production systems and a master's degree program in agro-ecology are also offered at UMU. The short-term courses are conducted with support of SIDA-EPOPA. On its part, the MU collaborates with NOGAMU to organize trainings for organic producers in addition to offering a course on organic livestock production.<sup>29</sup> The two universities also conduct research on different aspects of OA through their students, faculty and in collaboration with foreign academic institutions and development agencies

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<sup>29</sup> For details about the course offered by MU on organic livestock production, see, [www.covab.mak.ac.ug/...bap-2106-organic-livestock-production-.html](http://www.covab.mak.ac.ug/...bap-2106-organic-livestock-production-.html).



(Forss and Lundström, 2004; Muwanga, 2008; Pophiwa, 2012a; Ssekyewa, 2005; Taylor, 2006; Tumushabe et al., 2006; UNEP-UNCTAD CBETF, 2010; Walaga, 2012a).

### **Conclusion**

The focus of this chapter was to explain the factors that undergird the development of Uganda's organic sector as a success story. The chapter identified the major stakeholders behind the growth of OA in Uganda and explained their roles and the strategies that they have used to facilitate the development of the sector. In addition, it attempted to explain the institutional environment and policies that facilitated the development of the sector. The analysis showed that the development of Uganda's organic sector can be credited to the activities of NOGAMU, local CSOs and partner development/donor agencies. These actors partnered with one another in different ways to see the sector grow. They also worked with and supported small-scale farmers and producer groups to start organic operations. They did this in many ways including organizing smallholders into small productive groups that are technically and financially supported to start organic farming enterprises. They also conducted trainings on value-addition, business development, and management. They also organized capacity development training programs, advisory and extension services and offered technical support covering diverse aspects of organic production, processing, exporting, and certification requirements. The technical support assisted organic producers and processors in the country to develop and expand their productive capacity, enhance their business management skills and sustain their operations. At the same time, the technical support provided motivations for the adoption of organic production systems, a fact which became evident in the growing number of organic farmers in the country.

The stakeholders, especially, NOGAMU and pro-organic CSOs also engaged in promotional activities as a means of creating awareness and fostering the development of Uganda's organic sector. In addition, all three stakeholders are actively involved in market development activities. For example, NOGAMU and the local CSOs are actively involved in developing local market outlets for organic products in the country. NOGAMU does this by establishing exclusive organic shops and by creating market linkages with restaurants, supermarkets, parks and institutions. Similarly, some of CSOs, like SATNET, organize smallholders into marketing groups that are provided with outlets where they can sell their products. Internationally, all three actors partake in creating markets for Uganda's organic products. The sector has relied heavily on EPOPA for accessing international organic niche markets. EPOPA works with small scale farmers and exporters to produce commodity crops that are identified as having a market demand in Europe. Likewise, NOGAMU and some local CSOs provide international organic market linkages for organic farmers and exporters in the country. A summary of the role of the major stakeholders whose activities have helped to facilitate the development of Uganda's organic sector as the largest in Africa is presented in Table 3. The discussion highlighted some of the hurdles inhibiting the promotion of OA in Uganda. Of these, the lack of any real governmental support for the organic sector was identified as the major challenge limiting full development. To sum up, as its major finding, the chapter highlighted that Uganda's OA success story was mainly inspired by effective institutional arrangements put in place by NOGAMU in collaboration with pro-organic CSOs in the country and donor agencies such as EPOPA and Hivos. These include institutions that are responsible for (1) organizing and coordinating the country's organic sector; (2) organic

market development and awareness creation; (3) conducting training and research; and, (4) the formulation of Uganda's national organic standards and provision of organic certification and services. Finally, through the negative impacts of certain governmental actions on the organic sector, the chapter also highlighted how the lack of public institutional support may hinder the development or limit the realization of the full potential of a country's organic sector.

**Table 3: Summary of the Activities of Organic Agriculture Stakeholders in Uganda**

Name	Stakeholder Category	Activity and Roles
NOGAMU	Umbrella body	Unites and coordinates the activities of all organic stakeholders in the country.
		Conducts capacity development training programs, advisory services, outreach and organic extension for organic operators in the country.
		Facilitates and encourages research and education in organic agriculture by working with some of the universities in the country such as UMU, and MU.
		Creates domestic and export market opportunities for Uganda's organic sector by working with organic farmers, local pro-organic CSOs, exporters, foreign importers of organic products, Uganda Export Promotions Board, and international organic development organizations such as EPOPA.
		Undertakes organic advocacy and promotional activities, locally and internationally, to facilitate the adoption of organic production systems, attract support for the sector and expand domestic and international market opportunities for the country's organic products.
		Spearheads the development of Uganda Organic Standards (UOS), and other forms of organic quality guarantee systems such as the PGS and the ICS to facilitate and ease the certification of organic operations in the country Also, played roles instrumental to the creation of East Africa Organic Products Standards (EAOPS)
		Facilitated the development of domestic certification and inspection capacity in Uganda through the establishment of UgoCert
		Works with other pro-organic CSOs, government agencies such as such as the Ministry of Agriculture, Animals, Industries and Fisheries, Uganda National Bureau of Standards to facilitate the process of development of a national organic policy for Uganda. The policy document has yet to be approved by the government.
Kulika Uganda	Local NGO	One of the founding blocks and NGO, corporate members of NOGAMU.
		Mainly specializes in organizing organic capacity development training and outreach programs for smallholders in different parts of the country using training the training the trainers approach.
		Facilitates the organization of smallholders into production groups and assists them with supports including clean seedling provisioning.
SATNET	Local NGO	A regional bonding organization for pro-organic NGOs and CBOs in the six districts of Rwenzori region, western Uganda. Doubles as NOGAMU representative in the region.
		Helps in coordinating and supervising the activities of NOGAMU in the region.
		Partners with NOGAMU to run organic promotional campaigns on radio to foster adoption, educate farmers on organic farming management techniques and to create domestic market for the country's organic product.

Table 3 continued

		Creates market channels for organic farmers in western Uganda to sell their organic products.
		Organizes smallholders in the region into viable organic production and marketing groups.
		Works with her member organizations to facilitate the establishment of smallholders organic production enterprises.
		Conducts capacity building trainings for organic farmers in the region aimed at increasing their productivity and the profitability of their farm operations.
RUCID	Local NGO	One of the founding members of NOGAMU.
		Provides an organic extension and consultancy services for farmers and extension officers.
		Run apprenticeship training program and a training centre where short to medium term trainings are offered.
		Conducts outreach services for farmer groups in Mubende, Mityana and Kiboga towns, Central Uganda
		Promotes organic market activities and facilitates market linkage to smallholder organic farmers that benefit from its programs.
Caritas Uganda	Faith-based Local NGO	Offers training and extension services to organic farmers in Masaka on organic composting and other aspects of organic production systems.
		Supports smallholders to set up group organic marketing and production enterprises.
		Embarks on promotional activities by organizing exhibitions on organic and sustainable farming systems.
		Facilitates markets linkages for the organic farmers that are beneficiaries of its activities
St. Jude Project	CBO	Mainly provides a training program in organic production systems through its center, St. Jude Organic Farming Training Center.
Uganda Martyrs University (UMU) and Makerere University (MU)	Academic Institutions	The UMU runs distance learning programs in organic agriculture. Conduct organic training programs for primary school teachers. Masters level program courses in agro-ecology are offered at Uganda Martyrs University. Conduct research, however, limited, on OA through students and faculty members.
EPOPA	International Agencies	Works with NOGAMU and other pro-organic groups in the country to set up organic production enterprises for smallholders.
		Provides management and certification supports to smallholder organic farmers in addition to capacity building trainings and extension services.

Table 3 continued

		<p>Sponsor participation in international organic fairs and links smallholders with export organic markets and also provide them with interest free and commercial loans to support their operations.</p> <p>Supports NOGAMU organic institutional building activities by, for example, offering technical assistance to set up UgoCert.</p>
Hivos	International Agencies	<p>Provides funding supports to NOGAMU, UgoCert, SATNET, and a host of other pro-organic CSOs in Uganda.</p> <p>Supports organizational development and activities of the beneficiaries of funding support in the areas including trainings for organic farmers, awareness creation and organic market development.</p>
UNEP-UNCTAD	International Agencies	Supports organic research and capacity building for Uganda's organic sector through means including organization of programs that brings the stakeholders together.
MAAIF	Government	Sometimes support organic sector by collaborating with NOGAMU to draft and create the UOS and in developing the country's national organic policy that is still awaiting governmental approval.
Uganda Export Promotion Board	Government	Introduced and issues presidential awards categories for best organic exports

## **CHAPTER 5**

### **TUNISIA'S ORGANIC AGRICULTURE SECTOR DEVELOPMENT STRATEGIES**

#### **Introduction**

Tunisia's organic sector ranks as the second most developed in Africa and 24<sup>th</sup> worldwide (Heinze, 2012; Oxford Business Group, 2010). As it was noted in Chapter One, the Tunisian organic sector is state-driven. This chapter explores and explains the institutional context and the strategies adopted by the Tunisian government to facilitate the development of the country's organic sector. The roles of non-governmental stakeholders, the regulatory framework, policy measures, research, education, training, extension and collaborative relations in the sector's development are presented.

The chapter begins with a brief account of the evolution of OA in Tunisia alongside an analysis of the sector's performance over the years. The second section elaborates on the institutionalization of OA in Tunisia and the main actors responsible for the sector's development. The third section discusses Tunisia's organic national development action plans and the policies put in place to facilitate the growth of the sector. The fourth section discusses the organic regulatory framework and certification in Tunisia while the fifth dwells on Tunisia's organic market development strategies and awareness campaigns. The sixth section discusses OA research and training in Tunisia, as well as relationships forged with other stakeholders to spur the development of the sector. The last part summarizes the discussion in the chapter.

### **Tunisia's Organic Sector: Background and Performance**

Tunisia is an agrarian economy with an estimated 33% of its population dwelling in rural areas as of 2012 (The World Bank, 2013). The agricultural sector accounts for 12% of Tunisia's GDP and 16% of its total employment. Tunisia's agriculture is dominated by smallholders; an estimated 75% of the country's farmers cultivate less than 10 hectares each and 65% farms less than 5 hectares (Africa Development Bank, 2012; Lamboley, 2012; Ministry of Agriculture, Hydraulic Resources, and Fisheries (MAHRF), 2013a). The country's traditional crops include olive trees, dates and cereals; however, other crops, such as melon, tomatoes, almond, citrus fruits and a wide range of vegetables are also grown.

The beginning of OA in Tunisia is attributed to private initiatives, which started in the mid-1980s (Ben Khedher, 2004; Kilcher and Belkhiria, 2011; Lamboley, 2012) when five to six farmers in Tozeur and Keili began to grow dates based on organic methods (Carey, 2008). These pioneer organic farmers were mainly growers and exporters of dates (Belkhiria and Ben Khedher, 2008). The immediate motivation and the factors that made these pioneering producers adopt organic farming methods are not really known. However, it seems they were influenced by agroecological and climatic factors as well as the traditional farming culture in Tunisia. Tunisia's climate is reported to be unfavorable to pests and diseases. The country also has a rich biodiversity and geothermal water resources that support organic farming methods. Furthermore, the prevalent traditional farming system and practices in Tunisia rely on some organic farming techniques and cultural practices like crop rotation. These factors encouraged the growing of many crops organically and facilitated the conversion to OA (Ben Khedher, 2002; Mami, 2013;



Oxford Business Group, 2007; Znaïdi, 2001). These same factors may have probably influenced the OA pioneers of OA to grow their dates organically. Another possible factor may be related to access to European markets. To this effect, Belkhiria and Ben Khedher (2008) noted that the drive to 'go organic' by the pioneers was in response to the demand for organic products from Europe. Corroborating this submission, Carey (2008) documented that the pioneer organic farmers were producing for some European buyers who also advised them to certify their operations to be able to access premium prices for their dates. In a similar vein, Mami (2013) states that one of the driving forces prompting Tunisian farmers to go organic arises from their attentiveness to the market expectations associated with organic products. This needs to be understood in terms of the huge demand for organic products and their associated price premium prices in international markets. With this being a driving factor for Tunisian farmers to go organic, and given Belkhiria and Ben Khedher (2008) as well as Carey's (2008) elucidations, it seems reasonable to allude to market consideration as a factor that motivated the pioneer organic producers in Tunisia.

At the onset, the activities of the pioneer organic producers were not known to the Tunisian government and did not in any known way contribute to the spread and emergence of an organic sector. Professors Mohamed Ben Khedher, Habib Amamou and Mohamed Habib Ben Hamouda<sup>30</sup> at the Agronomic Institute of Chatt Meriem (AICM), Sousse, later brought OA to the government's attention. These professors were involved in a series of discussions on OA with French organic farmers who visited their institute

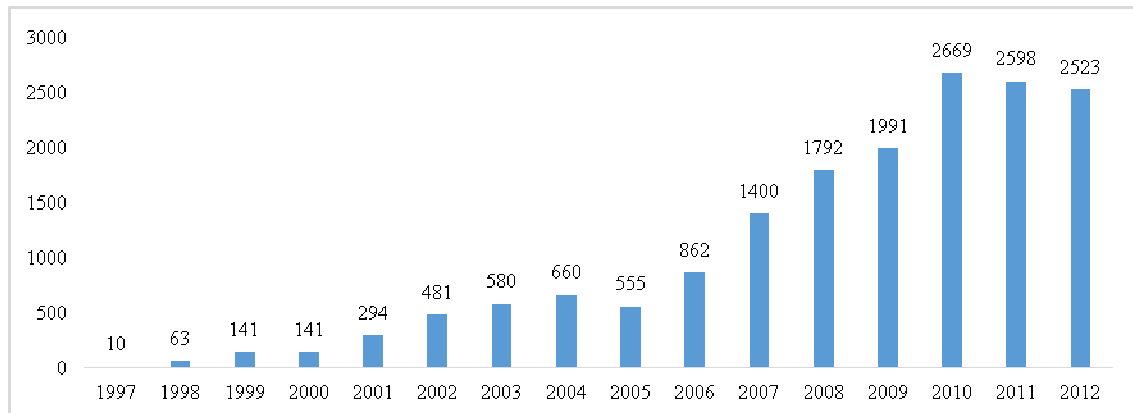
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<sup>30</sup> Professors Mohamed Ben Kheder is affiliated with the Department of Horticulture, Habib Amamou with the Department of Economics and Mohamed Habib Ben Hamouda with the Department of Biological Sciences and Plant Protection, at Agronomic Institute of Chatt Meriem, Sousse, Tunisia.

(Ben Khedher, pers. comm. 2013). This visit increased the professors' awareness about the potential and relevance of organic production systems to the Tunisian economy and food security situation and they later contacted and informed MAHRF about OA (Ben Khedher, pers. comm. 2013). Some MAHRF staff had learned about OA through international meetings (Carey, 2008). This probably aided the success of the discussion that the professors had with the MAHRF as it culminated into the organization of a workshop on OA on July 1997. It was discovered at the workshop that some Tunisian farmers had been practicing OA since the mid-80's (Ben Khedher, pers. comm. 2013). The Tunisian government also developed special interest in OA by closely following the operations of individual organic producers in the country (Sameh Amara quoted in Lamboley, 2012). Several other follow-up conferences were held in 1997 (Germain, 2003). The major impact of those conferences is that they heralded government support for OA because it was considered as one of the ways that the country could achieve some of its national agriculture policy objectives. These include using OA to improve food security condition in the country, and increase farmers' revenue and livelihood conditions. It was considered to be a reliable way through which the country's rural economy, agric-food exports and export revenue can be enhanced by tapping into international organic niche markets. Furthermore, the government saw Tunisia's proximity to Europe where there is a huge demand for organic produce as a primary strategic advantage to be utilized to realize its earlier stated priority objectives. It was also conceived that OA will aid in preserving the country's natural resource base and help in adding value to some of Tunisia's traditional crops such as dates and olive (Belkhiria

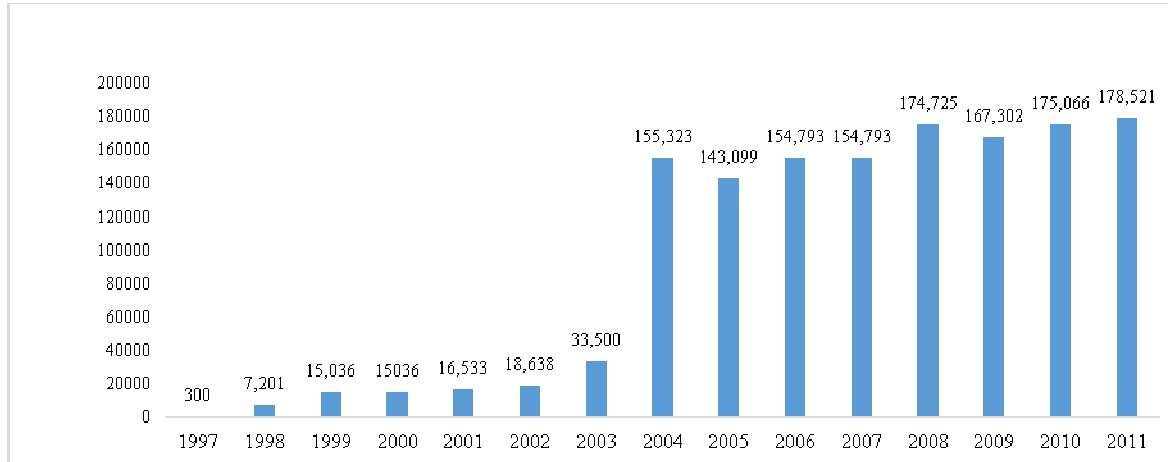
and Ben Khedher, 2008; Carey, 2008; Kenny et al., 2008; Morgan, 2010; Oxford Business Group, 2010).

From 1997 onward, because of government support, OA in Tunisia evolved from individual producers' operations to a sector backed with state-facilitated institutions, programmatic and market development activities, and explicit nationwide policy supports and measures. This sector also witnessed a remarkable turnaround in terms of the increase in certified organic farmland, the number of organic farmers and organically cultivated crops; these facts are reflected in the following organic key sector performance data (Ben Khedher, 2012; Ben Khedher and Nabli, 2003; Kilcher and Belkhiria, 2011; Parrott et al., 2003). As indicated in Fig. 4 and Fig. 5, since 1997 when the government started to steer the development of the sector, the number and size of organic farms in Tunisia grew 251- and 594-fold, respectively.



**Fig. 4.** Total Number of Certified Organic Farmers in Tunisia

Source: (1997-2004) Ben Khedher and Belkhiria, 2006; (2005-2012) Ben Khedher, pers. comm. 2013.

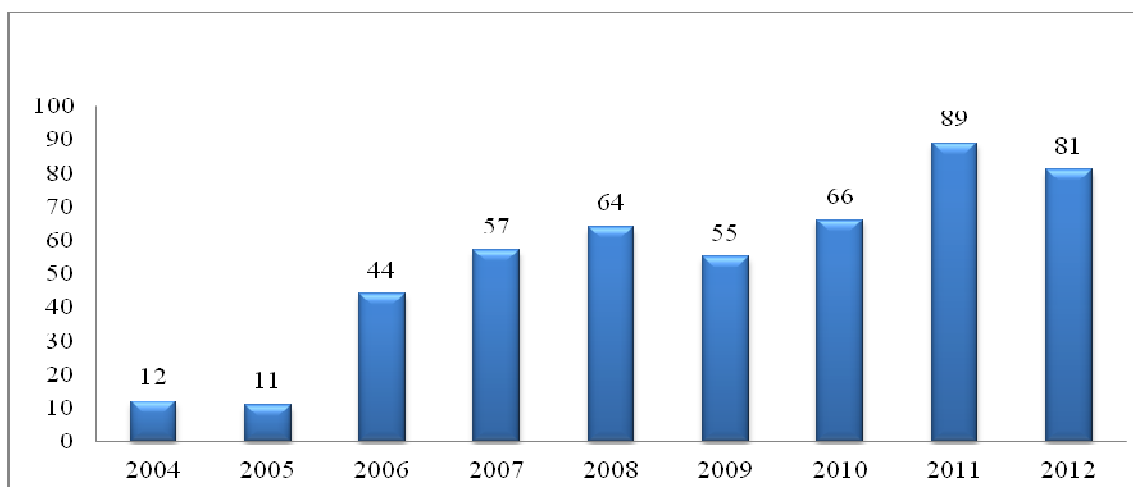


**Fig. 5.** Total Certified Organic Area (Ha) in Tunisia

Source: (1997-2003) Ben Khedher and Belkhiria, 2006; (2004-2011) FiBL, 2012b; FiBL-IFOAM, 2013.

In addition, and as shown in Fig. 6, Tunisia's export earnings from OA produce has been on the rise as well, experiencing no less than 575% between 2004 and 2012. The export organic crops and products include olive oil, dates, almond, vegetables, jojoba, fruit trees, dried fruits, grain crops, palm trees, aromatic and medicinal crops, and honey (Ben Khedher and Belkhiria, 2006; Oxford Business Group, 2010; Turki and Bonezzi, 2011; The Technical Centre of Organic Agriculture (CTAB), 2013a). Of these crops, as shown in Table 4, olive, dates, fruits (oranges, avocados, mangoes, dried fruits) and vegetables are Tunisia's flagship organic exports (Kilcher and Belkhiria, 2011; Oxford Business Group, 2007). Finally, there is no evidence linking the growth in Tunisia's organic sector to the general performance in the economy. Given the export orientation of OA in Tunisia, it seems reasonable to attribute the growth in the country's organic sub-sector to increase in international demand and trade in organic products (Heinze, 2012; Oxford Business Group, 2007, 2010; Diefendorf et al., 2012). In the sections that follow,

the major interventionist measures, agency and institutional frameworks put in place to facilitate the development of Tunisia's organic sector are described.



**Fig. 6.** Tunisia's Organic Export Value (Millions TND)

Source: CTAB, 2013a; FiBL, 2012b

**Table 4:** Production and Export of Tunisia's Main Organic Products

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total production in tons (includes organic olives)	9,077	39,364	30,030	100,000	120,000	145,000	174,500	245,500	311,000	233,000	244,190
Total production in tons (includes organic olive oil)	5,566	12,166	16,430	40,000	80,000	65,000	74,500	165,500	247,000	137,000	112,078
Total production of organic livestock (tons)									5	5,720*	5,760
Total Export (tons)	1,110	1,015	3,018	2,615	5,600	9,000	13,000	12,095	14,096	16,700	17,807
Export value (Millions TDN)	-	-	12	-	44	57	64	55	66	89	81

Source: CTAB, 2013a; Kilcher and Belkhiria, 2011, p. 113.

### **Tunisia's Organic Sector: Institutionalization and Specialized Institutions**

The institutionalization of the OA sector in Tunisia arose from the creation of specialized central and regional level administrative government agencies and technical institutions. These include (1) the *Commission Nationale de l'Agriculture Biologique* (National Commission for Organic Agriculture); (2) the *Centre Technique de l'Agriculture Biologique* (The Technical Centre of Organic Agriculture); (3) *Centre Régional des Recherches en Horticulture et Agriculture Biologique* (The Regional Center of Research in Horticulture and Organic Agriculture); and, (4) *La direction générale de l'agriculture biologique* (The Directorate General of Organic Farming). These specialized government OA establishments are tasked with well-defined and structured responsibilities aimed at promoting and advancing the development of the country's sector. Their activity areas span the design and provision of extension services, the organization of capacity building trainings and the conduct of research covering different aspects of organic operations. They are also responsible for providing a sense of direction for the development of the country's organic sector. This is usually done by working with other stakeholders to develop and implement sector development plans and programs that can help advance the growth of Tunisia's organic sector. Furthermore, they are engaged in sector coordinating and regulating activities. These include but are not limited to: overseeing and auditing the activities of organic certification and inspection bodies to ensure compliance with existing regulations; the organization of promotional activities aimed at increasing the adoption of organic farming systems and boosting public awareness about buying and eating organic products; the dissemination of information and the transfer of technology to organic farmers to help boost their productivity; and the

creation and maintenance of a database that contains the inventory of organic operations in the country as well as sector performance information (Ben Khedher, 2004; Carey, 2008; Kenny et al., 2008; Morgera et al., 2012). Taken together, the sector wide activities undertaken by the specialized OA agencies and institutions underscore why they are the major actors driving the growth and development of Tunisia's organic sector. From this general overview of the activity areas of the specialized OA government establishments, attention will now be on their specific and interrelated roles.

Earlier on, the *Commission Nationale de l'Agriculture Biologique* (National Commission for Organic Agriculture (CNAB)) was identified as one of the specialized OA establishments in Tunisia. Established in April 1999 as a consultative coordinating body mandated to orchestrate the development of the sector, the CNAB is chaired by the MAHRF (Journal Officiel De La République Tunisienne (JORT, 1999, 2012a). It is the first specialized OA institution that was created by the Tunisian government, and at the national level, it is the most important authority on OA (Ben Khedher, pers. comm. 2013). The CNAB is composed of non-government stakeholders and those drawn from other government agencies. Among others, these include the representatives of the ministries of commerce, environment and public health as well as the technical center for organic farming. Organic farmers, consumer defense organization, certification bodies and higher education agriculture research institutions are also represented on the commission (JORT, 2012a).

Among others, the responsibilities of CNAB include the preparation of capacity building sectorial development plans and proposals on how the organic sector can be supported and administered. The CNAB is also entrusted with the coordination of organic

certification and inspection activities in the country. In this respect, the CNAB issues authorization for certification companies and inspection bodies to operate in the country and also monitors the activities of the accredited certification bodies. In addition, the CNAB also keeps and updates a record system on certified organic crops produced in the country, and their production volume and markets. In addition, the database comprises the identity of certified organic operators in the country, the details of their operations as well as their compliance and infringements of the rules guiding certified organic operations. This has allowed for Tunisia's organic produce traceability from production through processing and the supply chain, hence, helping with the maintenance of the integrity and competitiveness of the country's organic products. Also, this seems to have enabled the CNAB to carry out its advisory role as a body that reviews and proposes plans for the development of the sector. Furthermore, the commission also audits the activities of inspection and certification bodies in the country and advises the MAHRF on the refusal and revocation of certification accreditation status (Ben Khedher, 2002; Ben Khedher and Belkhiria, 2006; Carey, 2008; JORT, 2012b; Kilcher and Belkhiria, 2011; Morgera et al., 2012). Finally, the CNAB identifies the barriers and challenges faced by organic inspectors and certification bodies (JORT, 2012b). This seems to assist the commission in developing proposals on what can be done by the government to strengthen the organic sector.

The Tunisian government and organic stakeholders also felt the need for a body that would serve as the focal overseer of the development of its organic sector. Towards this end, an administrative organic body, *La direction générale de l'agriculture biologique* (The Directorate General of Organic Agriculture, henceforth, DGAB) was



established. The DGAB is the main authority on OA in the MAHRF and it is responsible for housing the CNAB by providing a permanent secretariat for the latter (JORT, 2010a; Ben Khedher, pers. comm. 2013). In this sense, in Tunisia, not only is the DGAB the main OA coordinating body within MAHRF, it is also responsible for supervising the activities of CNAB. Therefore, from the perspective of its relationship with the CNAB whose designated functionality is advisory in orientation, as alluded to by Nadhem and Mohsen (2013), the central responsibility of the DGAB is supervisory. That is, the delineation of the function of the DGAB as supervisory and the CNAB's as advisory, seems to have made it possible for the DGAB to coordinate OA sectorial activities with the CNAB without problems. As observed by Bouckaert et al. (2010), cited in Lafuente and Nguyen (2011), advisory bodies are structural mechanisms used by government establishments to facilitate coordination between governmental agencies that are of the same or different levels. The same may be said of the decision to locate CNAB's secretariat within the DGAB as this seems to have enabled the two establishments to connect well with one another more so that their activity areas are similar and interrelated. This claim appears to be further reinforced by the fact that the DGAB has a representative on CNAB. Being represented in the CNAB, it can be argued, allows the DGAB to be aware of the activities of the former. At the same time, it places the DGAB in a position that makes it to have a voice in CNAB's activities. Looked at in this way, it seems reasonable to conclude that the location of CNAB's secretariat within the DGAB in addition to the delineation of CNAB's role as advisory and DGAB's as supervisory may have made it easy for the two establishments to effectively coordinate organic sector development activities in Tunisia. In its 2012 report on the organic certification systems

in Tunisia, the *Commission Européenne Direction Générale De La Santé Et Des Consommateurs* reported a high level of coordination among the major coordinating OA institutions, which included the DGAB and CNAB.

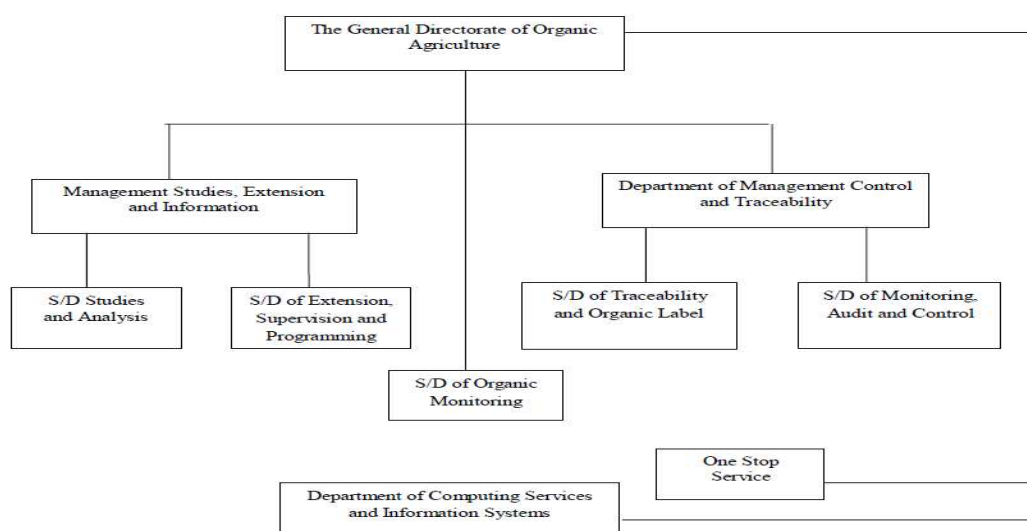
The DGAB tasks include the preparation, development and implementation of development plans and strategies for the country's organic sector (JORT, 2010a). To develop organic sectoral plans and strategies, the DGAB works with a select committee that is set up by the minister of agriculture. The select committee is chaired by the DGAB and the committee members are drawn from a broad array of governmental and non-governmental entities that are directly or indirectly involved in the organic sector. Among others, this includes the ministries of trade and industry, the specialized OA institutions in the country, the farmers' union, organic farmers, organic marketers and processors, interprofessional groups, organic research institutions and agencies that are promoting investment in the organic sector. The members of the select committee are further broken down into sub-committees which are assigned the responsibility of working on different components of the sector's plan. Thereafter, the DGAB facilitates the process leading to the harmonization of the different components of the plans into a coherent sector development document to be submitted and proposed to the CNAB. In turn, the CNAB discusses and endorses the plan, following which, it will be sent to the minister of agriculture for approval (Belkhiria, pers. comm. 2013).

The DGAB is also entrusted with the responsibility of supervising the activities of inspection and certification bodies in the country (JORT, 2010a; 2010b; Kilcher and Belkhiria, 2011). This is another responsibility that the DGAB co-coordinates with the CNAB. Before explaining how this is done, it is essential to highlight that one of the two

major divisions in the DGAB is the department of management control and traceability. As shown in Fig. 7, this department is sub-divided into two sub-directions; one, the sub-division of traceability and organic labels, and two, the sub-division of monitoring, audit and control. The sub-division of traceability and organic labels is responsible for, and able to carry out activities for, the allocation and management of organic labels, in addition to implementing and maintaining the traceability of the country's organic product (DGAB, n:d). Earlier, it was stated that the CNAB holds and updates a record system bearing the official details of all the production, processing and marketing activities of organic operators in the country. As indicated by Belkhiria (pers. comm. 2013), the DGAB helps the CNAB to manage this database. In this sense, it is the DGAB that manages Tunisia's organic product traceability system. The database allows for the coding and traceability of the country's organic products (Belkhiria, pers. comm. 2013), thus, making it possible for the sub-division of traceability and organic labels to carry out its responsibility pertaining traceability.

For its part, the duty of the sub-division of monitoring, audit and control includes supervising and conducting a technical audit of organic inspection and certification bodies in the country to ensure compliance and enforce organic regulations. The auditing process commences with the commissioning of an audit committee by the CNAB, the same body that is responsible for the planning and handling of the auditing process. The committee is chaired by the DGAB and a determination of the committee's membership is made by the minister of agriculture following due consultation with the CNAB. The committee membership usually consists of, but not limited to, representatives drawn from

the DGAB, CTAB, and Tunisian Accreditation Council (TUNAC).<sup>31</sup> The auditing takes the form of a mandatory preliminary and monitoring visit to be held at least once a year. The purpose of this visit is to authenticate compliance with conditions of approval as well as those guiding the execution of the inspection and certification process. This may be followed up by an observational visit whose purpose may extend to other activities being undertaken by the certification or inspection bodies. The process ends with the submission of an audit report to the secretariat of CNAB, following which recommendations will be issued to the minister of agriculture to renew or withdraw the authority granted a certification and inspection body or sanction the implementation of any recommended penalty (For further details about the auditing process, see, Commission Européenne Direction Générale De La Santé Et Des Consommateurs (CEDGSC), 2012; DGAB, 2011).



**Fig. 7:** The Organogram of the General Directorate of Organic Agriculture

Source: (DGAB, n:d).

<sup>31</sup> For details about TUNAC, see <http://www.tunac.tn/>.

The DGAB activity areas also include the provision of extension and support services for organic operators. This particular responsibility is organized by the department of management studies, extension and information-the second of the two major divisions in the DGAB, through means such as field visits, and the organization of trainings (Belkhiria, pers. comm. 2013; Kilcher and Belkhiria, 2011). Furthermore, through its sub-division of studies and analysis, the DGAB spearheads the conduct of studies for the development of organic crops (Belkhiria, pers. comm. 2013; JORT, 2010a). The DGAB also fosters organic market development and the dissemination of information on organic standards to organic operators in the country (Belkhiria, pers. comm. 2013; DGAB, n:d; JORT, 2010a). The DGAB facilitates market development through means such as (1) offering ‘one-stop service’ that provides market information and direction on organic produce exports; (2) connecting traders with producers; (3) monthly publication of organic production volume and supply; (3) local and international promotional campaigns for Tunisian organic produce. The database that the DGAB manages for the CNAB has facilitated the analysis of information on seasonal, total and value chain organic production volume, organic produce market destination points, and variation in market prices (Belkhiria, pers. comm. 2013). Finally, the DGAB facilitates cooperation with other countries and international organic stakeholders to support the growth of the sector (Kilcher and Belkhiria, 2011).

A number of factors have made it possible for the DGAB to carry out its numerous responsibilities. One, as documented in CEDGSC’s report (2012), the law specifying the activity areas of the DGAB in relation to those of the CNAB are clearly defined. This seems to have contributed to the high level of coordination between the

DGAB and the CNAB, a point which earlier on was noted and also ascertained in the CEDGSC's report. Two, the DGOA is staffed with well-trained and competent staff. Three, the DGAB organizes and participates in refresher trainings for its staff to strengthen their capability to carry out designated responsibilities. A case in point is the human capacity development training co-organized by the DGAB in conjunction with TUNAC on ISO 65/EN certification system in January 2011 and May 2012 (CEDGSC, 2012). Four, the DGAB has local coordinating organs in all the 24 regional commissariats in the country. This is to enable the directorate to increase its presence in the regions and allow it to achieve its goals (Belkhiria, 2011; Kilcher and Belkhiria, 2011). It is also worth noting that the DGAB has been able to effectively coordinate activities with all 24 regional branches through means which CEDGSC (2012) listed as including exchange of monthly and quarterly reports, organization of visits and annual meetings. Five, and finally, the DGAB runs an autonomous budget (CEDGSC, 2012). Thus, it can be argued, has saved the DGAB from delays that may arise if its funding is attached to another body.

The *Centre Technique de l'Agriculture Biologique* ((CTAB) The Technical Centre of Organic Agriculture) is another key dedicated OA institution established by the Tunisian government. The CTAB has financial autonomy (Ben Salah, 2007) and it has been identified not only as the main driver of Tunisia's organic sector but also, as the reference point for applied organic research activities in the country (Al-Bitar, 2008; Ben Khedher, 2012). It was established in October 1999 and the DGAB sits on its board as a representative of the minister of agriculture (Belkhiria, pers. comm. 2013). In this way, CTAB is linked to the DGAB in a capacity that enables the latter to be aware of, and

have a say in, the conduct of the affairs of CTAB. The two bodies are also linked together through their membership of the organic certification and inspection auditing committee which is chaired by the DGOA. Furthermore, like the DGAB, the CTAB is also represented on the board of CNAB (JORT, 2012a), in so doing, indicating that the CTAB is part of the decision-making process in the CNAB. The mission of CTAB includes organizing training and extension activities for organic operators in the country and to conduct applied research on all aspects of OA to be applied and adapted to farm conditions in different regions in the country. Its other objectives include providing technical support to organic operators and working with organic producers to oversee the diffusion and communication of information that can enhance their productivity. Furthermore, the CTAB participates in carrying out trials leading to the endorsement and registration of different organic inputs such as biopesticides and organic fertilizers. Relatedly, the CTAB ensures that the list of approved inputs is updated and listed on its website (CTAB, 2012). The foregoing probably explains the inclusion of CTAB as a member of the committee that audits the activities of organic inspection and certification bodies in the country. Furthermore, the CTAB has a pool of technicians who specialize in different aspects of OA that include but are not limited to organic crop and organic livestock production, pest and weed control, organic food processing and organic produce marketing. It is also backed up with adequate funding for the implementation of its activities (Ben Khedher, pers. comm. 2013).

To achieve its objectives, the CTAB organizes technical capacity development training sessions on diverse aspects of OA production techniques for technicians that are working with different organic groups in the country. These are usually done by

partnering with OA operators and groups, inter-professional organizations in different regions of the country and sometimes, with international organizations. As a result of these trainings, CTAB has been to develop the capacity of the organic units of inter-professional organizations in the country. In the same vein, the trainings have enabled CTAB to build regional technical capacity on OA and establish regional networks of OA technicians which are serving as its out-post liaison officers, trainers and technical advisers in different regions. (Ben Khedher 2004; Ben Khedher, 2008, cited in Pugliese and Al-Bitar, 2008; Ben Khedher and Belkhiria, 2006; CTAB, 2012). It is worth noting that the regional organic agriculture networks represent the DGAB at the regional level and further that they have evolved into strong regional drivers of OA in the country. Among others, they help conduct extension services and coordinate organic farm subsidy allocation at the regional level. They also work with MAHRF to organize organic farming information sharing days locally, regionally and nationally. Again, the foregoing helps highlight another way that CTAB activities connect with those of the DGAB. The CTAB also organizes specialized and refresher training programs for organic farmers, extension officers and researchers. It also conducts OA training programs for students of higher learning and works with organic operators to provide technical support in the areas of production, post-harvesting handling and processing (Ben Khedher, 2008, cited in Pugliese and Al-Bitar, 2008; CTAB, 2012; Kenny et al., 2008; Mami, 2013; Turki and Bonezzi, 2011). The trainings are conducted in different modes that include local, regional and national workshops seminars and workshops. Likewise, the trainings may take the form of information days and the organization of events that have international scope (Ben Khedher, cited in MAHRF, 2013c). The centre is also engaged in creating



maps of the areas where organic production activities can successfully take place in all regions in the country (Belkhiria and Ben Khedher, 2008; MAHRF, 2013c).

The CTAB also runs its own research experimental station and has organic pilot plots established on different farms in different regions of the country. On these pilot plots, and those operated by different agricultural organizations in the country, CTAB partners with other research bodies in the country to undertake 30 annual applied research activities on different aspects of organic production. These applied research activities are conducted on organic farms that are considered to be demonstrative of the best organic farm conditions in a locality with due cognizance also taken of the prevalent agro-climatic conditions as well. This has made it possible for CTAB to achieve its objective of adapting domestic and international OA research results to local and regional farm conditions in the country. On its own experimental stations, the CTAB also carries out an average of 16 adaptable organic experimental trials activities in a year covering different aspects of organic production such as bioinsecticides and composting. These experimental trials which are based on farmers' needs are aimed at exploring ways to improve organic operators' productivity (Ben Khedher, 2004, 2008, cited in Pugliese and Al-Bitar, 2008; Ben Khedher and Belkhiria, 2006; CTAB, 2012).

In addition, the CTAB uses many means to achieve its other objective of overseeing the diffusion and communication of information that can enhance organic operators' productivity. This includes the organization of field trips, seminars and workshops at the local, regional and national levels. It also fosters information exchanges through the publication of a quarterly Arabic Journal of Organic Agriculture, participation at events (fairs, festivals, exhibitions) and by preparing and exchanging OA

informative documents and leaflets to organic operators in the country (CTAB, 2012; Mami, 2013). Also, the CTAB allows farmers to participate in the evaluation of some of the outcomes of its research, an example being when comparing integrated pest management techniques with the conventional methods. Relatedly, the CTAB conducts surveys aimed at evaluating the socio-economic factors that may foster or hinder the adoption of a particular organic technology (Ben Salah, 2007). These activities are said to have contributed to increasing the awareness level about OA in the country in the same way they have stimulated and boosted the adoption of organic farming techniques in the country (Ben Khedher, 2008; Turki and Bonezzi, 2011).

Another dedicated OA institution established by the government is the *Centre Régional des Recherches en Horticulture et Agriculture Biologique* (Regional Center of Research in Horticulture and Organic Agriculture (CRRHAB)). The CRRHAB has a budgetary autonomy, it houses the Tunisian national OA research laboratory and it is responsible for conducting and disseminating research in all aspects of organic horticultural production systems in the governorates of Sousse, Monastir, Mahdia and Sfax (JORT, 2006; MAHRF, 2013c). These are the regions where most of the organic operations in Tunisia take place. The results of the research activities undertaken by the CRRHAB are simplified and adapted to local conditions by the CTAB to ensure their full-scale application by organic operators (Messaoud, pers. comm., 2013; MAHRF, 2013).<sup>32</sup> This implicates that the CRRHAB collaborates with CTAB for the implementation of its research results. Besides, the CTAB is also represented on the

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<sup>32</sup>Mars Messaoud, a faculty at University of Sousse, Department of Horticultural Sciences and Landscape, Tunisia, is also affiliated to the Regional Centre of Research in Horticulture and Organic Agriculture.

scientific council of CRRHAB, which, among others, undertakes an annual assessment of the research activities conducted by the CRRHAB (JORT, 2006). This, it can be said, allows the CTAB to impact the direction and nature of the research activities to be conducted by the CRRHAB. The fact that the CTAB is the body that adapts CRRHAB's research results to local conditions probably underscores the reason the former is represented on the scientific council of the latter. Besides, the CRRHAB collaborates with CTAB to conduct specialized training sessions and, especially, to undertake some research activities, examples of which include testing the use of plant extracts for the biological control of diseases in vegetable crops, and organic breeding of some fruit species (Messaoud, pers. comm., 2013). Furthermore, the CRRHAB is also connected to the DGAB, however, through the Institution of Research and Higher Agricultural Education (IRESA).<sup>33</sup> IRESA is the body within the MAHRF that directly supervises the activities of CRRHAB (Messaoud, pers. comm., 2013). The DGAB sits on IRESA's research commission. It is this commission that deliberates and decides the choice of research topics and projects for all research institutes under IRESA, among which is the CRRHAB (Belkhiria, pers. comm., 2013). The foregoing establishes the involvement of the DGAB in the selection and prioritization of research projects for the CRRHAB.

Among others, the CRRHAB's research activities cover the following areas: the collection and studying of genetic resources that can enhance organic vegetable and fruit production in CRRHAB's coverage regions; the creation of high-yielding, disease- and insect pest-resistant and nutritionally enhanced plant varieties, and the development of appropriate production, processing and conservation techniques that can benefit organic

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<sup>33</sup> IRESA is the main coordinating institution for agriculture research in Tunisia. IRESA's connection and contributions to the country's organic sector are elaborated upon in a later part of this thesis.

operations in the four governorates (Daami-Remadi, 2010; JORT, 2006; Kilcher and Belkhiria, 2011). The researches conducted by CRRHAB have led to the creation of different and new high-yielding plant varieties that are beneficial to organic farmers and the economy of the region (Tarchoun, cited in MAHRF, 2013c).<sup>34</sup> The CRRHAB has also recorded successes in the areas of biocontrol of soil-borne pathogens. To this effect, CRRHAB research outcomes have led to the development and use of antagonistic fungi, compost microorganisms, plant extracts and oils from different indigenous plants for biocontrol of soil-pathogens (Daami-Remadi, 2009). This has helped lessen the risk posed by pests and diseases to organic farmers' productivity. Furthermore, the CRRHAB works with OA stakeholders in the country such as CTAB to undertake the adaptation of technologies in organic horticultural production systems. Moreover, CRRHAB is engaged in organic technology transfer through a number of means, including the publication of the outcomes of its research activities, conducting specialized trainings and through technical education for students, farmers, researchers and extension officers. Finally, CRRHAB is involved in providing specialized technical services to OA groups in the four regions (JORT, 2006; Kilcher and Belkhiria, 2011; Tarchoun quoted in MAHRF, 2013c). It is worth noting that the activities of CRRHAB are done in close collaboration with research centers in the country that are either directly or indirectly involved in OA. One such example is CRRHAB's partnership with the Higher Agronomic Institute, Chott Mariem, Tunisia, to conduct research, training and supervision of university students on OA. Another case in point is CRRHAB's partnership with CTAB, and *Centre Régional des Recherches en Horticulture et*

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<sup>34</sup> Néji Tarchoun is the director of the Regional Center of Research in Horticulture and Organic Agriculture.

*Agriculture Biologique* (Centre for Agriculture Training and Reclying), to carry out training activities for organic stakeholders in the country (Messaoud, pers. comm., 2013).

Thus far, we have discussed the goals and activities of the specialized OA institutions. The analysis shows that some of the specialized institutions, such as DGAB and CNAB, are dedicated to sectorial development planning, organizing, monitoring and administration. Others, such as the CTAB, CRRHAB and the regional network of technicians, focus on OA research, technology transfer and extension delivery. However, nearly all the specialized institutions are involved in different forms of information dissemination and training activities for organic operators. Furthermore, all of the specialized institutions work closely with one another without many problems, a development made possible by dedicated OA institutions that are structured to carry out clearly defined specific and interrelated roles. Noting this particular point about the interconnectedness among Tunisian specialized OA institutions, Morgera et al. (2012, p. 104) stated, in Tunisia, "... ministerial orders have been adopted on institutional cooperation for the promotion of organic agriculture." Additionally, the discussion shows that Tunisia's organic sector benefits from an elaborate information gathering and dissemination system coordinated by the DGAB and CNAB. The discussion also highlighted the market support and development activities being provided by some of the institutions, particularly the DGAB, for organic operators in the country. In addition, the analysis suggests that some specialized institutions (e.g., DGAB, CRRHAB) enjoy budgetary autonomy but all of them receive government funding. This seems to have largely accounted for the institutions' ability to effectively carry out their various responsibilities. The activities and coordination of the specialized organic institutions

also included other public agencies and non-governmental stakeholders, such as CNAB. What is clear from this analysis is that Tunisia has well-established and functional specialized institutions spearheading the development of various facets of the country's organic sectors in a coordinated and integrated manner. Acknowledging this, in its 5<sup>th</sup> Annual Meeting report, the Mediterranean Organic Agriculture Network (MOAN, Italy) noted that, over the past one decade, Tunisia has been able to develop sound and advanced national OA institutions, which together with those of Turkey, are ranked as the best models among non-EU MOAN countries (MOAN, 2010).

It is important to mention that despite the strengths of the specialized OA institutions in Tunisia, they have some notable weaknesses. Although well-staffed and reasonably funded, the number of researchers, technicians and engineers, and the available budgets has not been enough to efficiently cover all the organic activities undertaken by the specialized institutions (Ben Khedher pers. comm. 2013; CEDGSC, 2012). For example, due to budgetary constraints, in 2010, the CNAB was unable to update the list of certified organic operators in the country (CEDGSC, 2012). Likewise, the annual visits made to audit the activities of organic operators in the country are limited by the number of staff and available budget (DGAB, 2013). Relatedly and as noted by Ben Khedher (pers. comm. 2013), some of the specialized OA institutions lack the required expertise to carry out laboratory analysis and research in some areas. Also, despite the elaborate extension services at the regional level, sufficient personnel is still considered a problem (MAHRF, 2013b). Interestingly, efforts are being exerted to address these weaknesses. This is being done through means such as increments in budgetary allocations, the acquisition and installation of more laboratory analysis

equipment, as well as human capacity enhancement through training and recruitment of more staff. Where necessary, transportation facilities available to some of the specialized institutions like DGAB and the regional network of technicians are also undergoing improvements (CEDGSC, 2012; DGAB, 2013; MAHRF, 2013b). Table 5 presents a summary of the activities of all the specialized organic institutions.

Besides the specialized OA institutions, there are other public institutions and agencies and non-governmental stakeholders that played instrumental roles in the development of the organic sector. In the section that follows, attention is on the roles of this category of stakeholders.

**Table 5: Summary of Activities of the Specialized Governmental Organic Institutions in Tunisia**

<b>The Directorate General of Organic Agriculture (DGAB)</b>	Main administrative body and authority on organic agriculture within the MAHRF
	Facilitates the creation and implementation of national OA development plans and strategies
	Supervises the activities of organic inspection and certification bodies
	Provides extension and technical support services for organic operators
	Facilitates organic market development and the dissemination of market information
<b>The National Commission for Organic Agriculture (CNAB)</b>	CNAB secretariat is located at the DGAB, the body which also supervises its activities
	Serve as the national consultative and advisory body on organic agriculture
	Review documents and proposes plans
	Team up with the DGAB to coordinate and audit the activities of organic certifiers
	Partner with the DGAB to keep and update database of organic operators
<b>The Technical Centre of Organic Agriculture (CTAB)</b>	Board Member, DGAB, Member, organic certification audit committee sets up by the DGAB Member, CRRHAB scientific council.
	Conduct capacity development trainings and provide technical support to organic operators
	Conducts applied research on all aspects of OA
	Adapts research conducted by the CRRHAB and other public research bodies to local farming conditions
	Disseminates information through means including Arabic Journal of Organic Agriculture
<b>The Regional Center of Research in Horticulture and Organic Agriculture (CRRHAB)</b>	Coordinate and conduct research into all aspects of organic horticultural production
	Collaborate with the CTAB and other stakeholders to organize specialize training sessions and to conduct technical education
	Work with the CTAB and other public bodies to adapt technologies in organic horticultural production systems to local conditions



### **Other Key Actors in Tunisia's OA Sector**

The development of Tunisia's organic sector has benefitted from the contributions of non-governmental establishments and public agencies other than specialized organic institutions. We begin the discussion of the roles of these stakeholders with a focus on the *Agence de Promotion des Investissements Agricoles* (Agricultural Investment Promotion Agency (APIA)). APIA is a designated non-administrative government agency established to promote and create an enabling environment for private investments in the country's agriculture sector (Tabet, 2013). As earlier mentioned, APIA is represented on the board of CNAB, hence, the linkage between the two governmental establishments in advancing the development of the country's organic sector. The contributions of APIA to the organic sector includes facilitating the entry and deepening the penetration of the country's organic products in international markets by partaking at international organic fairs and exhibitions (Global Arab Network and Oxford Business Group, 2010; Kilcher and Belkhiria, 2011; Tlili, 2010). It also collaborates with other government institutions and non-governmental bodies such as The Tunisian Union for Agriculture and Fishing (UTAP) to organize domestic organic produce fairs and seminars on organic farming for farmers and technicians (Tlili, 2010). APIA also coordinates government investments in the organic sector and helps secure government funding of OA projects in the country. At least 52 OA projects, worth more than TND 81.3 million (USD 50.6 million) have been funded by the government following APIA's endorsement (Global Arab Network and Oxford Business Group, 2010; Morgan, 2010; Tlili 2010). In addition, it helps with the dissemination of information on OA for organic operators and technicians and in developing branding measures that can strengthen the marketing of the country's organic

produce in international markets (Ben Khedher, 2002; Global Arab Network and Oxford Business Group, 2010). One such branding measure which is explained in a later part of this chapter is the development of an organic label, “Bio-Tunisia,” for the country’s organic products. Although APIA played the leading role in the development of Bio-Tunisia, this was done in conjunction the DGAB (Belkhiria, 2011).

Another governmental body involved in the development of the organic sector is the *Institution de la Recherche et de l’Enseignement Supérieur Agricoles* (Institution of Research and Higher Agricultural Education (IRESA)). IRESA is an institution under MAHRF and it is responsible for coordinating almost all agricultural academic and research institutes in the country as well as their research activities (IRESA, 2010); as earlier highlighted, this underscores why IRESA is directly responsible for supervising the research activities of the CRRHAB. It is within this capacity that IRESA contributes to the organic sector. To foster the development of the sector, IRESA created a body known as the National Commission for Planning and Evaluation of Organic Agriculture Research. This body is chaired by the director of the CTAB (Ben Khedher, pers. comm. 2013) and its activities include working with all the stakeholders involved in the organic sector to discuss their operational problems and constraints with a view to work out how they can be addressed through research activities. Through this body, IRESA also works with the research teams and institutions under its coordination to develop and fund research projects on topics that are considered crucial for the growth of the sector. In addition, through this body, IRESA engages in the evaluation of the outcomes of government funded OA research. In collaboration with CTAB and the Organic Agriculture Regional Networks, IRESA also coordinates the transfer of OA technology to

stakeholders (Ben Khedher, pers. comm. 2013) and to further organize human capacity development trainings for OA technicians and farmers (Ben Salah, 2007).

In addition, there are government funded inter-professional groups that are also engaged in activities that foster OA production, processing and marketing (Ben Khedher and Belkhiria, 2006; Kilcher and Belkhiria, 2011). One of these groups is the Vegetables Inter-professional Group (GIL). This establishment collaborates with CTAB to develop improved vegetable seeds and coordinate breeding programs aimed at enhancing organic vegetable production. It also partners with CTAB to support compost production activities and testing of organic inputs (GIL, 2013). Like other inter-professional groups, GIL has trained technicians offering technical services to organic operators to support and enhance their operations.

Finally, there are non-governmental groups whose activities have also contributed to the growth of Tunisia's organic sector. Among these are the *Union Tunisienne de l'agriculture et de la Pêche* (Tunisian Union of Agriculture and Fisheries (UTAP) and the National Federation of Organic Agriculture (FNAB) (Ben Khedher, 2006; Kilcher and Belkhiria, 2011). The latter is a deliberate creation of UTAP (Carey, 2008; Mami, 2013). Since Tunisia does not have a national organic umbrella organization like NOGAMU, UTAP in conjunction with FNAB act as the national coordinating bodies. Like IRESA, FNAB is represented on the board of CNAB (JORT, 2012a). As observed by Turki (2003) and corroborated by Bannani<sup>35</sup> (pers. comm. 2013), this has made it possible for FNAB to participate in the formulation of national development strategies for the country's organic sector, influence the direction of the sector's growth,

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<sup>35</sup> Mohamed Rachdi Bannani is the chairperson the of the National Federation of Organic Agriculture.

and to help analyze and suggest solutions to the challenges facing the sector. Furthermore, FNAB is included in the regional network of technicians that represents the DGAB in the 24 governorates of Tunisia. While this highlights the linkage between the DGAB and FNAB, the fact that it is CTAB that trains the regional network of technicians also indicates that FNAB works with CTAB to help drive the growth of the organic sector. As further indicated below, FNAB and UTAP collaborate with DGAB, CNAB and CTAB in different capacities. Generally, FNAB and UTAP help champion the interests of organic operators in the country. They also organize trainings and seminars, and provide technical support, as well as production and market information for organic operators (Ben Khedher, 2004; Kilcher and Belkhiria, 2011; Mami, 2013; Tlili, 2010). Such trainings are often conducted locally and regionally and in active collaboration with other organic stakeholders such as CTAB (Turki, 2003). The FNAB and UTAP also engage in national, regional and local awareness creation activities about the importance of adopting OA through means such as field visits, conferences and dedicated domestic OA trade fairs/celebrations (Barrouhi, 2010; Kacem, n :d; Tunisia Online News, 2010; Tunisia Today, 2010; Turki, 2003). As observed by Turki (2003), the presence of UTAP in all parts of the country has contributed to the effectiveness of the awareness creation effort. Relatedly, UTAP participates in fairs to create awareness and market opportunities for the country's organic products (Tunisia Online News, 2010). Furthermore, they also assist with organizing and aiding the group certification of their members who are small scale organic farmers (Carey, 2008). Group certification, explained in Chapter Four, is organized by International Certification Services (ICS, Medina, n:d). Moreover, they also participate in research activities and technology transfer by collaborating with and

assisting CTAB in the simplification, localization and full-scale adoption of the latter's OA research results by farmers (Turki, 2011, 2003). There are also a number of organic producers and farmers' associations that are supporting the sector. These groups engage in production and marketing activities considered to help foster the development of the sector. They also collaborate with government specialized institutions, regional OA networks and other stakeholders driving the success of the organic sector (Ben Khedher, 2004; Ben Khedher, pers. comm. 2013; Kilcher and Belkhiria, 2011).

**Table 6 : Summary of the Activities of Non-Specialized Institutions**

<b>Name</b>	<b>Roles and Activities</b>
<b>Agricultural Investment Promotion Agency (APIA)</b>	Board member, the National Commission of Organic Agriculture
	Mainly facilitates the entry and penetration of Tunisia's organic products into international market
	Team up with other stakeholders to conduct domestic organic fairs, and brand the country's organic products
	Coordinates government investment in the organic sector
<b>IRESA</b>	Supervises the research activities of the CRRHAB and other public establishments
	Work with specialized organic and other research institutions under its coordination to identify and sponsor research projects considered relevant to the development of the sector.
	Partners with the CTAB and other stakeholders to organize capacity development programs and transfer organic technologies
<b>Vegetables Inter-professional Group (GIL)</b>	Collaborates with the CTAB to undertake breeding programs and other activities that would enhance the productivity of organic vegetable growers
<b>Tunisian Union of Agriculture and Fisheries (UTAP) &amp; National Federation of Organic Agriculture (FNAB)</b>	Tunisia's non-governmental national organic umbrella body
	Part of the GDAB's regional network of technicians
	Advocates for the interest of all organic stakeholders in the country
	Participate in formulating national development strategies, action plans, and policies
	Conducts trainings, provides technical support and market information
	Fosters smallholders certification by organizing them into production groups
Partners with the CTAB to localize and simplify results of organic research and to transfer organic agriculture technologies	

### **Regulatory Framework, National Organic Action Plans and Certification Bodies**

One of the decisive actions taken by the Tunisian government to develop its organic sector was to enact a national OA legislation. To this end, soon after the Tunisian government embraced OA in 1999, as a means to achieving some of its developmental goals, Law No. 99-30 of April 5, 1999, was enacted, making Tunisia the first African country to have national organic regulations (Parrott et al., 2003). The April 1995 Law, which birthed the evolution of the organic sector in Tunisia, was followed by a series of decrees through 2005, when a comprehensive version of the Tunisian organic regulatory law was issued (Barrouhi, 2010; Belkhiria and Ben Khedher, 2008). The Tunisian organic regulations set forth general and specific requirements that guide organic production operations, post-harvest handling, processing and marketing. They also specify the criteria for setting up control systems and certification bodies and the procedure for carrying out organic inspection and certification in the country. This law enabled Tunisia to develop its own organic inspection and certification systems. Furthermore, the law provides for the creation of CNAB and enumerated its roles, among which is advising MAHRF to approve or revoke the approval of accredited inspection and certification bodies. It also outlined the appropriate sanctions for the violations of the rules and the procedure for implementing such penalties. Through 2013, the Tunisian organic regulatory law has been updated through a series of complementary ministerial decrees that fortified and expanded its original scope to cater to the sector's needs. The revisions also led to the creation of specialized institutions discussed earlier (Belkhiria and Ben Khedher, 2008; Ben Khedher and Belkhiria, 2006; CTAB, 2012; Kilcher and

Belkhiria, 2011; Mami, 2013; Morgera et al., 2012; Turki and Bonezzi, 2011).<sup>36</sup> The totality of the foregoing explains why the April 1995 Law heralded the transition of OA in Tunisia from a mere individual operation to an established sector (Barrouchi, 2010; Belkhiria and Ben Khedher, 2008; Germain, 2003).

The event leading to the formulation of the Tunisian organic legislation was a commission established in the late 1990s to investigate the potential of OA in Tunisia and how OA could be harnessed to achieve the country's developmental goals. The drafting of the organic regulatory law went through months of extensive and inclusive multi-stakeholders input-making and deliberative processes involving non-government stakeholders and several government agencies (Carey, 2008). In addition, the IFOAM Basic Standards, EU organic regulations and Codex Alimentarius were referenced to develop the Tunisian organic regulation, thereby making it the equivalent of those international standards (Ben Khedher, 2004; Kilcher and Belkhiria, 2011). At the same time, the Tunisian regulation catered to the local operational context of organic farmers, processors and marketers in the country. The referencing of the EU organic regulations facilitated the endorsement of the Tunisian regulation on the EU's 'third country list' and on the Swiss equivalence list (Ben Khedher, 2012).<sup>37</sup> This implies Tunisian organic products can be traded on European markets without any import authorization and regulatory barriers (MOAN, 2010; Tabet, 2013). With this, the entry of Tunisia organic products into EU markets should occur without delays, which, as indicated by Tabet

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<sup>36</sup> For details about the provisions of the Tunisian Law No 99-30 of April 5, 1999, and subsequent revisions effected to strengthen the law, see [www.ctab.nat.tn/ang/defaultan.php?p=regle\\_ang](http://www.ctab.nat.tn/ang/defaultan.php?p=regle_ang).

<sup>37</sup> EU's third country list comprises countries whose organic certification and inspection systems are considered equivalent to that of the European Union. For details, see European Commission Agriculture and Rural Development (n.d.). Trusting in organic food-from the EU or abroad. Retrieved June 15, 2013, from [ec.europa.eu/food/food/biosafety/establishments/third\\_country/](http://ec.europa.eu/food/food/biosafety/establishments/third_country/).



(2013), could have constituted up to 2 months. It is worth stating that the decision to include Tunisia on EU's third country list was also informed by the quality of the local certification and inspection systems and further, by the thoroughness of the organic certification audit mechanism in the Tunisian organic regulation (CEDGSC, 2012; Tabet, 2013).

The decision to reference the EU and other international standards seems deliberate for the following reasons. First, European markets are the main destinations for Tunisian organic products. Secondly, organic production in Tunisia is export-oriented (Lamboley, 2012; Mami, 2013; Oxford Business Group, 2010). Thirdly, the IFOAM Basic Standards and the Code Alimentarius are worldwide recognized standards that have been used to develop many national and international organic standards, inspection and certification systems (Carey, 2008). Therefore, it seems reasonable to argue that Tunisia deliberately drew on those standards to penetrate targeted European export organic markets and to increase the competitiveness of the country's organic products globally. This seems to have paid off given the continuous phenomenal rise in Tunisia's export revenue from organic products over the last decade. This fact is evidenced in the earlier sector performance analysis of the Tunisia's organic export which indicated a 575% rise in export revenue between 2004 and 2012.

The Tunisian organic legislation has been considered a success and one of the defining factors that undergird the development of the country's organic sector. This is mainly because, on one hand, it led to the creation of functional, specialized institutions that served as the drivers of the sector's development (Belkhiria and Ben Kkeder, 2008). On the other hand, the legislation provided clearly defined roles for each of the

specialized OA institutions in a way that allowed them to carry out their designated roles without conflicts and also to work in close collaboration with one another (CEDGSC, 2012). That the legislation led to the creation of internationally acknowledged certification and inspection systems also underscores why it is regarded as a factor for its success. The role of the organic legislation in aiding the entry of Tunisia's organic products into many international markets also undergirds its consideration as a factor of success for the country's organic sector (Carey, 2008; CEDGSC, 2012; Mami, 2013).

Another remarkable step taken by the Tunisian government to stimulate and guide the development of the organic sector was to facilitate the formulation of comprehensive OA national development strategy and action plans. Dabbert et al. (2004) reported that clearly structured action plans backed up with an enduring commitment, particularly, by policymakers, have proven to be a vital mechanism through which the integrated development of organic sectors is realized. As Dabbert et al.'s (2004) study further indicated, organic sector action plans are able to help achieve this because (1) they can help guide against policy contradictions; (2) they present an opportunity for broader stakeholder engagement and participation in designing policies; and (3) the process involved in their formulation may help create a forum for organic stakeholders to come together to develop a vision and plan for the sector's development. As it is here below demonstrated, the foregoing seems to be reinforced by the role played by Tunisia's OA national development plans in fostering the development of the sector. The first of the 4-year national organic strategy and action plan that Tunisia formulated was executed between 2005 and 2009 and, the second plan is currently being implemented between 2010 and 2014. The OA development strategy and action plans are rooted in the

country's 10<sup>th</sup> (2002-2006) and 11<sup>th</sup> (2007-2011) Economic and Social Development Plans (Belkhiria and Ben Khedher, 2008; MAHRF, 2013b). The connection was effected, by, for example, linking the organic sector development strategy and action plans with some of the agriculture, food security, farmers' livelihood enhancement and natural resource conservation and management specific objectives in the country's Economic and Social Development Plans. One of the explicit objectives of the 11<sup>th</sup> Economic and Social Development Plan was to facilitate "food security, self-sufficiency in basic foodstuffs, increase in export of agric-food products as well as enhancement of the management and conservation of natural resources" (Belkhiria and Ben Khedher, 2008, p. 27). These specific objectives constituted the cornerstone of the 2010-2014 organic sector development strategy and action plan. To this effect, the 2010-2014 organic sector action plan was structured to contribute to food security through increments in organic farmers' income earning, an objective to be achieved through means such as facilitating the improvement in organic production volumes, organic product quality and value-adding. Also, the 2010-2014 organic sector development strategy and action plan were targeted at increasing the number of organic farmers as well as production area, forest, range and wasteland under organic management (MAHRF, 2013b). Achieving such targets, and it turned out to be in most cases (MAHRF, 2013b), it can be argued, has helped Tunisia to realize some of the natural resource management and conservation objectives spelled out in the country's 11<sup>th</sup> Economic and Social Development Plan.

The organic sector development strategy and action plans were developed through extensive consultative and collaborative processes involving governmental and non-governmental stakeholders that were directly and indirectly linked to the country's

organic sector. Regionally, discussion forums were held to solicit input from organic stakeholders. For the same purpose, a national level seminar involving several OA stakeholders in the country was held. Furthermore, visits were made to organic stakeholders as part of the input soliciting process (Belkhiria and Ben Khedher, 2008). Overall, the plans' drafting process included the following stakeholders: The National Organic Agriculture Federation; some organic farmers associations, organic agricultural leaders, organic processors and exporters; The Technical Centre of Organic Agriculture; The Directorate General of Organic Farming; academic and research institutions involved in OA; The National Agency for Agriculture Promotion; and, several professional organizations partially involved in OA production activities (Ben Khedher, pers. comm. 2013; Hulsebusch et al., 2007). International development agencies such as FAO and FiBL were also involved in the elaboration of the plans, especially the first one which was funded by FAO (Kilcher and Belkhiria, 2011). Another important aspect of the organic strategy and action plans is that they built on one another. To this end, the creation of the second plan was preceded by a review of the organic sector situation vis-a-vis the first action plan. The outcome of the review laid down the foundation for the development of the second action plan (Global Arab Network and Oxford Business Group, 2010; MAHRF, 2013b; Morgan, 2010).

The organic sector national development strategy and action plans are based on planning components which listed several constraints affecting the country's organic sector. One of these is the diversification of organic production in the country. To accomplish this, the two organic-specific plans sought to expand the country's organic products beyond its flagship products (olive oil, dates, and aromatic plants) by including

organic cereals, fruits and vegetables, as well as forestry products. In order to diversify, the two plans incorporated organic animal production (bee-keeping, poultry, sheep, cow, rabbit, etc.), as a component, which, as aptly reasoned, would not only help increase Tunisia's range of organic products, but could also contribute to optimizing the country's organic farming productivity (Belkhiria, 2008; Belkhiria and Ben Khedher, 2008; MAHRF, 2013b). Another component of the plans, aims at increasing the country's organic production volume. As spelled out in the two organic sector plans, this was to be achieved by increasing land under organic production and management, in addition to the number of organic farmers. With this, it was expected that farmers' income and the country's export earnings would increase, and further that it would enhance the country's capacity to meet the high demand for its organic products internationally (Barrouhi, 2010; Belkhiria and Ben Khedher, 2008; MAHRF, 2013b; Tabet, 2013).

Market development is another component of the plans. In this regard, action steps were mapped out to create demand for domestic organic product consumption through sensitization campaigns and by further providing for the creation of local organic marketing channels through supermarkets, hotels and tourist routes. In addition, strategies were laid out to increase the visibility of the country's organic products and its share of international organic markets through awareness campaigns, participation in international fairs, and the branding of the country's organic products (Belkhiria, 2008; Belkhiria and Ben Khedher, 2008; Hülsebusch, et al., 2007; MAHRF, 2013b).

Structural consolidation and re-organization is another element of the plans. This mainly focuses on the strengthening of the human, financial and infrastructural capacity of existing organic institutions to carry out their various sector-coordinating

administrative, organizing, research, and extension support. The last two components of the plans are focused on organic value-added agriculture and improving the credibility of the country's organic label. Value-added agriculture is to be accomplished by supporting organic operators in their development of on-farm and off-farm organic processing capacities. To increase the country's organic product credibility, provisions were made for improvement of the auditing process of organic certification and inspection bodies as well as the implementation of the system of organic traceability (Belkhiria, 2008; Belkhiria and Ben Khedher, 2008; MAHRF, 2013b).

The plans are designed in ways that allow them to be continuously evaluated and updated. In this way, the plans were structured as living plans. The plans were set up to specify yearly targets to be achieved for some of the plan's components (MAHRF, 2013b). For example, the targets for land area and volume of organic olives, date palms, vegetables, forages, fruit trees, forest, and range for the years 2007, 2008 through 2014 were stipulated. The targets were reasonable and at the same time ambitious. For example, in 2010-2014, in order to address the problem of the poorly developed domestic market, the target was to reasonably increase local patronage of the country's organic products by 1%. However, and as it is in the 2010-2014 plan regarding production volume and export earnings, the target was to double the area under organic cultivation and the value of exports. Among others, to help realize this, the annual subsidy allocated to help farmers lessen the cost of organic certification and control was increased from TND 5,000 (USD 3,115.46) to TND 10,000 (USD 6,230.92). Furthermore, aid funds for organic products exports and investment were increased and provisions were made to identify areas that are suitable for organic farming in the country. It was also in relation

to achieving such targets that provisions were made for organic value-added agriculture and the branding of the country's organic products (Barrouhi, 2010; Belkhiria, 2011; MAHRF, 2013b; Nadhem and Mohsen, 2013; Tabet, 2013). The foregoing implies items in the plans are backed up with specific interventions aimed at facilitating their implementation, thereby acting as living sectoral development plans.

The implementation of the national development strategy and action plans has resulted in concrete projects and sector lifting outcomes. Among others, these include the launching of new market initiatives and regional organic advisory initiatives in the 24 regions in the country, as well as the creation of a new OA research laboratory. The plans have also led to the introduction of measures that help mitigate the financial constraints that prevent farmers from certifying their operations (Belkhiria, 2011; Ben Khedher, 2012; Belkhiria and Ben Khedher, 2008; Hülsebusch, et al., 2007). The plans are also considered to have contributed to improvement in organic research and extension activities and are associated with an increase in organic export revenue, organic farmland and operators (Belkhiria, 2011; MAHRF, 2013b; Tabet, 2013). As also intended, in the areas of organic product diversification and value-addition, the plans have produced impressive outcomes. To this effect, the varieties of crops other the country's trademark organic products have not only increased, but also experienced growth in production areas. A case in point is prickly pears, whose production area has increased from 200 ha in 2005 (Tabet, 2013) to 7, 600 ha (Belkhiria, 2011). According to Rachdi Bennani (cited in Tabet, 2013, p. 11), a grower and processor of prickly pears, this growth can be connected to the strategy of increasing value-added production in the organic sector. Correspondingly and as documented by Belkhiria (2011), the growth in organic

production area dedicated to organic vegetables is strongly influenced by dried tomato production and the processing of artichokes. Overall and for most of the part, the national development strategy and action plans have been successful as most of the targets were realized and even surpassed (Belkhiria and Ben Khedher, 2008; MAHRF, 2013b).

The success of the national development strategy and action plans can be attributed to a number of reasons. First of all, the plans are clearly linked to all aspects of the organic sector and are structured in a way that fosters inter-sectoral and stakeholders' coordination and cooperation (Ben Khedher, 2012). Secondly, there are well coordinated and highly mobilized regional and central level institutional structures in place to ensure that plans are implemented (Kenny et al., 2008). Another reason for the plan's success seems to be associated the state's political will to see the plans fully implemented by providing the necessary financial support (Heinze, 2012; Kenny et al., 2008; Kilcher and Belkhiria, 2011; Oxford Business group, 2010). The inclusion of all the necessary stakeholders in the process leading to the formulation of the plans may be said to have also played a role in the plan's success. Finally, the success of organic sector specific plans may also be attributed to their grounding, and linkage to some of the specific objectives of the country's Social and Economic Development Plans. This appears to have guaranteed the stability of the organic sector specific plans and ensured political and financial commitment toward their implementation.

Besides putting in place national organic legislation and action plans, the Tunisian government also created a conducive environment within which organic certification and inspection bodies can operate. To do this, in the country's national organic legislation, explicitly defined guidelines to be followed to carry out organic



certification and inspection activities are defined. Also, the national organic legislation details specific provisions spelling out the process and conditions guiding the accreditation of the inspection and certification agencies in the country. As stated earlier on, there are also the provisions pertaining to the audit of the activities of the organic certification and inspection bodies, and the process to be followed for penalizing them when their operations do not comply with regulations (For details, see JORT, 1999, 2000). Presently, there are seven inspection and certification companies operating in the country. These include ECOCERT (German), IMC (Italian), BCS (German), LACON (German), ICEA (Italian), SuoloeSalute (Italian) and INNORPI (Tunisian) (CTAB, 2013b; Nadhem and Mohsen, 2013). With the exception of INNORPI,<sup>38</sup> the remaining certification and inspection bodies are wholly foreign-owned. They conduct their inspection and certification activities using Tunisian organic regulations (Ben Khedher, 2002; Belkhiria, 2008); they are also able to certify Tunisian organic products for European, United States, and Japanese markets (Belkhiria, 2008). Furthermore, as noted by Belkhiria (2008), the Europe-wide recognition enjoyed by the foreign-owned certification bodies has resulted in their services contributing to the ease of entry and acceptance of Tunisia's organic products in European markets. Also, some of the executive directors and inspectors working for some of these certification companies are

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<sup>38</sup> INNORPI is public agency established by the Tunisian government in 1982 and its mandate is "to undertake all actions concerning standardization, quality products and services and the protection of industrial property <[http://www.innorpi.tn/Fra/accueil\\_46\\_4](http://www.innorpi.tn/Fra/accueil_46_4)>. Within INNORPI is a unit known as the Department of Certification System and Quality, which, as highlighted by Nadhem and Kaabia (2013), undertakes certification activities according to ISO 9000 standards. Before INNORPI became an independent organic certification and inspection body, it was collaborating with an Italian organic certifier, BIOAGRICOOP (Ben Khedher, 2002). BIOAGRICOOP prides itself as a body that supports and advances sustainable development in developing countries by undertaking cooperative projects in areas including organic agriculture. For further details about BIOAGRICOOP see [www.bioagricoop.it/](http://www.bioagricoop.it/).

Tunisians (Ben Khedher, 2002; Belkhiria, 2008). This seems to have contributed to the the human capacity pool built upon to allow INNORPI to emerge in 2011 as Tunisia's fully-owned organic inspection and certification body.

### **Investment Supportive Environment and Financial Instruments**

The Tunisian government created a supportive environment that favored the adoption of OA and encouraged investment in the organic sector through the use of subsidy packages and tax breaks, including a package to aid the conversion of traditional agriculture to certified organic farming. The subsidy package covered the cost of certification and inspection by 70% for both individual and group organic producers. Individual farmers can benefit from this package for the first 5 years of adoption of OA with the total subsidy amount not exceeding TND 5,000 (\$3,013.87) per annum. For group producers and associations, the conversion subsidy can be accessed for the first 7 years of conversion at a ceiling amount of not more than TND10,000 (\$6,027.73) per year (Ben Khedher, 2012; CTAB, 2012; Morgan, 2010). This subsidy regime was initiated to mitigate the financial barriers hindering organic farmers from certifying their operations (Oxford Business Group, 2010).

The government also introduced subsidy packages and tax break aimed at increasing farmers' productivity, reducing production costs and enhancing organic product exports. In connection to this, organic equipment is subsidized by 30% and the analysis cost of organic products for exports by 50%. Also, organic farming equipment and supplies are exempted from valued-added tax and custom duties (Carey, 2008; CTAB, 2012; Lambolely, 2012; Tlili, 2010). To foster investment in the organic sector, a number of measures which attracted local and foreign investors were introduced. This

includes supporting organic farming projects with a matching grant of about 30%, a full income tax exemption through the first ten years and another 10% exemption thereafter (CTAB, 2012; Diefendorf et al., 2012). In the same vein, full tax relief is provided on income and benefits reinvested as part of the starting capital in OA companies. A special subsidy covering 1% of the investment amount is also dedicated to support organic project study fees. At the same time, the contract expenses incurred when securing organic farmland is also repaid by the government. In addition, the government also encouraged and incentivized local-foreign investment partnership with foreign investors allowed having up to 60% ownership. Finally, the government also relaxed the conditions for hiring foreign experts and workers whose services are secured in the organic sector. In this regards, four foreign project experts are allowed to be recruited by entirely-export companies without the government's prior approval (Ben Khedher, 2004; CTAB, 2012). Another incentive measure put in place to steer the development of the sector is an annual presidential prize for the best organic producer in the country (Kilcher and Belkhiria, 2011; Morgan, 2010).

As a result of the above policies and other related measures, the investment in the organic sector is reported to average €5.3 million (USD 7.39 million) per annum between 2005 and 2010 (Oxford Business Group, 2010). In 2012, this underwent a 43.21% increment as the investment in the organic sector reached €7.59 million (USD 10.58 million), a figure which represents more than 52% of the total investment in the agriculture sector for that year (Mami, 2013). Generally, the impact of the policies transcended the organic sector as they are said to have contributed to over a 250% increase in investment in the agriculture sector between 2005 and 2009 (Diefendorf et al.,

2012). Other impacts of the policies include facilitating an increase in the volume of organic exports and the number of organic projects in the country (Diefendorf et al., 2012; Morgan, 2010; Tlili, 2012).

### **Organic Market Development and Awareness Creation**

As indicated in the previous sections, organic production in Tunisia is mainly export- market oriented. The exportation of organic products is primarily done by organic exporting companies, organic farmers' associations and some organic farmers who export their own produce (Ben Khedher and Belkhiria, 2006). These marketing activities were enhanced by the export friendly environment created by the government. Another factor that has enhanced their organic marketing activities is the internationally recognized organic regulatory environment created by the Tunisian government. As highlighted earlier, this has led to the inclusion of Tunisia on the EU third country list and facilitated the entry of the country's organic products to many international markets. Similarly, organic product promotional activities are undertaken by APIA by participating in international fairs (Kilcher and Belkhiria, 2011). Organic product value-addition through the bottling of processed Tunisian organic products and branding are also being used to create a marketing identity for Tunisia's organic products and as a means of penetrating foreign markets (Lamboley, 2012; Mami, 2013; Tlili, 2010). The branding is mainly done by designing a logo 'Bio Tunisia' as the hallmark of the country's organic products. In the words of UTAP's director general, Mr. Ayyachi, 'Bio-Tunisia' has become "a visa for organic agricultural products to enter foreign markets" (cited in Tlili, 2010). As further observed by Cappellazzi (2012) not only has Bio-Tunisia allowed "the value and

benefits of all organic products to be communicated to consumers both nationally and abroad” it has also “led to a very positive outlook for organic agriculture” (p. 25).

In addition, there are export market development activities undertaken by the government in partnership with the sector’s private stakeholders. One of these is international organic olive oil promotional activities that the government supports, with the Packaging Technical Centre (PACKTEC) coordinating on its behalf. PACKTEC is a national central point for all economic operators concerned with packaging in Tunisia. To achieve its aims, PACKTEC works with organic olive oil producers to arrange tasting sessions and partake in specialized organic trade fairs (Heinze, 2010; Mami, 2013). It is also with a view to creating foreign markets for the country’s organic products that a promotional day known as the “Tunisian Organic Day” was initiated. The first Tunisian Organic Day was held in Dubai because it was designed to penetrate the Gulf organic markets by establishing a footprint in United Arab Emirates (UAE). It was jointly packaged and organized by the Tunisian Ministry of Trade and Handicrafts, MAHRF and the International Trade Center (ITC). Dubai is considered as the commercial hub in the Gulf region as it plays host to shoppers from nearly all Arab countries. It also offers the entry point to many international markets because it houses a large number of multinational stores, foreign companies and foreign experts from different parts of the globe. These factors underscore the strategic decision to stage the first Tunisian Organic Day in Dubai. The event was considered a huge success as some Dubai specialty stores with wide regional reach became patrons of some Tunisia’s organic products (EnACT Team, 2012).

Domestically, the organic market in Tunisia is poorly developed. This has been largely associated with the export-orientation of the country's organic sector. However, effort is being exerted to develop local organic markets through promotional activities. This includes awareness campaigns on the health and environmental benefits of growing and eating organically grown foods through media such as TV advertisements, the launching of Tunisian Organic Week and the organization of specialized local trade fairs (Lamboley, 2012; MAHRF, 2013b; Oxford Business Group, 2010; Tlili, 2010). Furthermore, organic product diversification, through growing and marketing different varieties of fruits, vegetables and animal products for domestic consumption, is also being used to boost domestic organic markets (Tunisia Today, 2010). This became more important as a strategy because as indicated by Kacem (2010.), the absence of diversified organic products that meet domestic consumers' food needs have been constraining the development of domestic markets for organic consumption. In some parts of the country, organic farmers' markets have also been initiated with promising revenue being recorded by participating farmers (Lamboley, 2012). In addition, other domestic organic outlets, such as supermarket chains, hotels and specialized organic shopping outlets have been launched to stimulate domestic demand. The government also initiated market development studies with a view to determining the best approach that can be used to stimulate domestic demand for organic products (Belkhiria, 2011; Ben Khedher and Belkhiria, 2006; Kilcher and Belkhiria, 2011). While some of the domestic marketing initiatives have been yielding promising results, they are not without challenges. Notable example are the supermarket chains, such as Carrefour, Champion, and Monoprix, which currently dominate the domestic organic market in the country (Kacem, 2010). This may

pose a risk to the survival of other retail organic domestic marketing channel, as they may not be able to compete with the supermarket chains.

### **Organic Agriculture Research, Training and Collaboration**

We have already discussed the roles of different specialized institutions and other agencies of OA in Tunisia in conducting research and trainings. In addition to the specialized organic institutions, the Tunisian government also made provisions for other research and training activities on OA, including compulsory OA courses at all higher agronomic institutes of learning. Similarly, master degree programs in Sustainable Agriculture and Protection in OA have been developed and offered in some of the higher institutions of learning in the country. These programs serve the dual purpose of training students on OA and as a way of researching organic production systems (Ben Khedher, 2012; Belkhiria, 2008; Ben Khedher and Nabli, 2003). Equally, a diploma program in OA was developed to provide professional trainings for stakeholders involved in the country's organic sector. This program is jointly conducted by APIA and the Agriculture the Training and Extension Agency (Kilcher and Belkhiria, 2011).

In addition, through a technical collaboration with FAO, Tunisia established an organic school for farmers, which is focused on providing training for farmers based on the farmers field school model. The project, which started as a pilot has since been replicated by the Tunisian government following its huge impact in helping organic farmers with their production activities. Noting this, Belkhiria (2008), MAHRF's Head of OA Unit stated:

This particular experience made us realize that the establishment of the school for peasant farmers and the introduction of a participatory approach to field

research and extension work have been highly effective catalysts in the development of organic agriculture in Tunisia (p. 10).

There are other collaborative relationships that Tunisia forged with foreign countries to advance the growth of the organic sector. One of these is the Tunisian-Italian technical cooperation (2007-2010) whose focus was to provide support for Tunisian organic fruit and vegetable producers and other organic stakeholders. The projects associated the Tunisian-Italian technical cooperation were sponsored by the Italian Ministry of Foreign Affairs, and coordinated by the Mediterranean Agronomic Institute, Bari, Italy (CIHEAM-MAIB),<sup>39</sup> another cooperating organic stakeholder body with Tunisia (MOAN, 2010b). Among others, the cooperation led to the organization of trainings which enhanced farmers' productivity. It has also resulted in the improvement of laboratories where tests on organic production activities are conducted (Ben Khedher, 2012; Hamrouni, 2010; MAHRF, 2013b). Another related example is the partnership between the Tunisian and German Chambers of Industry and Commerce, whose focus was to foster Tunisia's organic products exporting activities in Germany (Mami, 2013). There are other collaborative relations Tunisia established with other entities as IFOAM, MOAN, and ISO FAR which have all contributed to the organic sector's development (Ben Khedher, 2012; Ben Khedher and Belkhiria, 2006).

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<sup>39</sup> CIHEAM-MAIB is one of the four institutes that constitute and endowed CIHEAM. Established in 1962 as international and intergovernmental organization by the Organization for Economic Co-operation Development (OECD), CIHEAM's major mandate is to facilitate "specialized postgraduate education, networked research and ... regional debate" among agriculture stakeholders in the Mediterranean region. One of CIHEAM's research foci is organic agriculture; hence, the connection with Tunisia's organic sector. For further details about CIHEAM, see <http://www.ciheam.org/index.php/en/about-ciheam/an-intergovernmental-organisation> ; <http://www.organicdatanetwork.net/odn-partners-iamb.html>.



## **Conclusion**

The goal of this chapter was to explain the strategies adopted to help advance the growth and development of Tunisia's organic sector. It focused on the role of different stakeholders – governmental and non-governmental – in facilitating the development of the organic sector. As discussed, the Tunisian government has been the main driver of the country's organic sector and it has been able to do this by establishing specialized administrative, technical and research-oriented OA institutions. It was found that the roles of each of the dedicated OA institutions were well defined and so were the responsibilities that they have had to carry out with one another. This largely helped drive, provided the focus, and synergy needed to sustain the growth of Tunisia's sector. The chapter also found that other than the specialized OA institutions, there were public institutions and non-governmental stakeholders playing roles instrumental to the development of the country's organic sector. Among others, such roles include the organization of human development capacity trainings, organic agriculture awareness creation and the provision of technical support for organic operators. The discussion also showed that there exists a high level of collaborative relationships between the specialized organic institutions and other public and non-governmental establishments supporting the development of the sector. Furthermore, the discussion indicated that to facilitate the development of its organic sector, in conjunction with non-government stakeholders, the Tunisian government had to develop a national organic regulatory framework that is internationally recognized and also adapted to the country's local agroclimatic and farmers' socio-economic conditions. Likewise, the discussion showed that the government cooperated with non-governmental stakeholders to develop vigorous

organic market development activities, awareness creation, organic national action plans and policy measures to steer the growth of the sector. It was also found that the government provided sufficient financial support for the organic sector, and established the institutional structures needed to conduct research on organic food production systems and to provide training and technical support to organic operators.

The bottom line of the discussion in this chapter is that institutional arrangements and supportive policies played key role in fostering the development of Tunisia's organic sector. There were institutions at all levels playing roles instrumental to (1) coordinating the organic stakeholders in the country; (2) formulating policies and planning for the sector; (3) disseminating information; (4) facilitating organic market development; (5) providing certification services; and (6) conducting OA research, trainings, extension and outreach. Finally, the discussion indicated that the sector's development was inspired by the government's well directed interventions covering all aspects of OA. In this sense, the Tunisian OA development experience illustrates that as an infant sector, to foster its development and make it compete favorably and succeed in established markets, a country's organic sector needs the support of the state. Also, it was found that OA in Tunisia is export-oriented and further that market-oriented instruments were created to facilitate the entry of the country's organic products into international organic niche markets. The foregoing, coupled with the delimitation of the role of the Tunisian government to the creation of enabling framework to help spur and support the development of the country's organic sector further suggests that a mix of the state and market explains the success of the Tunisia organic sector.

## **CHAPTER 6**

### **ORGANIC AGRICULTURE DEVELOPMENT IN UGANDA AND TUNISIA: LESSONS FOR AFRICAN ORGANICS**

#### **Introduction**

One of the core objectives of this study was to advance lessons for African organics based on the Ugandan and Tunisian OA development success stories. This chapter addresses this objective by building on the discussions in Chapters Four and Five to draw lessons from the Ugandan and Tunisian OA development experiences. This chapter is based on the following analytical domains that guided the discussions in the last two chapters: institutionalization and organic sector organization, organic standards/regulations and certification, policies and organic sector action plans, organic market development and awareness creation, and, research, training and extension service. For each of these domains, an analysis of the successes and barriers in Uganda's and Tunisia's organic sectors will be used as a basis for recommendations for other African countries to further develop their OA sectors.

#### **Institutionalization and Sector Organization**

OA started in Uganda and Tunisia at approximately the same time in the 1980s as private initiatives involving a few individual organic farmers and exporters. However, to transform and foster the development of OA in the both countries from individual producers' operations to a sector with structures, it took the establishment of coordinating bodies and supportive institutional structures. For instance, NOGAMU was established in Uganda by some individuals with commitment to OA and non-governmental

establishments to serve as a national umbrella body that unites organic stakeholders in the country to inspire and direct the development of the country's organic sector. Prior to NOGAMU's creation, a coordinating body that could cater to the needs of Uganda's organic stakeholders did not exist. NOGAMU became the coordinating structure through which Ugandan OA stakeholders were able to discuss their problems constraining OA progress, and facilitate the development of institutions and supportive environments that drove the growth of the country's organic sector. Similarly, albeit differently, in Tunisia, it took the creation of specialized public OA institutions under the overall coordination of MAHRF to develop the necessary institutional framework imperative for the country's organic sector to take form and manifest its potential. Therefore, as its first implication, the Ugandan and Tunisian case studies establish the need for a coordinating body as the first step towards the development of African organics. This specific recommendation is particularly instructive for African countries without a coordinating organic body, be it state-facilitated or private-stakeholders' prompted. Second, as the Ugandan and Tunisian case studies also exemplified, the coordinating umbrella bodies should be able to attend to the diverse needs of all organic stakeholders in the country. In this way, it would be a rallying point for the advancement of the sector, just as it is with the non-governmental umbrella organic organization of NOGAMU in Uganda and specialized governmental organic institutions in Tunisia.

As indicated earlier, Uganda's non-governmental, stakeholder-initiated organic coordinating body, NOGAMU, and Tunisia's government-established specialized organic institutions were both successful in facilitating the development of their organic sectors. This, as several examples in the Ugandan and Tunisian experiences further demonstrated,

was connected with a number of factors, including the ability to mobilize, organize, and work with arrays of public and private stakeholders. For example, to foster the formulation and adoption of Uganda Organic Standards (UOS), NOGAMU worked with a broad array of governmental (MAAIF, UBoS, UNBS) and non-governmental (faith and non-faith based NGOs, CBOs, EPOPA, etc.) stakeholders. This was one of the reasons why the Ugandan government adopted the UOS as the country's national organic standards. Relatedly, in Tunisia, several government agencies and private OA stakeholders led the creation of action plans that provided the direction for the growth of the country's organic sector. The lesson here is that to direct and drive the development of their organic sectors, African countries need organic coordinating bodies that can partner with and bring together an array of governmental and non-governmental stakeholders,

In Tunisia, one of the ways used by the government to guarantee a wider participation of stakeholders was to set up CNAB within MAHRF as a national commission for the organic sector. The CNAB is structured as a multi-sectoral and multi-stakeholder consultative and deliberative body comprised of members drawn from different government establishments and private stakeholders' groups that are directly and indirectly involved in Tunisia's organic sector. Similarly, but in a different way, NOGAMU developed strategies that connected it with government agencies and non-governmental organic stakeholders. The NOGAMU forged strategic partnerships with organic producers, processors, exporters, NGOs and CBOs located in different parts of the country by (1) having them registered as members and (2) cooperating with them to undertake different activities supporting the development of OA. Also, as it was in the

case of the UOS cited above, in order to encourage governmental participation in its activities, NOGAMU set up committees which had government agency staff as members. On other occasions, as instanced by the process leading to the creation of Uganda's national organic policy that is awaiting approval, NOGAMU would lobby government agencies like MAAIF to set up a committee to lead some the organic-sector-supportive efforts. In sum, the Ugandan and Tunisian experiences present some possibilities through which coordinating bodies, be it governmental or private stakeholder-facilitated, can partner with diverse stakeholders to foster the development of their organic sectors. One alternative is for African governments to set up a multi-stakeholder and multi-sectoral deliberative body with well-defined functions to work with the central coordinating body. Another possibility is for private stakeholder-initiated organic coordinating bodies to establish a working relationship with like-minded CSOs and government-agencies as it was with NOGAMU. This may be achieved through (1) mobilizing these groups to enroll as members of the coordinating body, and (2) organizing programs together, and (3) inclusion and participation in committees related to OA development.

Another issue that the Ugandan and Tunisian OA development experiences draw attention to is the need for umbrella coordinating body/institutions to possess the capability needed to undertake sector-wide developing activities. In Tunisia's instance, specialized governmental organic institutions were provided with the budgetary support required to carry out their mandated tasks. Furthermore, the specialized OA institutions are staffed with competent and well-trained employees, who, as the occasion demands, also undergo refresher training programs. In this sense, the government-facilitated organic institutions in Tunisia have both the financial and human capacity required to

carry out their various responsibilities. Relatedly, NOGAMU's access to funds also defined its ability to carry out various organic sector development activities, but NOGAMU is more dependent on foreign aid than Tunisia's governmental organic institutions. For the most part, NOGAMU relies on donor and international organic agencies like Hivos, EPOPA, and DED to fund its activities. To receive such funding support, NOGAMU had to demonstrate financial accountability and a stable umbrella body organization, with a strong and diverse membership base. Like the coordinating organic institutions in Tunisia, NOGAMU also had to build the required human capacity needed to undertake different sector developing activities. To do this, NOGAMU had to develop a robust membership base cutting across different groups, in addition to forging broad-based strategic alliances, locally, regionally and internationally.

Thus far, the discussion has drawn on the Ugandan and Tunisian OA development to advance a number of instructive lessons on how African organics can be institutionalized and organized. As a starting point, to advance their organic sectors, African countries, particularly those without an OA structure, need to establish an organic coordinating body. This can either be government-initiated or private stakeholder-facilitated. In addition, the coordinating bodies should devise the means that will allow for broad participation of an array of public and private organic stakeholders that are directly and indirectly linked to the organic sector. Lastly, the coordinating body/institutions should be fortified with human and financial capacities required to enable them to undertake various cross-sectoral organic activities.

### **Organic Standards/Legislation and Certification**

As indicated in the literature review, an organic regulatory framework is one of

the market-oriented instruments used by governments and private organic stakeholders to access international organic niche markets. Like other African countries, in Uganda and Tunisia, OA is export-driven. Therefore, to penetrate international markets where most of their organic products are destined, the two countries had to develop internationally recognized national organic regulatory frameworks. Besides helping them realize the aforesaid objective, the organic regulatory frameworks also provided assurance to consumers that the organic claims of the products from the two countries are genuine; hence, increasing their acceptance and competitiveness in the international arena. With this, the Ugandan and Tunisian OA development experiences present the need for internationally recognized national organic standards as an imperative for advancing the growth of African organics.

The Ugandan and Tunisian experience further present how African countries can design national organic regulatory frameworks to meet international standards and still attend to local needs. To this end, Tunisia and Uganda referenced international organic standards such the EU organic regulations, IFOAM Basic Standards and Codex Alimentarius to develop their own national organic regulatory frameworks. It is worth reinstating here that the EU organic regulations were referenced because Europe is the major market for Ugandan and Tunisian organic products. Also, the two countries referenced IFOAM Basic Standards and Codex Alimentarius, two international standards recognized worldwide. This was to facilitate the entry of their organic products to markets other than those of the EU. Again, this highlights the influence of market considerations in the two countries' determination to develop national organic regulatory frameworks. In addition to referencing international organic standards, Tunisian and



Ugandan national organic regulatory frameworks were observed to be adapted to their individual local agro-climatic and socio-economic conditions. With this, the two countries were able to design national organic frameworks that are global and local in content. Therefore, the Ugandan and Tunisian experiences present how African countries can design national organic regulatory frameworks to meet international standards and still attend to local needs. One more noteworthy point is that the adaptation of their organic standards to local conditions meant Ugandan and Tunisian organic operators were saved the burden of having to work with standards that are crafted based on socio-economic and agronomic conditions that are not similar to theirs. As a result it became easier for organic operators in the two countries to meet certification requirements. This further underscores why the creation of a national organic framework is an imperative for the development of African organics.

An additional lesson that the Tunisian and Ugandan OA success stories present to African organics is that national organic standards/legislation can either be designed by the government or initiated by private stakeholders. In Tunisia, the organic legislation was government-initiated. However, in Uganda, the UOS was prompted by private stakeholders under NOGAMU's coordination and later adopted by the Ugandan government. In both countries, multi-stakeholder involvement was a major factor of success in establishing their organic regulatory frameworks. This was more helpful in Uganda as it provided the opportunity for bringing public and private stakeholders to the table in addition to getting the government to support the organic sector by adopting the private stakeholders'-initiated standards as the national organic regulatory framework. Therefore, the Ugandan experience seems to offer a good example of how African

countries with little or no governmental support can develop non-governmental stakeholders'-initiated but nationally adopted organic standards. However, to be able to replicate the Ugandan experience, umbrella organic bodies in Africa need to develop the capacity and collaborative relationships that can help in designing organic standards.

Furthermore, in Uganda, the existence of EAOPS, a regional organic regulatory framework, whose development was facilitated by NOGAMU, aided the cooperation with public and private stakeholders, locally, regionally and internationally. Creating regional organic standards, as the Ugandan case exemplified, may help foster organic trade across regions in Africa in the same way it can potentially enhance domestic organic marketing opportunities. In effect, on one hand, this may broaden the existing market base for organic products produced in different countries. On the other hand, it may help increase the resilience of African organics to shocks that could probably arise from a decreased demand for their organic products at international organic niche markets. Moreover, EAOPS may help enhance the entry and competition of a country's organic products in the international markets. Therefore, to penetrate target markets, regionally or internationally, the Ugandan experience evokes the relevance of regional standards for the development of African organics.

Additionally, in both Tunisia and Uganda, there are third-party certification and inspection bodies carrying out roles instrumental to the development of their organic sectors. Although most of these service providers are foreign-owned, they do have operational branches in the two countries and are widely recognized internationally. As a consequence, this assisted in easing the enormity of the challenge that organic operators in Uganda and Tunisia would have had to face if they had no locally domiciled

certification and inspection bodies. As a consequence of employing well-known certification and inspection bodies, the competitiveness of organic products from the two countries and their export-markets' entry was increased. Thus, African governments need to create a suitable environment for internationally recognized certification and inspection bodies to set up an operational base in their countries. In this way, the challenge posed by the dearth of certification and inspection bodies to the development of African organics may be mitigated. This said, as the Tunisia experience further demonstrated, a need seems to exist to have an auditing system set up to ensure compliance to regulations. This is one more area where state institutions can be put to use to support the development of African organics.

In Uganda and to a lesser extent in Tunisia, there exists the evidence of smallholder group certification. As explained, this form of certification is based on the ICS quality assurance system. It is mainly used as a means of reducing certification costs, particularly for smallholders, thus enabling them to access premiums for their products in the international markets. In Tunisia, this approach was used by FNAB, and in Uganda, by NOGAMU and several other pro-organic, local organizations operating in the country for the same purpose. Given its practicality, and effectiveness in facilitating smallholders' certification, and their ability to access organic export markets, smallholder group certification is worth replicating by other African countries, especially by private organic stakeholders. In addition to this, the PGS certification system may also be considered for replication, especially, in African countries with no organic certification system on the ground. Like the ICS, the PGS also offers group certification, which as the Ugandan case study illustrated, has proven to be effective in encouraging smallholders to certify their

operations – it is locally-focused, requires less paperwork and is a good way of enabling smallholders' transition to the ICS-based certification system, which offers export-market access. One advantage of the PGS that was earlier articulated is that it may be a good way of creating and sustaining domestic markets for a country's organic products. Like the ICS, the PGS, as the Ugandan case study further exemplified can be explored by other African countries as a stepping stone towards developing the capacity to establish domestic organic certification bodies. This further underscores the need for other African countries to consider establishing such certification systems.

Furthermore, the exposition in Chapters Four and Five indicated that both Uganda and Tunisia are able to develop local organic certification and inspection capacity. In Uganda, to achieve this feat, NOGAMU had to forge a cooperative relationship with local and international stakeholders with the capacity to help establish UgoCert as the country's national certification and inspection company. A parallel situation occurred in Tunisia, whereby, before it became an independent Tunisian owned organic certifier, for some years, INNORPI had to collaborate with BIOAGRICOOP (Italy) to undertake certification and inspection activities. Again, the foregoing reinforces the importance of widespread strategic cooperation to help drive the development of African organics. This said, the analysis described in Chapter Five found no documented evidence implicating the impacts of INNORPI as a fully-owned Tunisian certification body on the development of the country's sector. This seems to be associated with the fact that INNORPI only became a self-subsisting organic certification body in 2011. However, the formation of UgoCert was found to have contributed to the growth of OA in Uganda, by mitigating the costs of organic certification and creating opportunity for an increasing

number of smallholders to have their operations certified organic. Also, UgoCert's formation has lessened the extent of the domination of organic certification and inspection activities in Uganda by foreign-owned companies due to increased competition from UgoCert. Given the contributions of UgoCert towards advancing Uganda's organic sector, it makes sense for non-governmental and public organic stakeholders in Africa to work towards creating domestic capacity for certification and inspection. However, this may not be possible without first developing the required technical capability to initiate an organic certification company. Here again, the Ugandan and to some extent, the Tunisian experience is instructive. To develop UgoCert, NOGAMU leveraged on (1) the technical support provided by organizations including EPOPA, and Grolink AB, and (2) the experience of Ugandans who had worked as inspectors with foreign-owned certification and inspection companies operating in the country. Related evidence was alluded to as a possible factor that aided the emergence of INNORPI as an independent entity that was only able to carry out organic inspection and inspection activities after years of cooperation with BIOAGRICOOP (Italy). Again, this highlights the importance of having third-party certification companies establish operational bases in African countries. At the same time, it reinstates the importance of forging strategic working relationships with foreign organic stakeholders.

Finally, the process leading to the formation of UgoCert and INNORPI seems to offer two different possible approaches that may be followed by African countries to develop their own domestic organic certification and inspection capacity. Although the viability of UgoCert and its immediate impacts on Uganda's organic sector had been highlighted, the same may not be said about INNORPI for reasons earlier stated.

Nonetheless, recommending the INNORPI model as a possible option for replication by other African countries seems to be reasonable because there exist no evidence to suggest otherwise. This said, it may be appropriate that the involvement of government in certification activities be limited to (1) developing the capacity to audit the activities of registered certification agencies and (2) supporting local non-governmental organic stakeholders to develop domestic organic certification capacities. This is informed by the fact that, in most parts of Africa, the existing government institutional capacities seem to be overstressed. However, in African countries with strong governmental willpower to appropriate the potential of OA, INNORPI provides an example of how existing state agencies tasked with executing food product standardization, quality assurance and certification can be equipped with the capacity to function as an organic product certifier. Like INNORPI, one option is to have public agencies in charge of food product standardization in African countries partner with established organic certifiers to conduct inspection and certification activities for some years before transforming to stand-alone certification bodies. The other option is to equip existing standards-focused public institutions with the technical and human capacity required to undertake organic certification and inspection activities. This can be done by organizing human capacity trainings in organic certification for staff of existing organic standards-oriented public institutions or by recruiting personnel with the required expertise as certifiers and inspectors.

The UgoCert model presents an option that can be explored by private organic stakeholders in African countries, particularly, umbrella organic coordinating bodies to develop domestic certification capacity. Replicating this, may, as it was with the UgoCert

formative experience, require (1) forging strategic relationships with international organizations focused on organic certification to assist with financial support and technical capacity for organic certification, (2) where applicable, leveraging on local personnel who have acquired the capacity to carry out organic certification and inspection activities; in the absence of this, such capacity would have to be developed, and (3) soliciting government support to assist in developing the capacity for organic certification.

### **Policies and Organic Sector Action Plans**

In the literature review section, the range of policy instruments used by private and public organic stakeholders to foster the development of OA was explained. Among others, these include financial policy instruments, which may take the form of economic dis/incentives aimed at fostering the adoption of OA and creating investment-supportive environments for the development of the sector. This study found no evidence in Uganda of any financial policy instrument deployed by the government to support the country's organic sector. This had been attributed to the lack of any real governmental commitment to the organic sector. Nonetheless, previous discussions showed that some forms of limited financial support are provided by NOGAMU, local pro-organic CSOs like Caritas Uganda and, especially, by international organic actors such as EPOPA to help smallholder organic farmers defray some of their certification expenses and set up organic enterprises. In contrast, the Tunisian government was able to collaborate with the country's private organic stakeholders to introduce a wide range of incentives and subsidies aimed at supporting the development of the sector. As a highlight, these include subsidies for organic inputs and equipment, conversion cost subsidies, subsidies for

export, matching grants for organic farm projects, income tax relief for organic investors, and incentivizing local-foreign investment in the organic sector. As indicated, this range of incentives contributed in a significant manner to the development of Tunisia's organic sector. Similarly, the financial policy support provided by EPOPA, NOGAMU and other non-governmental pro-organic NGOs to spur the adoption and development of organic operations in Uganda were found to be effective, albeit limited. Against the backdrop of the success of the financial policy instruments deployed in Tunisia as well as those employed by non-governmental stakeholders in Uganda, replicating them in other African countries seem to make sense. This is one more area where African governments can step in to play instrumental roles in the development of their organic sectors.

Equally, the discussion on Uganda found no evidence of any specific action plan advanced by the government to foster the development of the sector. To a large extent, this underscores why certain actions of the Ugandan government undermined the development of the country's organic sector. Contrarily, in Tunisia, comprehensive sector specific action plans and national development strategies that attend to the needs of all stakeholders in the organic sectors were in place and also noted to be central to the development of the country's organic sector. This is consistent with the findings in Chapter Two, where it was found that national OA development strategies and action plans may be effective mechanisms to help spur and sustain the development of an organic sector. Therefore, formulating national development strategies and action plans is another area where African governments can play a critical role necessary to help stimulate the growth and sustain the development of their organic sectors. Not doing this, may, as it was observed in the Ugandan experience, create a situation whereby certain



government actions will either hinder the growth or undo some the successes already recorded in the sector.

In contrast, as evidenced by the Tunisian experience and further supported by the literature review, creating a successful organic sector action plan and national development strategy requires (1) wide-ranging involvement of public and private stakeholders and (2) the political commitment to ensure plans are implemented, by providing the required financial and institutional support needed for successful OA development. Moreover, as shown by the Tunisian experience, and further corroborated by reviewed studies, formulating an effective OA action plan and development strategy would also require linking the goals in the latter to the overall development objective of the country. These factors of success, in addition to the other ones listed in Chapters Two and Five, and elsewhere in this thesis, need to be observed while developing OA action plans, national development strategies and policies to help advance African organics.

### **Organic Market Development and Awareness Creation**

The Ugandan and Tunisian OA success stories suggest that the ability to create organic markets is a major factor that helps drive the growth of an organic sector. Just like in other African countries, Uganda and Tunisian organic sectors are export-driven. However, to penetrate international markets, the organic stakeholders from the two countries had to first design internationally recognized organic regulatory frameworks. It was noted that rigorous multi-level promotional campaigns were undertaken by Ugandan and Tunisian organic actors to create export markets for their organic products. This was done through participation at regional and international organic product fairs, among other activities. In Uganda, while such effort was mainly coordinated by NOGAMU and

international organic stakeholders like EPOPA, in Tunisia, it was facilitated by some of the government establishments in close collaboration with private organic stakeholders. In what further accentuates the importance of such organic market promotional efforts, Tunisia was observed to have gone as far as staging its first Organic Day in Dubai by packaging it as a form of an international organic fair that was meant to showcase and stimulate market linkages for the country's organic products. Evidence from the two case studies illustrated that such promotional efforts assisted in creating export markets for Tunisian and Ugandan organic products. Given this, and African organics being export-driven, a need is therefore implicated for other African countries to develop and undertake well-coordinated strategic international market promotional activities as an imperative for the development of their organic sectors.

Moreover, to penetrate export markets, it was observed that different forms of market linkage strategies were used in Tunisia and Uganda. For example, NOGAMU would collaborate with international organic stakeholders like the ITC and governmental entities like the UEPB to organize buyers' tours aimed at creating contact and familiarity between the country's organic producers and prospective foreign patrons of their products. Relatedly, like NOGAMU, in Tunisia, evidence was found that, in partnership with private stakeholders, public establishments such as the GDOA and PACKTEC, undertake market linkage arrangements targeted at connecting their organic operators with international buyers. For the same reason, and to provide market information to local and international organic stakeholders, organic market information systems/services were created in Uganda and Tunisia. One such mechanism employed in both countries was a digitized and regularly updated online one-stop center, profiling their organic

operators, product range, and their seasonality and production volume. Among others, the online one-stop centers were observed to be accessible to local exporters, foreign importers and prospective patrons of the organic products from the two countries. Also, they were able to capture export organic market information which is processed and disseminated to organic growers, processors, importers and local exporters. In this way, Tunisia and Uganda's online one-stop centers were able to serve the dual purpose of market linkage and market- and production-related information dissemination to organic stakeholders. Other means deployed to serve related and complementary purposes in the two countries, included NOGAMU's organic market information newsletter, Bio-Market Place, Tunisia's CTAB organic market information portal and GDOA's production volume and supply monthly publications. Furthermore, part of the strategies devised to facilitate export-market access in the two countries was to guarantee a steady supply of organic products and ensure that they are produced according to specified market requirements. To this effect, in Uganda and to a less extent in Tunisia, smallholders were organized into viable production groups along specific commodity chains. Participating farming groups were also found to be supported with technical support and human capacity development trainings needed for them to successfully manage their farm operations as profitable enterprises and meet market requirements. This largely accounted for the effectiveness of this approach in realizing its intended objectives which included increasing productivity, and export-market accessibility, as well as the bargaining power of smallholders. In Uganda, this particular strategy was employed by NOGAMU, EPOPA and some of the local pro-organic CSOs. Relatedly, in Tunisia, it was promoted by UTAP, the country's coordinating organic body, with support from the government,

which generally consisted of providing market-oriented trainings and technical support to the country's organic stakeholders. In addition, branding, by designing a country specific organic logo, and value-addition, through promotion of small-scale organic processing enterprises and packaging of organic products, were observed to be central to Tunisia's and Uganda's export and domestic market development strategies.

Also, in Tunisia, and unlike Uganda, it was found that state policy measures, explicit planning for organic market development and collaborative relationships with other countries assisted in creating export markets for the country organic products. While this highlights the benefits of having the state to support OA, it also presents the option of what African governments can do to advance the development of their organic sectors.

On the whole, the Tunisian and Ugandan experience provide evidence that developing explicit international market linkage strategies and providing organic market information services are critical to the development of African organics. The two countries' OA development experiences, especially Uganda, also presents the need for African countries to improvise means that can help build their smallholders' capacities to access organic export markets. As illustrated by the Ugandan case study and owing to their closeness to the grassroots associations, this is one area where umbrella organic bodies and pro-organic groups in Africa may do better. Doing this, may, as it is in the Ugandan experience (1) require grouping smallholder organic farmers into production groups along a specific commodity chain, organizing them as producer organizations, farmers' cooperatives, or linking them with export companies, and (2) providing them with the necessary trainings and technical support. The latter is another aspect where

African governments can step in to support the activities of umbrella organic bodies. Furthermore, the Tunisian and Ugandan OA development case studies also highlighted the necessity for African countries to develop OA market information systems and a regularly updated database which profiles their organic sectors and serves as a repository of market information. As it was in Tunisia, this effort may be undertaken by the government or by private OA stakeholders as exemplified by the Ugandan experience. However, as the literature review and the Tunisian experience demonstrate, for government to be successful in doing this (1) it must partner with private organic stakeholders, and (2) its role must be that of an enabler who facilitates market access and provides organic market information, rather than being a controller or regulator of market prices. Equally, for non-governmental organic umbrella coordinating bodies in Africa to replicate the Uganda experience, like NOGAMU, they must develop the human, organizational and financial capacity to facilitate what Guijt and Woodhill (2008) aptly described as “commodity-based market development and training approach” (p. 66). One way to do this is to seek the assistance of, and forge strategic relationships with international organic establishments like EPOPA and Hivos, as was the case with NOGAMU. Also, this is another area where Africa governments can support their organic sectors, by facilitating the process that would see coordinating umbrella organic bodies develop such capabilities. Similarly, African governments may do better in the aspect of branding of their organic products and by providing the technical, financial and institutional supports necessary to foster organic value-addition. As shown by the Ugandan and Tunisian experiences, branding will help increase the visibility of a country’s organic products, while packaging will contribute to the diversification and

expansion of a country's organic product range and market entry points. Generally, it seems reasonable to replicate the approaches used to facilitate market linkage and provide organic market information in Tunisia and Uganda since they were found to be effective.

In the area of domestic market development, Uganda's organic sector fared better than Tunisia's. Some factors seem to account for this. One, and most importantly, unlike in Tunisia, NOGAMU and the pro-organic CSOs in Uganda were able to develop inspection and certification systems, such as the PGS, purposely to spur domestic organic market development. Two, compared to Tunisia, in Uganda, more effort seems to have been invested into increasing domestic consumers' awareness about adopting OA and eating organic foods. This may be attributed to the activity levels of several pro-organic CSOs in Uganda, who, as the core driver of the country's organic sector, have widespread grassroots presence. Three, although Uganda's organic products are largely export-oriented, that the country's organic sector is driven by local CSOs with strong grassroots connections has meant it has more domestic focus. Producing for domestic markets offered immediate opportunities for smallholder members of the local CSOs to take advantage of OA to gain market access- even without a premium for the most part- and hence, attend to some of their livelihood needs. This was not necessarily the case with Tunisia as the OA development strategy of the Tunisian government is focused on taking full advantage of organic premiums at international export markets through certified organic operations, hence, the lesser attention given to domestic market development. Given the aforesaid, the Ugandan experience may be considered as offering a better exemplar of what African organics can do to create and grow their domestic organic markets. And here, the main lessons are as follows. Local pro-organic CSOs

seem to do better in promoting and creating domestic market access for organic farmers, particularly smallholders who populate African agriculture. Hence, African government will do better supporting the activities of pro-organic CSOs in this regard. Also, creating a domestically-oriented organic quality assurance system such as the PGS is worth being explored to foster the development of domestic markets for African organics. This is better done through public-private stakeholders' collaborative process.

In addition, there are noteworthy parallels and distinctions in the Tunisian and Uganda's organic domestic market development efforts. In both countries, value-addition, the creation of organic farmers' markets and specialized organic shopping outlets, hotel and supermarket loops were explored with notable results recorded. Equally, consumers' sensitization through means such as organizing domestic organic fairs and dedicated organic days, sponsoring TV adverts and running radio talks were found to be part of, and also crucial to Tunisia and Uganda's domestic organic market creation efforts. However, some strategies were unique to Uganda and were equally shown to have worked well in stimulating domestic market for the country's organic sector. These are smallholders' group production and marketing, exclusive organic shops, organic basket home delivery scheme and internet ordering services. All of these approaches present options that can be replicated in other parts of Africa, particularly, by umbrella organic coordinating bodies, to create domestic markets for their organic sectors.

### **Training and Research**

Training and research covering certain aspects of OA played a significant role in aiding the development of the Tunisian organic sector to a large extent, and to a lesser

extent in Uganda, except for organic training activities. In Tunisia, there were well-linked dedicated central and regional institutions with representatives at the local levels created by the government to organize OA trainings, provide extension services and technical support to organic producers, processors and exporters. Relatedly, in Uganda, capacity development trainings are carried out by NOGAMU and the pro-organic CSOs at the national, regional, and grassroots levels. In Uganda, there was evidence of some privately established OA training centers such as St. Jude and RUCID. There were also a number of international development organizations that partner with NOGAMU to help conduct trainings in the areas of OA. The implication of the foregoing is that African governments, umbrella organic bodies and pro-organic CSOs need to develop the capacity to carry out OA trainings. This said, it seems more feasible to replicate the Ugandan OA training model in other African countries than Tunisia's due to the lack of government support for the sector. This idea is further informed by the effectiveness of NOGAMU and several Ugandan pro-organic CSOs in facilitating organic capacity building, outreach and trainings. A related observation was noted in Chapter Two regarding the ability of sustainability-focused NGOs to do well in this aspect of OA development. It is further suggested that umbrella organic bodies in Africa should work with like-minded development organizations and local CSOs to coordinate the organization of OA trainings. This may first require helping local CSOs develop the capacity to conduct trainings for farmers in the areas of organic production.

In the aspect of research, it was found that Tunisia has well organized and elaborate institutional arrangements committed to carrying out OA research. This is not the case in Uganda due to the lack of explicit government support for the organic sector.



Again, this makes a strong case for government's involvement in developing African organics since it is the state that has the capacity to fund OA research. This said, the Ugandan experience also presents an alternative way through which OA research can be instituted. As it was in Uganda, private OA stakeholders in Africa can partner with public and private agriculture universities to develop and strengthen their capacity to conduct courses and research on OA. This may require the support of development organizations just as it was the case in Uganda. This approach can be also be followed by African governments with vested interest in promoting OA.

### **Conclusions**

The core objective of this thesis was to draw lessons from the factors of success that underlie the development of Tunisia's and Uganda's organic sectors to advance recommendations that can help spur the development of African organics. The chapter built on the discussions in Chapters Four and Five to derive lessons for African organics based on what worked well and those which did not in Tunisia and Uganda. Among others, the recommended lessons underscore the need for organic coordinating bodies that are able to unite and collaborate with all stakeholders to drive the growth of the sector. As its main finding, this study found that the creation of supportive and effective institutional infrastructure at different levels of the organic value chain underlies the Tunisian and Ugandan OA success story. In other words, the Tunisian and Ugandan OA development experience indicate that institutions matter. Therefore, the proposed recommendations also emphasized the significance of institutions in fostering the development of African organics. To this effect, specific recommendations highlighting the need for the establishment of effective and well-structured institutional arrangements

that will help with organic standards, policy and action plans formulation, the provision of certification and inspection services, organic market development and awareness creation, as well as the conduct of organic research, training and extension service were suggested.

Furthermore, the recommendations drew on the role of the government as the main driver of the Tunisian OA success story to advocate for a mix of state and market as a way to advance African organics. This specific recommendation was further informed by a host of other factors, such as African organics being an infant sector, and the fact that the potential adoptors of OA in the continent are most likely to be resource poor smallholder farmers that populate African agricultural clime. The latter needs supportive environments to adopt organic farming systems and to acquire the technical and managerial know-how required to productively, profitably and sustainably manage an organic farming enterprise and compete favorably in established markets. However, as a caveat, the role of the state is delimited to that of a facilitator in order to allow for the inclusive participation of non-governmental stakeholders in African organics.

In addition, the lessons highlighted areas where government and non-governmental stakeholders will do better to support the development of African organics. In this respect, it was reasoned that African governments will do better by focusing on the establishment of the institutional infrastructure for OA research, organic standards creation, as well as organic action plans and policy formulation. This is because it is the state that has the financial and human resources needed to undertake such activities. Non-governmental stakeholders are considered well-suited to take the lead in the areas including organizing training and outreach activities, information dissemination and

awareness creation, as well as the development of organic markets. The need for cooperation between African organic stakeholders, governmental and non-governmental with international organic development organizations was also emphasized. A highlight of the lessons is provided below.

### **Institutionalization and Sector Organization**

- Establish national umbrella organic coordinating bodies that can unite and partner with all stakeholders, governmental and non-governmental. This can be state or private stakeholders' facilitated.
  - Organic coordinating bodies to put in place mechanisms and adopt strategies that will foster wider participation of stakeholders in organic sector developing activities.
  - Organic coordinating bodies to develop the human and financial capability to undertake sector-wide development activities.

### **Organic Standards/Legislation and Certification**

- Develop internationally recognized national organic regulation frameworks that are adapted to specific socio-economic and agro-ecological conditions in Africa. This process can be initiated either by government or private organic coordinating bodies. For the latter to successfully do this, it may require the support of international organic organizations such as IFOAM.
  - Either government or private stakeholder facilitated organic regulatory frameworks should be based on inclusive participation of all stakeholders that are involved directly or indirectly in the organic sector for it to be successful.
- Partner with regional stakeholders to develop a regional organic regulatory framework. This may require forming a regional organic coordinating body to help coordinate such undertaking.
- Develop other forms of organic guarantee assurance certification systems such as the ICS and one with a domestic focus, such as the PGS.
- Support smallholder group certification to enable them to overcome financial constraints that could prevent them from certifying their operations. This responsibility is better done by the government due its access to financial resources.
- Work towards developing domestic capabilities to undertake organic certification and inspection by setting up local certification companies. Although this can be undertaken by the government or spearheaded by organic coordinating bodies, the latter may be able to do better implementing this recommendation.

- African governments to create conducive environment for internationally recognized organic certification companies to operate and have operational offices in their countries.
  - Coordinate with foreign organic certification and inspection companies to train and use local inspectors and directors. This may help reduce the overall cost of certification and also help develop the local human resource base that can be leveraged to develop domestic certification capacities.

### **Policies and Organic Sector Plans**

- African governments to partner with private organic stakeholders in their countries to develop and deploy wide ranging financial policy instruments that can foster the adoption of organic production systems.
- African governments to partner with non-governmental organic stakeholders to create robust national organic development strategies and action plans that are backed up with political willpower, funding and adequate institutional support.
- Link the action plans to the country's overall development strategy.

### **Organic Market Development and Awareness Creation**

- African governments to partner with their organic umbrella coordinating bodies to undertake strategically coordinated international organic market promotional activities for their organic products.
- Public and private stakeholders in African organics to develop diverse but complementary market creation linkage strategies.
- Provide organic market information services.
- Build smallholders' capability produce to meet export market requirements and demand through means such as organizing them into production groups that are technically and financially supported.
- African governments to support organic coordinating bodies and other stakeholders to promote value-addition and the branding of their organic products.
- African governments to support local CSOs and organic coordinating bodies to create domestic organic market channels.
- Develop locally focused organic quality assurance systems that required less paper work.
- Undertake consumer sensitization campaigns through domestic exhibitions, TV advertisements, road exhibitions, and the use of other effective means.
- Facilitate the creation of specialized organic market outlets in addition to increasing hotel and supermarket uptake of organic products.
- Explore innovative marketing approaches like organic basket home delivery plan and e-placement of order for organic products.

## **Training and Research**

- African governments, umbrella organic bodies and pro-organic CSOs to develop the capacity to undertake organic trainings. The last two categories of stakeholders may do better than the government in this regard.
- Umbrella organic coordinating bodies to work with local CSOs and development organizations like Hivos and EPOPA, to carry out human capacity development programs related to OA.
- African governments to sponsor research into different aspects of organic agriculture by establishing dedicated institutions and encouraging agricultural departments in their academic institutions to conduct organic agriculture research.

On a final note, it is essential to highlight that Africa is a diverse continent. The implication of this for this study's recommendations is that not all of the lessons from the Tunisian and Ugandan OA development experience may be transferable to other African countries. Most of the lessons under institutionalization, organic market and awareness creation, as well as organic standards/legislation and certification may be replicable in other African countries. This is because those lessons are basic to the development of the OA sector in most parts of the world. However, this may not be the case with the financial policy instruments and organic research and training institutional needs that each African country needs to put in place to develop their organic sectors. Like organic trainings and organic research activities, financial policy instruments must be tailored to meet the specific needs of a country's sector and to address some of the challenges facing it.

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