Institutional Innovations for Organic Agriculture in Africa (IIABA)

Work Package 3: Participatory Guarantee Systems (PGS)

Domestic markets for the East African organic agriculture.

The place of institutions, standards and certification.

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October 2023

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Contents

Acknowledgement

The presented study investigates the role played by organic labels and certification schemes in the development of domestic markets in East Africa, with a focus on the *Kilimo Hai* label and PGS. The study was performed during a PhD at Institut Agro. A three months mission took place in September-November 2022 to gather the required data, expenditures have been financed by CIRAD as part of the Work Package 3 of the IIABA project. The author has no conflict of interest to declare, and wishes to thank all stakeholders who gave their time to make this study possible.

Acronyms

CB: Certification Body

CBTF: Capacity Building Task Force

CSO: Civil Society Organisation

EAC: East African Community

EAOPS: East African Organic Product Standard

EPOPA: Export Promotion of Organic Products

GDP: Gross Domestic Product

ICS: Internal Control System

IFOAM: International Federation of Organic Agriculture Movements

IO: International Organisation

JMC: Joint Management Committee

KEBS: Kenya Bureau of Standards

KOAN: Kenya Organic Agriculture Network

NBS: National Bureau of Standards

NGO: Non-Governmental Organisation

NOAM: National Organic Agriculture Movement

NOFA: Ngong Organic Farmers Association

NOGAMU: National Organic Agriculture Movement in Uganda

OSEA: Regional Cooperation for Organic Standards and Certification Capacity in East Africa

OTEA: Organic Trade and value chain development in East Africa

PGS: Participatory Guarantee System

RSTWG: Regional Standards Technical Working Group

SAT: Sustainable Agriculture Tanzania

SIDA: Swedish International Development Cooperation Agency

TBS: Tanzania Bureau of Standards

TOAM: Tanzania Organic Agriculture Movement

TPC: Third Party Certification

UNBS: Uganda National Bureau of Standards

UNCTAD: United Nations Conference on Trade and Development

UNEP: United Nations Environment Program

Key elements

Creation of the *Kilimo Hai* label and East African Organic Product Standard (EAOPS) (2005-2007):

- Initially, EU equivalency program was the main incentive for the creation of the label, but EU recognition was never achieved. Instead, the label facilitated cooperation of local actors through a common definition of organic agriculture.
- The involvement of public authorities in the creation of the *Kilimo Hai* label sensitised many industrial agriculture-oriented public actors to the potential benefits of organic agriculture, with subsequent facilitating effect on policy advocacy.

Creation of the *Kilimo Hai* PGS scheme (2010-2013):

- With the failure of EU equivalency recognition, stakeholders decided to fall back on domestic markets to promote the label by introducing Participatory Guarantee Systems (PGS).
- The vertical implementation of the concept and the limited number of decision-makers generated a risk of mismatch with the needs of the community.
- The ownership of the *Kilimo Hai* label provided most decision-making authority to a single national body in each country, therefore centralising powers of PGS governance.
- Most actors were deeply influenced by third-party certification representations, resulting in a hybrid governance midway between mainstream PGS and third-party ICS.
- The implementation and certification activities of the *Kilimo Hai* PGS suffer from donor dependency which can jeopardize the sustainability of the system.

Outcomes of *Kilimo Hai* label and PGS:

- New organic outlets have been opened.
- Consumer awareness has been improved.
- Farmer livelihood, transmission of knowledge and social link were improved.
- Preservation of health and ecosystems was enhanced.
- Sector coordination and public recognition improved.
- Food sovereignty took a greater importance in public discourses.

Limitations of *Kilimo Hai* label and PGS:

- Limitations in the use of the label: low consumer awareness, lack of incentives for involvement of producers, adverse trainings…
- Limitation in the governance of *Kilimo Hai*: centralised powers and donor dependency, confusions in standard ownership, lack of transparency in PGS certification procedures, limited circulation of information…

Perspectives of evolution:

- Gradual growth of organic value chains based on coordinated networks of actors.
- PGS councils led by farmer representatives, along with public and civil society.
- Multi-level label with different levels of guarantee and verification procedures.
- Introduction of PGS assessors, new technologies, association with ICS or involvement of public authorities to improve remove some barriers to organic certification and marketing.

Introduction

Organic agriculture is defined as a sustainable food production model based on the principles of Health, Ecology, Fairness and Care. By taking advantage of ecosystemic processes (soil fertility management, favourable interspecies interactions…) and promoting biodiversity (crop diversification, no synthetic pesticides…), organic agriculture gives an opportunity to build resilient food systems that enable preservation of ecosystems, health, and adaptation to climate change (Wezel et al., 2009). However, in low income countries, organic value chains were mostly focused on international markets and limited attention was given to local consumers (Jouzi et al., 2017). In order to address this shortcoming, Participatory Guarantee Systems (PGS) became an increasingly popular certification scheme for the management of organic labels at local scale. PGS rely on the involvement of local stakeholders of the food system (producers, community members, experts…) in order to ensure the development of trust-based relationships among actors (Home et al., 2017). Through the participation of peers in inspection and decision-making processes, PGS foster knowledge dissemination (sharing of experiences, good production practices…) and a low-cost certification for the recognition of organic practices. In PGS, community members set their own rules on how to use and manage their certification, which can lead to a better adaptation of organic standards to local contexts, but also represent a tool to achieve food sovereignty[1] (Nelson et al., 2016).

This form of collective management of organic labels, informal know-how and trust-based relationships has many advantages, but also challenges to address. First of all, since they have a very distinct approach than the dominant Third-Party Certification (TPC), PGS are not recognised by public authorities in many countries, including European Union and United States, two main markets for organic exports. This very often limits PGS-certified products to domestic markets (Iannucci and Sacchi, 2021). Secondly, although PGSs are supposed to be anchored in context, they do not escape the risk of "blueprint" approaches, which copy other initiatives instead of adapting their own governance to local needs (Ostrom, 2007). Finally, a PGS-certified market can only develop with an important participation of members, who don't always have capacity or motive to involve in collective action (Home et al., 2017), which make it crucial for PGSs to build a governance that answers the needs of involved communities. Identifying such governance models is not an easy task, as PGS rely on organic labels which are themselves the product of negotiations and adaptation to specific institutional environments (de Lima et al., 2021). When actors collaborate to craft new institutional arrangements, the result is shaped by asymmetries in power among actors (Knight, 1992). These outcomes lead to the development or collapse of domestic organic markets.

The East African organic label *Kilimo Hai*, along with its associated PGS scheme, offers insightful perspectives on that matter, as it relies on a co-management[2] governance system whereby power is shared between public authorities, NGOs and farmers' organizations. In spite of the involvement of many actors and 15 years of existence, the *Kilimo Hai* label seems to be taking up with difficulty. In Rwanda and Burundi, PGS certification stayed at infancy stage due to a lack of resources

[1] Food sovereignty advocates for the social importance of local markets as a precondition to genuine food security (Desmarais, 2007), associated with a redistribution of powers in favor of rural communities (Patel, 2009).

[2] Co-management is defined as a governance system relying on a network of diverse private and public sector actors linked by a wide array of relations and agreements in relation with a given resource (Carlsson and Berkes, 2005), *i.e.* the organic label and associated certification schemes, in the present case.

(Schwindenhammer, 2016), and the use of the label remains minor in the other countries. Nevertheless, many actors keep on believing the *Kilimo Hai* label holds potential for giving birth to a vibrant regional organic market. In this report, we therefore investigate which factors influenced the governance of the *Kilimo Hai* label, what are its outcomes on domestic organic food systems, and what perspectives exist to improve the label.

Based on an analysis of technical literature and interviews with diverse actors of the East African organic sector (Methods in Part 1), we elaborate upon how collaboration and negotiation processes shaped the current domestic organic markets in those countries, with a focus on standard and certification issues. We start the study by describing the pioneer organic initiatives between 1980 and 2000 (Part 2). We proceed by analysing the creation and outcomes of organic standards and of the *Kilimo Hai* label in 2000-2010 (Part 3). We then analyse the creation of the *Kilimo Hai* PGS scheme in 2010-2013 (Part 4) as well as its implementation in 2014-2022 (Part 5). We discuss the outcomes of *Kilimo Hai* label and PGS (Part 6), their limitations (Part 7), and perspectives of evolution for the system (Part 8). We conclude by summarizing the elements provided herein.

1

Methods

1.1 Data collection

In this research, we analysed one of the three main regional organic labels in the word, the *Kilimo Hai* label, based on the East African Organic Product Standard (EAOPS). A preliminary review was performed on documents with relations to organic agriculture and/or PGS in East Africa. In total, 75 project reports and studies have been selected. We identified data related to the institutionalisation of the East African organic sector, to the creation of the EAOPS, and/or to the implementation of PGS. With the information extracted from the available literature and with the help of identified key actors, an initial set of relevant stakeholders was identified in Tanzania, Uganda and Kenya. The focus was made on those three countries because in the other members of the East African Community (EAC), PGS certification remained at infancy stage due to a lack of resources (Schwindenhammer, 2016). Semi-structured interviews were performed with stakeholders involved in the organic sector since the creation of the label in 2005, and originating from various types of institutions: International Organisations (IO), governments, National Bureaus of Standards (NBS), National Organic Agriculture Movements (NOAM), Civil Society Organisations (CSO), Certification Bodies (CB) and PGS groups. When possible, new actors were identified by chain sampling to provide a deeper understanding of the dynamics at play. In total, 57 interviews have been performed (Table 1). The interviews carried on the events that shaped the organic sector and their outcomes, on the role of each institution, the discourses of actors and on the associated challenges. Additionally, several events related to the topic were attended in order to observe how actors interact and the positioning of their respective institutions.

Table 1 - Number of actors from each institution type and origin interviewed for the study.*

Institution type	International	Kenya	Tanzania	Uganda	Total
IO	2	-	-	-	2
NOAM	-	3	6	3	12
CSO	1	3	4	4	12
PGS group	-	-	3	5	8
CB	-	-	1	5	6
Academia	1	1	-	1	3
Government	-	-	2	9	11
NBS	-	-	1	2	3

(*) IO = International Organisation; NOAM = National Organic Agriculture Movement; CSO = Civil Society Organisation; PGS = Participatory Guarantee System; CB = Certification Body; NBS = National Bureau of Standard. Actors are grouped according to their current institution, but many actors have changed institutions across time and/or cumulate various roles. For example, many interviewed stakeholders are also organic producers themselves.

Source: author.

1.2 Data analysis

We formulate two hypotheses. First, we hypothesize that at the core of organic labels governance designs lies monitoring, enforcement and sanctioning regimes which are themselves complex adaptive systems (Cole, 2017), whose rule-making processes are the product of successive path-dependent action arenas influenced by power dynamics (Brisbois et al., 2019; Clement, 2010). Secondly, considering local organic markets as food systems, we formulate the hypothesis that organic markets are profoundly linked to their social-ecosystemic environment (Ericksen, 2008), and that that their governance designs is the product of negotiations operated by a diverse set of actors with specific interests (Niederle et al., 2020).

We ask the following research question: which institutional factors have influenced the collective choices regarding the *Kilimo Hai* label governance, and what have been their outcomes on domestic organic food markets? In order to answer the question, we drew upon the "politicized Institutional Analysis and Development framework" adapted by Clement (2010) from the works of Elinor Ostrom (Figure 1).

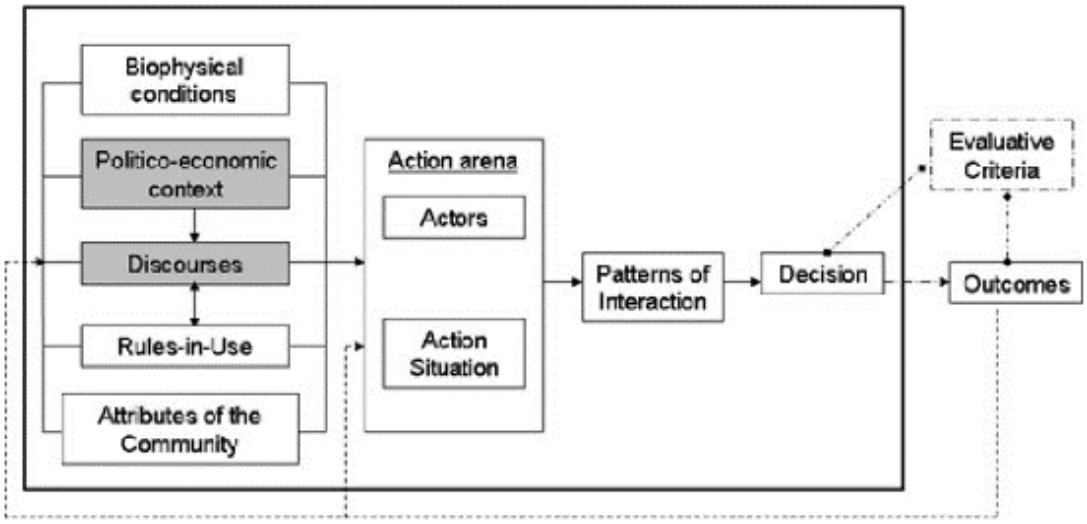


Figure 1 - Politicized Institutional Analysis Development framework. Source: (Clement, 2010)

This framework focuses on *Action situations* of collective decision-making regarding the management of a common resource, the label in the present case. Their *Interactions* result in institutions, knowledge, or operational *Outcomes* that may be *Evaluated* by the community. Action arenas are influenced by a set of *External variables* (*Biophysical conditions, Politico-economic context, Discourses…*) which orient collective decisions. The outcomes of past Action arena can become external variables for new collective choices (McGinnis, 2011b), which invites to consider the evolutionary nature of the process. As such, we identified two pivotal action situations for the governance of the *Kilimo Hai* label: the creation of the label (2005-2007), and the creation of its associated PGS scheme (2010-2013). It was, however, necessary to consider a broader time frame in order to identify all relevant factors and outcomes. We thus followed a methodology inspired by (Clement and Amezaga, 2009; Cole et al., 2019; Whaley and Weatherhead, 2014):

A. Identification of key negotiation and decision-making situations.
B. Identification of interactions within between stakeholders and outcomes that occur as a result.
C. Identification of links between the action situation and biophysical, political-economic, discursive, institutional, or community settings.
D. Evaluation of outcomes

2

A brief history of organic farming in the region

(1980-2005)

2.1 A favourable but threatened biophysical context

Though Kenya and Tanzania have drier areas than in Uganda, the three countries possess favourable climates for agriculture – ranging from tropical along the coasts to arid in North Kenya and South Tanzania –, as well as a topography that enables various crops to grow and diverse agricultural systems to be set up. This diversity reinforced by the livelihood strategies of the many different populations that coexist in the three countries (D'Alessandro, 2018; Jaffee et al., 2011).

However, climate change increasingly affects agricultural productivity and livelihoods in the region. According to the last projections from the International Panel on Climate Change, East Africa is expected to keep warming. Although longer droughts are to be expected, heavy precipitation and pluvial flooding are also projected to be more frequent. Coastal areas seem particularly vulnerable, with a projected continuous rise in sea water level and higher proportion of tropical cyclones (IPCC, 2021). The agricultural sector, especially small-scale farmers who mostly rely on rainwater, is particularly vulnerable to drier conditions. Moreover, pest and disease patterns are expected to change in response to human activities, which makes it essential for the sector to adapt to changing climate conditions (Turley et al., 2022). In the past decades, smallholder farmers have been affected by livestock losses, crop failures, and related income and livelihood losses, causing many to resort to migration and/or shift towards non-farm income generating activities. Consequently, agricultural productivity decreases in areas which were already vulnerable (FAO, 2015). As population increases, pressure is growing on vulnerable ecosystems such as forests, wetlands and mountainous areas. In the past decades, urbanization of arable land, encroachment of key ecosystems, unsustainable agronomic practices and climate change have had numerous negative impacts, especially on rural communities and local ecosystems. Desertification, loss of soil fertility and decreasing biodiversity have, among other factors, increased vulnerability to external shocks and stresses (Nakalanda and Kugonza, 2016).

2.2 Green revolution, liberalisation and *de facto* organic agriculture

Agriculture is a pillar of the economy in East Africa, employing as much as 80% of the population and representing 25% of its Gross Domestic Product (GDP) (Turley et al., 2022). Kenya, Tanzania and Uganda have distinct agricultural histories, which induced fundamental differences in the current organization and dynamics of their current agriculture sectors. Although the comparison of East African rural trajectories itself would necessitate a whole stand-alone study, it is necessary to understand the basic historical differences in order to explain how the organic sectors have emerged in different ways. Before independence, colonial land occupation was common in Tanzania and Kenya, where extensive farms were developed for export-oriented production. These farms were capital based and thus put an emphasis on high added value crops and synthetic inputs-based agriculture. After independence, the Tanzanian government aimed to speed up the socio-economic development of rural areas through facilitating access to synthetic inputs and hybrid seeds. Chemistry-based production was supplied through bilateral agreements with other countries and subsidies for synthetic inputs (Mella et al., 2007). In Uganda, on the other hand, colonial land occupation was never as important and production was entrusted to smallholder farmers cooperatives. However, Britain did introduce cash crops, and changed the structure of the agricultural sector towards export value chains. The outcomes of colonisation remained after independence and impacted even contemporary East African agriculture (Bendjebbar and Fouilleux, 2022; Taylor, 2006).

From 1971 to 1979, the Ugandan policy regime shifted radically. State extension services and public support to agriculture almost disappeared, foreign investors were expelled and international

trade was reduced to a strict minimum. Between 1970 and 1986, agricultural GDP in Uganda declined by almost 20%, while food crop production declined by 20% (Joughin and Kjær, 2010). As chemicals products were not imported anymore, agroecological practices were the only option for improving yields. A limited number of religious NGOs started disseminating such practices to reduce food insecurity in the country (Hauser and Lindtner, 2017), which sensitised a consequent part of the population to organic principles and practices, thereby enabling farmers to easily adapt to organic standards when the time came (Bendjebbar and Fouilleux, 2022).

In the end of the XXth century, in a context of green revolution, the dominant narrative for the future of agriculture was by far industrialisation. People thought the only way to feed a growing world population was through a massive use of synthetic inputs, high yield hybrid seeds and economies of scale, and few trainings and school curricula were teaching otherwise. It is only later that society started realizing the hidden costs of globalized industrial farming in terms of health of producers and consumers; loss of biodiversity, soil erosion and greenhouse gas emission; and inequal repartition of income at the expense of smallholder farmers and poorer countries, among else (Sarkar and Singer, 1991; Wezel et al., 2009). Countries from East Africa did not escape this narrative, and many actors – from farmers to government representatives – were reluctant to see their country keeping a production model that was seen as backward and sub-optimal (Twarog, 2011), something that you would practice only when you are too poor to buy inputs (Taylor, 2006), and whose advocates were perceived as "foes" to industrial farming who lacked the documentation to corroborate their stance (Kareko, 2018; SIDA, 2019). But since the late 1980s, governments from the global South have been encouraged – sometimes compelled – to liberalise their economies. Despite the withdrawal of the State from public services having a social cost for many, assigning production, processing and marketing functions to the private sector provided a significant flexibility to civil society (Cooksey, 2011). Foreign investments and foreign enterprises increasingly promoted export-based production, taking advantage of cheap labour and favourable soil and climatic conditions for the cultivation of cash crops (tea, coffee, cotton, sugar, cocoa, tropical fruits…) (D'Alessandro, 2018). Non-Governmental Organizations (NGOs) also took advantage of the environment provided by liberalisation, and have become increasingly active in developing and promoting farming systems adapted to smallholder farmers (Taylor, 2006). Since synthetic inputs were not easily applicable, accessible or affordable, some NGOs promoted traditional knowledge, and introduced locally available technologies and science-based practices[3] to improve farm productivity by conserving and taking advantage of biodiversity and soil fertility, while reducing dependence on external inputs (Rundgren, 2008). These approaches gradually merged under the common denomination of organic agriculture[4] (IFOAM, 2008), and started to receive support from actors seeking to supply the increasing European demand for organic tropical products. By then, the vast majority of East African farmers were not using chemicals (Ton, 2013). Even in Tanzania, where government was more actively promoting industrial farming, new privatisation policies had led to increased prices for synthetic inputs (Taylor, 2006). Most farmers were producing organic *de facto*[5] in a political and economic context open to foreign investors. From the East African

[3] For instance, organic nutrient cycling, nitrogen fixation, intercropping and rotation, crop diversification, integrated livestock farming, push & pull strategies…

[4] Since the western approach of organic agriculture involves standards that may be excluding for farmers that apply agroecological practices but cannot comply to certification schemes, the terminology in East Africa has more recently evolved as "ecological organic agriculture" to encompass all forms of agroecological food systems more inclusively. Nonetheless, since this specific report is focused on issues of standards and certification, we chose to keep the "organic agriculture" denomination.

[5] Most interviewed actors use the term "organic by default" to qualify producers that use traditional farming without chemicals nor organic certification. However, this term raises controversy (D'Alessandro, 2018; Ton, 2013), especially since "by default" may imply that if these farmers could afford synthetic inputs, they would systematically use them, which is not always the case. To avoid any undesired misunderstandings, we will therefore use "*de facto*".

perspective, by then, organic products were no better than any other. For some foreign investors, this looked like a golden opportunity (Bendjebbar and Fouilleux, 2022).

2.3 Introduction of export-oriented organic certification

Private actors started specialising in the trade of organic products. To do so, they mobilised or trained farmer groups – often through contract farming – and encouraged them to produce specific cash crops by complying to foreign organic standards (Bendjebbar, 2018; Ton, 2013; Turley et al., 2022). As mentioned before, it was not under foreign influence that organic farming appeared in East Africa. Yet, various foreign projects, aiming to set up organic value chains towards European markets, provided trainings related to international market procedures, standards and guarantee schemes and policy advocacy, thereby contributing to the formalization of the sector and transposing their own terminologies[6]. The Lango Organic Cotton Project (1994–1997), financed by the Swedish International Development Cooperation Agency (SIDA), took place in Uganda and came out on the Export Promotion of Organic Products (EPOPA) (1997–2002) applied in Uganda and Tanzania. Following the "Trade not Aid" approach, these projects promoted export chains as a tool to empower producers through access to European markets (Bendjebbar and Fouilleux, 2022). Kenya was not involved in these projects as it was more economically developed than its neighbours, and therefore did not beneficiate from SIDA's support. In addition to its stronger currency, Kenya has a longer history of industrial farming and expensive labours, two elements that make organic practices more difficult to apply. Nonetheless, the Kenyan organic sector developed simultaneously under the impulsion of its own NGOs, such as the Kenya Institute of Organic Farming (KIOF) formed in 1986, community based organizations, and faith-based organizations (UNEP et al., 2010). As soon as the mid-1990s, large companies were exporting organic products while Kenya Organic Farmers Association (KOFA) published their own organic standards without the support of their government (ProFound and Markus Arbenz, 2020).

Since organic agriculture is protected by European regulation, third party certification is required in order to penetrate its market. Two options exist: classic Third-Party Certification (TPC) for individual producers, or Internal Control Systems (ICS) for farmer groups. The latter is more adapted to smallholder farmers, as the costs of audit and certification are divided among the members of the group (or sometimes taken in charge by the exporting company). In 1994, a private company called KRAV started training local inspectors in Uganda, though most certification activities were done by foreign auditors (Bonabana et al., 2022). EPOPA facilitated the creation and certification of ICSs and created an environment that allowed actors from the organic sectors of Uganda and Tanzania to meet and receive trainings on organic agriculture. Doing so, EPOPA laid the foundations of the current organic sector in both countries. The focus on ICS allowed for quick and replicable results, and EPOPA was globally considered a success. However, the responsibility for training the farmers on organic practices and farm management was not taken by the project and production practices did not seem to change significantly, which was highlighted as one of its major shortcomings (Jaffee et al., 2011). Moreover, only a limited diversity of crops was certified and exported, while farms still had integrated agricultural systems. The remaining production, though it complied to organic standards requirements, was thus sold as conventional on local markets. This may be explained by the fact that SIDA itself had little knowledge on organic farming. The agriculture department of the Swedish agency was in fact more eager to promote industrial farming. Therefore, EPOPA was managed by the department in

[6] "*At that time, the issues of organic market had not really come up. We wanted to see how we could produce safe food and healthy food. And as we started working into that process, we got involved with Greenpeace in Germany and we got to know about organic standards."* (Interview with NOAM representative, 2022)

charge of markets and private-sector development, which deeply influenced how the program – and the beneficiary sectors – were shaped (EPOPA, 2008).

The Ugandan organic sector had several advantages over Tanzania and Kenya. It was the first to beneficiate developing projects promoting agroecology and organic agriculture; its small size allows for easier implementation and coordination; Uganda had more relaxed regulations on agriculture and business, making entrepreneurship easier; all of which came to be a great help for the construction of the sector (EPOPA, 2008). Nevertheless, in the end of the XXth century, governments provided little attention to organic agriculture and seemed to provide a more favourable environment to large-scale investments in commercial agriculture (Gourion, 2022a; Loconto and Simbua, 2017). Organic sectors were mostly driven by communities of like-minded actors from the private sector, mostly NGOs financed by international donors or foreign governments and companies. In addition, because premium price on international markets was perceived as the main incentive (FAO, 2015), production was almost always dedicated to export and high-end markets, leading to the common belief that "*organic agriculture is for the rich and for the white people*" (Interview with NGO representative, 2022). This conception hindered the development of local markets, as few people considered organic agriculture could be done without premium price: "*Whoever practices organic agriculture expects a good price. The organic prices are three times conventional. No local person will pay this kind of money*" (Interview with CB representative, 2022). Kenya, whose organic production was historically lower than its neighbours, has received less influence from international companies. This may have contributed to the fact that Kenya was the first to have certified organic products in their own domestic supermarkets.

These differences that emerged between the three countries from the very beginning of their organic agriculture sectors countries led to distinct trajectories. In Kenya, the organic production was very soon led by large commercial farms which produced for export, Tanzania's socialist regime favoured smallholder farmers cooperatives, as in Uganda organic sector has soon been mainly composed of smallholder farmers organized through private companies (Taylor, 2006). We note that cooperatives have been used everywhere to gather and organize smallholder farmers, in order to facilitate export value chains development, such as coffee and cotton. However, when governments underwent liberalization (first in Kenya, then Uganda, and more recently Tanzania), farmers cooperatives lost much of their political weight. Many went through financial or institutional crisis, leading to an overall lack of confidence in cooperatives. NGOs, however, were given increasing attention and consideration as key actors for economic development. This increased legitimacy was even enacted in public statements such as the Ugandan NGO Act of 1999 (Bendjebbar and Fouilleux, 2022). As such, when the nascent organic sector realised the need for a unifying driver that could coordinate the actors and implement a strategy to up-scale organic agriculture, one could expect that an NGO would be chosen to take up that role.

In 1999, the East African Community (EAC) was established by the three founding partner states: Kenya, Tanzania, and Uganda. It was then joined by Rwanda and Burundi in 2007, South Sudan in 2016 and Democratic Republic of Congo in 2022 with the objectives of eliminating barriers to trade, harmonising standards and facilitating movement of persons and commodities within the region (EAC, 2009). The EAC indicates a growing political will from governments aiming towards regional integration of their economies and societies, with an ultimate objective to establish a complete political federation (Turley et al., 2022). The creation of the EAC was the first political stepping stone for the institution of a regional organic market.

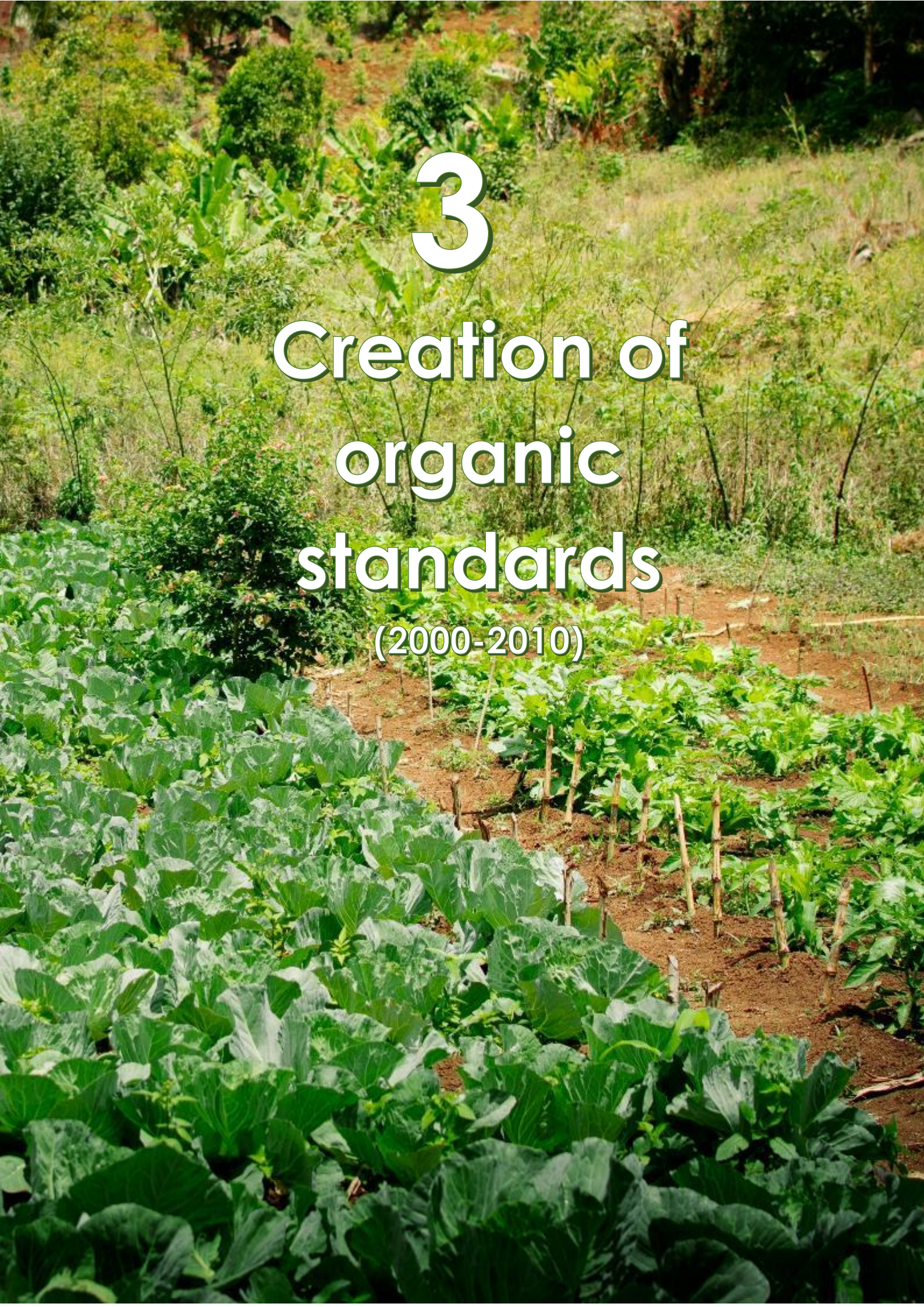
2.4 Creation of National Organic Agriculture Movements

As export-oriented organic agriculture developed, organic actors started realising the limitations of using foreign standards such as European Union (EU) regulation, which are in no case adapted to East African farmers – especially smallholders[7] (Nadvi and Wältring, 2002), and which necessitate being certified by accredited certification bodies – which at that time were all foreign. Additionally, there was a growing need to involve government authorities and to advocate for organic agriculture in order to avoid the appearance of legal barriers to organic agriculture. In Tanzania, for example, the 2003 Seed Act criminalized the trade of local seeds and enforced intellectual property rights (ACB, 2016), thereby endangering the possibility for farmers to comply with organic standards. Even when public authorities were trying to create an environment for organic agriculture, the absence of a visible representative was a challenge for coordinating actions. In spite of the recent advances of the sector, there were still many misconceptions and misinformation about organic agriculture (Twarog, 2011). From 2002 to 2008, the EPOPA project shifted from an approach focused on certification towards supply chains development and institutional capacity building for the local organic sector. The project trained organic experts, from extension to management, quality assistance, organization of farmer groups, organisation of contract farming, as well as exports. They facilitated the formation of National Organic Agriculture Movements (NOAM) – umbrella organisations which gather all organic agriculture-related initiatives in their respective countries to act as representatives and coordinators – and local certification bodies: UgoCert in Uganda, and TanCert in Tanzania. The creation of NOAMs was a major advance, as they provided a unified and more audible voice to the national organic sectors (Bendjebbar and Fouilleux, 2022; UNEP et al., 2010). Because of their wider visibility, NOAMs were able to build partnership with international organisations and foreign donors, which has been instrumental to advocate, create awareness, conduct training and research, and prospect for new market opportunities (Adebiyi, 2014).

The mid-2000s seem to have marked a change for the organic sectors of Kenya, Tanzania and Uganda. Countries had developed vibrant networks of organic actors and opportunities were multiplying on foreign markets. Though organic agriculture was still mostly invisible in more industry-oriented agriculture public policies[8], plans budgets research and extension services (Taylor, 2006; Twarog, 2008a), discourses from policy-makers started changing gradually towards an inclusion of agroecology (Mella et al., 2007; Wangari, 2004). Among International Organisations (IO), environmental sustainability of human activities was becoming a prominent concern, organic agriculture started being considered by international organisations as a tool for "sustainable development" through improvement of food security, climate change adaptation and mitigation, soil fertility and biodiversity, among others (UNEP et al., 2010). Moreover, the success of EPOPA attracted new actors and donors towards the East African organic sector (Bendjebbar and Fouilleux, 2022). Among them, the United Nations and the International Federation of Organic Agriculture Movement (IFOAM) worked together to create a regional organic standard.

[7] Discontent on foreign standards is still rising amongst actors, especially since the last ICS reform: "*The ICS system is becoming more and more an exclusive club, which is based on the crazy bureaucracy of rich countries which are completely nuts. Yeah, which are trying to have 0.00% contaminated produce out of a contaminated world. The small-scale farmers are not qualifying anymore because they cannot have ten-meter-long buffer zones because when they have these on all the sides: they have no farm anymore! With this exclusion, we are not saving our planet. Now, with the PGS, we have the flexibility, we can be adjusted to standards*" (Interview with PGS representative, 2022).

[8] At the exception of the Ugandan Organic Agriculture Policy, whose creation process started in 2003.



3

Creation of organic standards

(2000-2010)

3.1 Introduction of the concept

3.1.1 Creation of national organic standards

In the early 2000s, in spite of various projects and private actors, certification was still a challenge due to the cost of running TPC and ICS in itself, but also due to the cost of accreditation for CBs to use international standards. To that extent, work started on local organic standards to facilitate certification of producers. In 2002, in the hope of reducing their dependency to foreign standards and reducing certification costs, the National Organic Agriculture Movement of Uganda (NOGAMU) succeeded in mobilising the Ugandan Bureau of Standards (UNBS) and representatives from various ministries to develop the Ugandan Organic Standard (UOS), which was officially adopted in 2004 and owned by NOGAMU and UgoCert. Likewise, the Kenyan Bureau of Standards (KEBS) produced drafts in collaboration with the newly formed Kenyan Organic Agriculture Network (KOAN). Between 2002 and 2004, the TanCert Organic Standard was designed and adopted by TanCert in order to provide a simple and accessible standard dedicated to the local market (Taylor, 2006).

The multiplication of standards in the region contrasted with the limited public recognition and consumer awareness. Because the purpose of these organic standards was not always clear, their targeted consumers were not either (Schwindenhammer, 2016). Farmers had difficulties to comply to the requirements of multiple organic standards' and struggled to afford associated certification costs, while the fragmented market did not provide a reliable incentive (EAC, 2007; UNEP et al., 2010). The problem of "proliferation of standard", however, was not limited to East Africa. In 2002, to address the issue of organic standards multiplication across the world, FAO, UNCTAD, and IFOAM established a global public – private partnership funded by SIDA, the Norwegian Agency for Development (Norad), and the government of Switzerland. The International Task Force (ITF, 2002 – 2008) was set up to facilitate access to international organic markets. It initiated a global dialogue between stakeholders on opportunities for harmonization, recognition, and equivalence of public and private organic agriculture standards (Bowen, 2013).

3.1.2 Institutional work and preparation for a regional standard

As part of the joint works of FAO, IFOAM and UN organisations, several seminars, policy dialogues, consultations and workshops were organised between 2002 and 2005, and the idea of a regional organic standard emerged. Subsequently, both UN organisations and IFOAM started using their reputation to advocate for a single East African organic label (IFOAM, 2007; Taylor, 2006; UNEP, 2010; UNEP et al., 2010). The main argument was that a common regional standard and a joint lobbying effort would increase the likelihood of having the standard recognised as equivalent to the European regulation, thereby opening access to international markets at lower certification costs; Secondly, a vast majority of farmland was already cultivated as organic *de facto*, which would make certification and marketing much easier; Third, a common mark, rather than a proliferation of organic logos, would reduce certification costs as well as confusion for traders and consumers and avoid doubt on the integrity of products; Finally, it was perceived as "*obvious*" that a common standard would encourage regional trade and "*triple the size of the domestic market*" (UNEP et al., 2010, p.37). The latter was not so obvious for some government members, who had barely finished establishing their own national organic standards or were in the process of doing so, and therefore were not eager to throw them away, especially when requested by foreign "*NGOs coming from outside and telling them what to do*" (Schwindenhammer, 2016, p.112). Some of public sector stakeholders were even less willing to participate, as most of them had only been trained in industrial agriculture and still doubted the relevance of organic agriculture (Twarog, 2011).

Nonetheless, in the still recent EAC, agriculture was defined as a priority sector, solutions were sought to improve rural livelihoods and enhance intraregional trade while building resilience to climate change (Turley et al., 2022). Simultaneously, organic agriculture was increasingly recognised as a tool to alleviate rural poverty and food insecurity if associated with market-oriented support (Hine and Pretty, 2008; Taylor, 2006). Using their relations with the EAC, as well as their resources and credibility, United Nations organisations eventually convinced governments to participate (Schwindenhammer, 2016). Since organic sector actors were mostly focusing on export markets because of their higher prices, the idea of an organic label that could be recognised on European markets easily convinced most of the private sector. Some private-sector actors, additionally, foresaw the institutional benefits such a standard could have. Beyond access to markets, a common standard could help to formalize the organic sector in the region by providing a common definition of organic agriculture for advocacy and awareness campaigns. This common reference point would strengthen organic networks of each country and be a gateway to scale up local markets in addition to export.

Among the events related to standards-making issues, a regional seminar was financed by EPOPA and held in Tanzania in 2003. A working group was created, but the funds from EPOPA were limited and each country decided to focus on their respective national standards. The work on a regional standard could only start in 2005 with the arrival of new actors and sources of funds (Rundgren, 2007; Taylor, 2006), as well as a critical mass of actors ready to embrace the idea of a regional standard (Schwindenhammer, 2016).

From 2005 to 2007, two projects merged to facilitate the creation of an organic standard that would fit the East African context, thereby giving room for the whole regional sector to grow. Their global objective was to contribute to sustainable development, environmental protection, food security, and poverty reduction in countries of the EAC by taking advantage of their cooperation-based relations to promote the production and export of organic products in the whole region (UNEP et al., 2010). The first initiative, under the direction of the Capacity Building Task Force (CBTF) composed of representatives from United Nations Environment Programme (UNEP) and United Nations Conference on Trade and Development (UNCTAD), was called “Promoting Production and Trading Opportunities for Organic Agriculture in East Africa”. The second one, financed by SIDA and coordinated by IFOAM with the collaboration of NOAMs from each country, was called “Regional Cooperation for Organic Standards and Certification Capacity in East Africa” (OSEA). The OSEA-CBTF merger was notably facilitated by an individual who moved from one project to the other, and thus acted as a bridge for actors to synchronize (Schwindenhammer, 2016). This hybrid public-private sectors alliance allowed to connect and merge the efforts of many stakeholders in one scene of action: the creation and adoption of the East African Organic Products Standard (EAOPS). Initially, actors had distinct visions on the definition of organic agriculture, on the role it had to play in East Africa and the orientation it had to take. Many doubted the relevance of spending resources in its formalisation since a common misconception was that everything in Africa is organic. However, all agreed for a common objective of developing a vibrant organic sector in the region, expecting positive outcomes on livelihoods, food security and environmental protection (Twarog, 2011). As such, the *Kilimo Hai* label was expected to kickstart organic trade and regional market development, help to raise awareness on organic agriculture, and provide a strong reference frame that could be recognised as equivalent to the European regulations (EAC, 2007).

3.2 Creation of the *Kilimo Hai* label and EAOPS

3.2.1 An inclusive development

The creation of the EAOPS is widely described as a "*participatory*" with an "*inclusive atmosphere*", led by civil society, whereby foreign and public institutions had a facilitating role but no power to impose their decisions (UNEP, 2010). The inclusion of a numerous amount of civil society representatives and public sector stakeholders has been described as one of the major keys to success, notably because having a critical mass of familiarised stakeholders across the region would facilitate the implementation and popularisation of the standard. After an initial comparison of pre-existing organic standards in the region, a Regional Standards Technical Working Group (RSTWG) was created with the mandate to develop the EAOPS (Rundgren, 2007). The RSTWG was composed of:

- UNEP/UNCTAD CBTF and IFOAM were facilitators and co-chairpersons (UNCTAD/IFOAM).
- NOAMs and certification bodies from Kenya, Tanzania and Uganda, later joined by Burundi and Rwanda[9] provided expertise on organic agriculture.
- National Bureaus of Standards from Kenya, Tanzania and Uganda, later joined by Burundi and Rwanda, provided expertise on standard-making.
- EA business council secretariat ensured a continuous representation of the EAC in the process.
- Grolink, the same consultant as EPOPA project, did not take part in decisions but facilitated the process and provided information and training.
- SIDA did not take part in decisions but funded the project through IFOAM and Grolink.

The RSTWG was the place where technical discussions and expert knowledge exchange took place. In spite of the still early development of organic movements in 2005, many stakeholders had participated to the creation of their respective national organic standards, and thus already had experience in standard development and how to best suit them to local conditions. This experience was enhanced by the expertise from the national standards bureaus and foreign consultants. The implication of a wide range of actors, including field implementors, ensured that the standard would be best adapted to local conditions (Schwindenhammer, 2016; UNEP, 2010). It also reinforced the East African community of organic sector advocates around common values and representations: "*the East African market helped us, first love and respect African organic food. As Africans. Give us the pride of going towards what is good and what is healthy*" (Interview with NOAM representative, 2022).

In addition to two public consultations over the three countries and direct consultations with representatives from ministries, NBS and EAC, the project involved field-testing activities, trainings, regional workshops and consumer awareness campaigns (IFOAM, 2007). Taking inspiration on national organic standards, the Codex Alimentarius Guidelines for Organic Production, and IFOAM Basic Standards, three drafts of the EAOPS were developed and revised under OSEA-CBTF (Annex 1). Over 1,000 individuals were involved in the global process (UNEP et al., 2010). Once development was over, the EAOPS was presented to the EAC Council of Minister, which adopted it in 2007 as the official organic standard of the EAC (EAS 456:2007). In order to avoid confusion, when the regional standard has been registered in the catalogues of each bureau of standards, national organic standards of member states were required to be withdrawn (except for those covering areas not yet within the scope of the EAOPS) (EAC, 2007).

[9] Rwanda and Burundi joined the EAC in 2006. As such, they also got access to the EAOPS. However, since they were not involved in its entire development and there was no planned budget for its implementation, the evidence in literature and interviews indicate that the *Kilimo Hai* label has never been really integrated in those countries, just as South Sudan and the Republic of Congo later (IFOAM, 2007; Schwindenhammer, 2016).

3.2.2 International organisations as facilitators and more

During the project, UN organisations had a political weight and legitimacy that made the involvement of public authorities (EAC and ministries) much easier, which in turn played a critical role in adding credibility to the label (IFOAM, 2007; UNEP, 2010). Though the idea of a regional organic standard was initially mostly pushed by IOs, they managed to convince actors it would increase export incomes (Bendjebbar, 2018; Schwindenhammer, 2016). In spite of the synergy of actors around the creation of the *Kilimo Hai* label, asymmetries of power remained between foreign and local actors due to differences in resources, knowledge and political influence. In one of UNEP reports, for instance, one can read that the involvement of public authorities was also, for them, a way of building governments capacity through a process of "*learning by doing",* implying afterwards that UN organisations could have been more efficient working alone in the development of EAOPS (UNEP et al., 2010). Another element is in a report from IFOAM, where it is indicated that public authorities were initially more inclined to "*copy*" European regulation and to keep the label under government control, and that "*It took major efforts to convince them that the model chosen [private sector-led] was the right one*" (IFOAM, 2007, p.23), thereby revealing IOs might have overstepped their facilitating role, and may have influenced collective decisions towards what they assumed was best for the sector.

3.2.3 A shared ownership of the label

In the first stages of the EAOPS development, an unresolved concern was who should own the organic label. NBSs had unmatched expertise on standard management, CSOs had more experience with organic agriculture and would be more prone to implement it, whereas the EAC was more politically relevant due to its regional integration policy (Taylor, 2006). One concern was that the EAC might lack funds and capacity to ensure that standards revision procedure would be as inclusive as the process undergone for the creation of EAOPS (Turley et al., 2022). This limited capacity of EAC is partly why ownership and administration responsibilities of the EAOPS have been delegated to the NBSs (Schwindenhammer, 2016), whereas the NOAMs received ownership of its associated mark, the East African Organic Mark (EAOM, also called *Kilimo Hai*) and became the warrants of its use. The EAOPS provides requirements and rules of production for being certified organic, the associated *Kilimo Hai* label exists to create a clear identification of organic certified products in the marketplace (EAC, 2007; IFOAM, 2007). As warrants of the *Kilimo Hai* label, NOAMs would decide who would be authorised to provide certification services against the EAOPS. Based on this co-management model, most stakeholders agreed that government involvement had been an asset and that this shared ownership of the organic label was a good way to open the path for continuous collaboration without the risk having one party marginalized (Schwindenhammer, 2016; UNEP, 2010).

In turn, as umbrella organizations, NOAMs were still young and required to secure their institutional positions with their respective networks and governments (Bendjebbar and Fouilleux, 2022). The OSEA-CBTF project has been an opportunity for them to take up a central position in their respective networks, making sure that all key stakeholders were involved in the process. It also provided a unique opportunity to be visible for government members, hence initiating their future advocacy works. The initial agreement was that a Joint Management Committee (JMC) would gather the NOAMs of the entire EAC in order to regulate the mark and establish a joint management protocol at regional scale (IFOAM, 2007). However, once the project ended, there was no source of funding for sustaining these activities. Consequently, though employees of the different NOAMs kept on interacting on a regular basis, there was soon no formal arena for regional harmonization, and each country did as they could to implement the label.

3.3 The first outcomes of the *Kilimo Hai* label

3.3.1 A harmonised and comprehensive definition of organic

The EAOPS covers plant production, animal husbandry, bee-keeping, wild collection, processing and labelling of products. It does not cover procedures for verification. The standard was deliberately kept wide and comprehensive to avoid too complex requirements for smallholder farmers, and to reduce the budget of standard-making and of dissemination. The comprehensive nature of the EAOPS allows to embed it in various landscapes and to use it as a tool to preserve ecosystems from the specific challenges they face (erosion, biodiversity loss, drought, floods…) through tailor-made agroecological systems. However, the unsettling vagueness of the EAOPS – as compared to the very precise nature of other public standards in East Africa – made it hard to mobilise and implement for some public sector actors. To date, some actors consider the EAOPS as mere guidelines which don't differ from Codex Alimentarius or IFOAM organic standard. For others, the standard goes beyond the common western approach of farming, which is often understood as a "*direct translation of conventional farming, but with organic inputs*" (Interview with PGS representative, 2022), as the EAOPS promotes a diverse ecology in the farms as well as social welfare.

Many interviewed actors acknowledge that, when they started being involved in the creation of EAOPS, they had limited knowledge of organic standards. There were disagreements on the definition of organic agriculture. In addition to the respective perception of each stakeholder, many foreign actors funded projects with their own visions and terminologies. Since beneficiaries of these programs are compelled to adopt the same vocabulary as their funders, inconsistencies of terminology often led to misunderstanding between local actors and to scepticism of public actors. The first part of the OSEA-CBTF project therefore consisted in capacity building and trainings, meaning that those who detained information (namely foreign consultants and IOs) had a significant impact on the collective perception of organic agriculture standards and their use. Although the debate is still ongoing, the confusion between "traditional", "natural", "organic by default" and "certified organic" became clearer as the drafting process advanced. In the end, thanks to the wide audience that had participated in its creation, the EAOPS provided fundamental rules and regulations that made further network coordination and cooperation much easier (Bendjebbar, 2018). The coordination of the sector was one of the major outcomes of the standard development, as explained by one of the interviewees: "*Before, we had a lot of disjointed activities regarding the organic sector, the organic movement, The EOAPS has allowed people to understand what different actors are doing. As much as we have not brought them together at once, to work in a concerted effort, but it sorts of created platforms where different actors would come together and exchange ideas regardless of whether they are going to implement those ideas jointly or not. But it created that bridge of communication between different actors*" (Interview with NOAM representative, 2022).

Covering the productions from the whole organic sector in the span of two years with over a thousand people involved would not have been feasible. The decision-makers had to establish priorities. As a result, EAOPS requirements on vegetables and fruits came out much more detailed than livestock and inputs. These expectable shortcomings of the label gradually called for a revision, which took place in 2017-2019 and will be discussed in part 5.

3.3.2 An ambivalent posture for the public sector

During the OSEA-CBTF project, UNCTAD and UNEP advocated for the integration of organic agriculture within national policy frameworks of East African countries, foreseeing that the standard could be undermined if one of the member states introduces Genetically Modified Organisms (GMOs) or finances imported synthetic inputs (Kledal, 2009; UNEP, 2010). In addition to the works of the

RSTWG for the development of the EAOPS, advocacy activities were organised to involve public authorities and to raise their awareness (Jaffee et al., 2011). The public recognition of the standard, the presence of ministers on events, the involvement of the EAC, were more than steps for getting governments' attention on the *Kilimo Hai* label, which in itself had a limited direct impact on policies (EPOPA, 2008). They were strategic actions aimed at opening doors for further collaboration between public authorities and private organic sector stakeholders.

When the OSEA-CBTF project started, the Ugandan government had already started drafting its own organic policy. The drafting process initiated in 2003 and intensified from 2006 and 2009, *i.e.* just before and after the adoption of the standard. Though the policy took 15 years to be enacted, many actions from the government contributed to the organic sector, as some ministerial actors had been advocating for the recognition of organic agriculture since the 1980s. Organic agriculture has been included as a priority sector for export promotion in the National Export Strategy (2007-2012). In Kenya, the government created a dedicated desk for organic agriculture in its ministry of agriculture (UNEP, 2010), and started formulating a national organic policy in 2009 which also took over a decade to be adopted (Kareko, 2018). In Tanzania, the government soon hosted a National Organic Agricultural Development Programme, demonstrating its growing interest in the sector (Taylor, 2006). The National Agricultural Policy of 2013 marks the official recognition of organic agriculture in the country. Although it happened six years before, the creation of the regional organic label had been the occasion for several key government members to be introduced to the potential of organic agriculture. The growth of the organic sector at national and global scales allowed the idea to take seed and led to the enactment of a dedicated Tanzanian National Ecological Organic Agriculture Strategy launched in June 2023. As for the EAC, the community kept on trying to remove barriers to trade in the region (EAC, 2011) while implementing voluntary sustainability standards such as Sustainable Rice Production and GLOBALG.A.P., and adopted a Climate Change Policy in 2011 that notably addresses sustainable agriculture practices (Turley et al., 2022).

Indisputable progresses have been made for the public recognition of the organic sector in the late 2000s. Yet, governments kept on simultaneously adopting policies and implementing actions in favour of commercial and industrial farming based on new technologies and aimed towards high added value, in line with the low initial interest of public authorities for organic agriculture (EPOPA, 2008). The EAC shortly released an Agricultural Development Fund shortly after the EAC to stimulate "*competitive agricultural production*", "*agricultural capital investment*", and "*agricultural mechanisation and inputs*" (EAC, 2009), and kept on reinforcing its inclination towards agroindustrial growth (EAC, 2011). Once the OSEA-CBTF project stopped, public authorities ceased all activities for negotiating equivalence between EAOPS and EU organic regulation. Today, the EAOPS may be found in the catalogues of NBSs, but is not mentioned on EAC websites: "*I don't know if even in the East African Community they remember these standards*" (Interview with NOAM representative, 2022).

This ambivalent posture of the public sector can partly be explained by the fact that, though decision-makers were increasingly aware of the importance of sustainable agriculture and preservation of ecosystems, many used to be sceptical – many still are – about the potential for volume production, demand in markets and overall viability of organic agriculture in East Africa (ProFound and Markus Arbenz, 2020). Another explanatory factor is the conflicts of interests coming from the fact that many influent actors had – many still do – personal interests in agrochemicals importation and/or production, and used their influence to slow down policies in favour of alternatives as well as their enforcement. The faltering involvement of government hampered the development of comprehensive national plans for the future of the organic sector. The issue was increased by the limited coordination between actors which delayed public recognition (UNEP et al., 2010). Since organic agriculture –

especially on domestic market – does not bring substantial direct income to the country, it is not seen as a strategic priority, and therefore does not beneficiate support for implementation and awareness campaigns. Limited public recognition has had an impact at institutional scale (limited support to CSOs, abortion of equivalence program with the EU…), but also at farm scale. Indeed, many farmers received contradictory trainings provided by organic-oriented NGOs on the one hand, and industrial-oriented CSOs and public extension services on the other hand, resulting on the reduced adoption of agroecological practices by some communities. As a negative feedback loop, the limited general knowledge and lack of tangible outcomes led to even more limited commitments and political will to support the sector in the late 2000s, with consequences on the implementation of the EAOPS.

Before the OSEA-CBTF project, data was still scarce to alleviate the uncertainties about the capacity of organic agriculture to enhance food security in the African context. But projects like EPOPA and OSEA-CBTF provided the occasion to gather knowledge on the impacts of organic agriculture in East Africa. In spite of the common perception of organic agriculture as little productive, increases in yields had been observed on organically cultivated crops, with significant savings on inputs (Hine and Pretty, 2008). Gradually, many governments members embraced the idea that organic and industrial sector answer different needs and challenges, and do not have to compete. They try to establish an enabling environment allowing food system actors to choose the model that suits them best.

3.3.3 Limitations in trainings and horizontality

Organic agriculture and agroecological practices involve an intensive use of knowledge (ecosystemic interactions, farm integration, plant physiology…). Relying on top-down trainings alone to disseminate such knowledge in a whole region would require an unrealistic amount of extension experts. This high degree of knowledge requires substantial experience-sharing and peer-learning among farmers. It involves to use and foster cooperative dynamics within farmer communities, allow them to flourish and to increase collectively what is commonly called “social capital” (UNEP-UNCTAD CBTF, 2008). Yet, farmers are often perceived not as experimenters who experiment new practices and accumulate knowledge, but as implementors who apply the advices coming from extension workers and researchers. In parallel, isolation of farmers and lack of skilled trainers to initiate the learning dynamic have soon been identified as a limitation for organic production (UNEP et al., 2010). Consequently, at the creation of the *Kilimo Hai* label, farmers expressed their frustration with the trainings provided by some local NGOs, realizing that rushed trainings, language barriers and lack of follow-up were limiting their appropriation of agroecological practices (Goldberger, 2008).

In spite of the inclusive intentions of the OSEA-CBTF project, few farmers have been involved in the decision-making for the contents of the standard. Some of them were consulted, some even participated in its experimental implementation. However, due to budget and time limitations, only organized groups of farmers could contribute to the development of the label. The vast majority who did not belong to any strong farmers organization engaging in organic agriculture could not participate. The EAOPS was written in English – language in which most smallholder farmers are not fluent –, in technical terms, by a community composed mostly of experts from the public and the private sector. Since funding stopped before popularisation activities could take place, translated and simplified summaries of the standard took years to be developed (Kirundi, French and Swahili translations were published in 2011). As a result, the appropriation of the organic standard by producers is close to non-existent. Even today, a significant number of PGS-certified farmers are not aware of the EAOPS (Ninnin, 2021). It seems that, just as Jaffee et al. (2011) identified with the earlier project EPOPA, the OSEA-CBTF project focused on creating market opportunities, while comparatively little attention was given to the farmers themselves. As a result, at the end of the project, the implementers (AgroEco and Grolink) expressed their regrets faced with the low impact of the project on farmers practices (EPOPA,

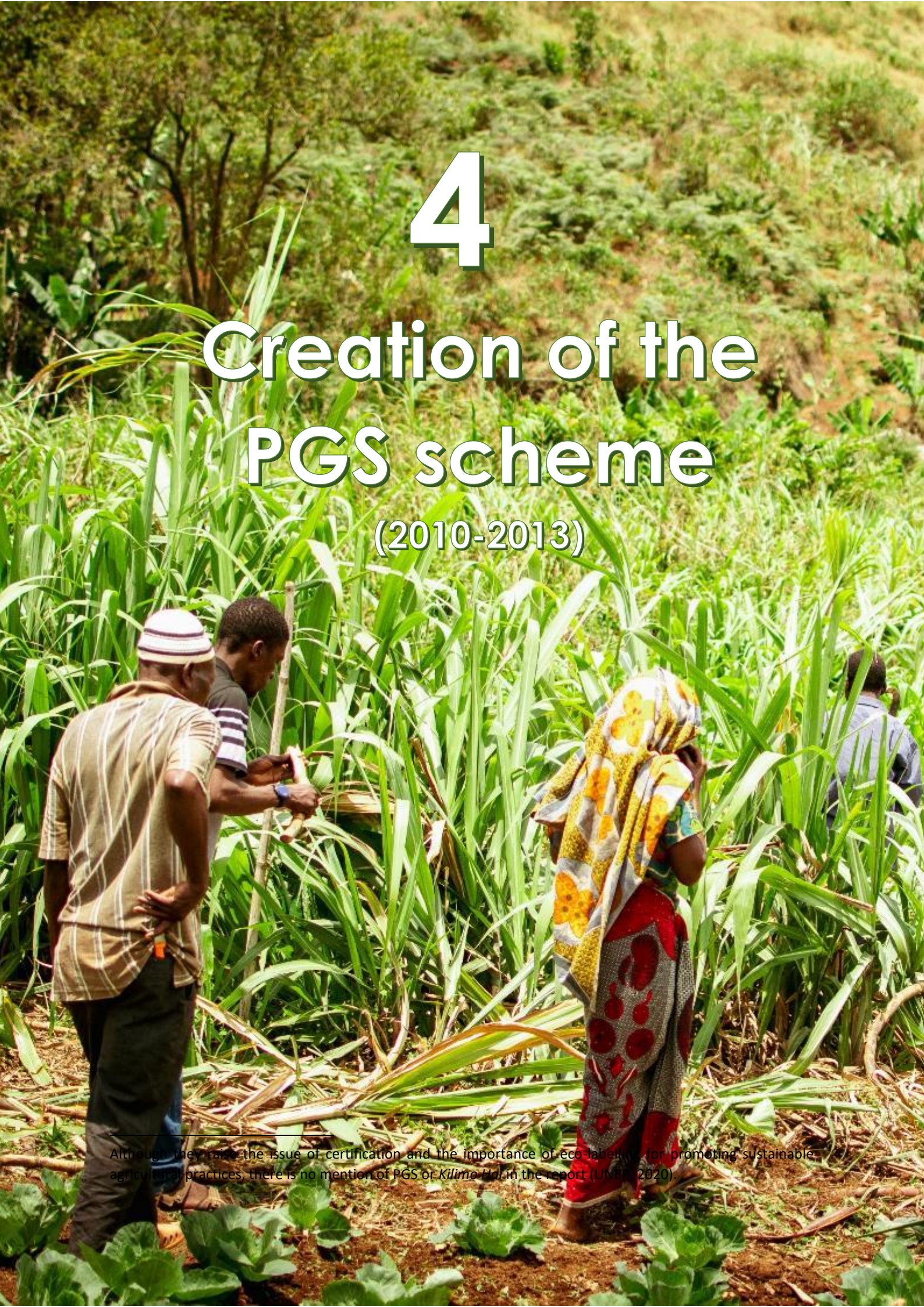
2008). This shortcoming in the design of the project may be explained by the fact that many organisations still replicate top-down approaches and "silo" mentalities (Kareko, 2018). Although expert roles and scientific knowledge can be valued assets for the development of an agriculture sector, establishing a too strict hierarchy and underestimating the capacity of farmer communities to innovate and manage a market may reveal to be a counterproductive mindset.

3.3.4 An aborted lobbying for equivalence recognition

As developed above, having the *Kilimo Hai* label recognised by EU authorities as an equivalent to the EU organic label was supposed to be one of the key strategic outcomes of its creation. This achievement would have meant that, once East African farmers were certified under the EAOPS, they could sell their products in any European country, and the *Kilimo Hai* mark would be just as good as the European organic label. Once adopted, the standard was expected to be taken in charge by the governments and the EAC secretariat, which had the bargaining power to negotiate with the EU. But governments had other priorities and did not commit resources for lobbying. On the other hand, when OSEA-CBTF ended, foreign financing stopped. UNEP and UNCTAD ceased all activities related to the EAOPS, whereas IFOAM intended to continue with a second phase which, due to funding procedures, could only start in 2010. As Rundgren (2007), stressed, the NOAMs at this period did not have the capacity to be financially self-sufficient, and had limited capacity of action without external funds. The disappearance for three years of the facilitators of the project, and the absence of funds to establish activities, led to a major loss of momentum for the implementation of the *Kilimo Hai* label (Schwindenhammer, 2016; SIDA, 2014). Once both public sector and funding partners retired, no resources were available. In addition, since there was no regulation governing organic production in the countries of the EAC and EAOPS was not registered by the International Organisation of Standards (IOS), EU legislators could not be guaranteed that EAOPS could be equivalent to the EU regulation in its implementation. In spite of additional activities funded during the OSEA II project (2010-2013), the EAOPS was never recognised as equivalent to any foreign standard (SIDA, 2014). Progressively, the EU stopped equivalence programs and shifted towards mandatory regulation, thereby suppressing all hopes of achieving equivalence for EAOPS.

As a result, the EAOPS could not be used on the main western markets (Europe, United States, Japan). It has been used for exports in very niche markets in a few occasions, but for lack of outlets, the EAOPS remained mostly circumscribed within the limits of the EAC. In some reports, one may read that a few years after the adoption of the EAOPS, the label was "*widely used in Kenya, Tanzania, and Uganda, where the standard is perceived as most applicable to marketing at the local and regional levels*" (UNEP et al., 2010), though the "*widely*" is quite relative. In fact, it appears *Kilimo Hai* remained a minor label including in the EAC. Many see the event as if the standard had been put on a shelf and then forgotten by almost everyone. It may be from there that the UN organisations decided to orient their priorities towards other matters, as they did not find the relevance of pushing smallholder farmers to become certified without a reliable and profitable market. In a report they state: "*when there is a limited domestic market for organic produce, it is not necessarily critical, possible or attractive for small-scale farmers to be certified organic*" (UNEP-UNCTAD CBTF, 2008). After the OSEA-CBTF project, the UNEP and UNCTAD focused their efforts on matters of organic agriculture policies and policy advocacy[10]. However, the *Kilimo Hai* label was not completely left over, especially NOAMs kept on trying to implement it in their respective countries.

[10] Recently, UNEP implemented the SWITCH Africa Green programme in collaboration with two other UN organisations. The overall objective of the programme was to support the countries to achieve sustainable development based on agroecological practices, economic growth, decent employment and poverty alleviation.



4

Creation of the PGS scheme

(2010-2013)

Although they raise the issue of certification and the importance of eco-labelling for promoting sustainable agricultural practices, there is no mention of PGS or *Kilimo Hai* in the report (UNEP, 2020).

4.1 An export-oriented market still dominated by foreign companies/standards

For the first decades of its existence, with the exception of a few CSOs, the organic sector focalised its production towards cash crops for high-end international markets (UNEP et al., 2010). Due to the precarious situation of many farmers, NOAMs focused on securing markets for organic products, and the main market was export (Bendjebbar, 2018). The profitable premium prices were a major incentive for farmers who could improve their livelihood, but also for entrepreneurs who saw business opportunities, and for public authorities, some of whose actors were interested by the perspective of increasing their national GDP. The spread of the export-oriented organic sector was facilitated by Internal Control Systems (ICS), which allowed export companies and NGOs to easily gather and train farmers and to minimize certification costs (UNEP et al., 2010). Premium prices on international organic markets were told to reduce poverty among farmers, and by extension food insecurity, although producing for export markets – conventional or organic – often requires specialised monocropping farming systems, which leaves farmers vulnerable to international price fluctuations and crop failure (UNEP-UNCTAD CBTF, 2008). Without recognition of the EAOPS by European authorities, farmers kept on having to comply to foreign standard to sell on international markets, whereas the *Kilimo Hai* label was mostly restricted to minor domestic and regional outlets.

The establishment of local organic market faced numerous challenges. Despite intents from NOAMs and concerned CSOs to advertise for the *Kilimo Hai* label, consumer awareness was low to non-existent; Relevance of organic labels was unclear since everything on the markets was perceived as natural and chemical-free; And local organic products suffered competition from uncertified organic claims and imported organic products coming from countries where their production is subsidized (Rundgren, 2007; UNEP et al., 2010). Due to low demand, lack of confidence in the label and limited buying power of local communities, the price margin between produces sold as conventional and organic in most outlets did not justify certification costs for farmers (Mella et al., 2007; UNEP et al., 2010). Consequently, few farmers requested *Kilimo Hai* certification, which led national Certification Bodies (CB) to turn their business model towards subcontracting as inspectors for foreign certifiers (SIDA, 2014).

4.2 Introduction of the concept

4.1.1. The first local organic markets based on high-end outlets

In the 2000s, several CSOs were striving for improving smallholder farmers livelihood through group trainings in sustainable practices. Yet, in order to achieve economic viability, establishing dedicated outlets soon appeared to be necessary. Some Kenyan civil society actors decided early to dedicate their time and resources on local markets rather than on policy advocacy, which contributed to the early development of their local organic markets (Taylor, 2006; Ton, 2013). In Uganda, NOGAMU created a specialised organic shop and built partnerships with supermarkets as soon as 2001 (Bendjebbar, 2018). In parallel, local traders were looking for organic products to buy (markets, shops, supermarkets, basket deliveries…), but outlets themselves struggled to obtain consistent and adequate supply, sometimes having to resort to importation to fill their shelves (Kledal, 2009; Taylor, 2006; UNEP et al., 2010). This mismatch between offer and demand was mostly due to a lack of information domestic along value chains. In direct sales, trust passes through human contact and consumers can easily visit the farms of their neighbours, there is no need for formal guarantee. But direct sales are quickly limited. On the markets, people still had no way to be guaranteed that the produce they bought was indeed organic. The absence of adequate and affordable certification scheme was becoming a barrier for longer value chains. Moreover, isolated smallholder farmers had little bargaining capacity

and access to information. As such, they were often subject to abusive intermediaries who bought their harvest at lower prices with insecure contractual terms (UNEP et al., 2010).

In the early 2010s, most actors still believed that organic farmers should aim for high-end outlets (expatriate communities and upper classes) to obtain some form of premium price which regular consumers don't have the capacity nor will to pay for (Mella et al., 2007; Taylor, 2006). This approach is often justified by the belief that producing in an agroecological way is more expensive than by using synthetic inputs, and higher selling prices would compensate the shortfall. This belief was imported from western countries, which have different economies. In fact, it was progressively proven that organic farming in East Africa can be just as profitable as industrial farming by using fair prices that would allow farmers to improve their livelihood, while keeping organic products affordable for local communities. Consequently, promising high premium prices to farmers as an incentive for going organic is not without risk, as high-priced products would only target a limited fragment of the population. By promising a price like those found on international markets, one may create expectations that will result in disillusion and frustration, making farmers more likely to quit.

Many farmers complied to organic requirements, but did not have the means to appeal to TPC. In order to build domestic organic value chains, making certification affordable and accessible to smallholder farmers was soon perceived as critical in shifting the organic agriculture sector from export-only to a food system open to all (NOGAMU, 2012a; Rundgren, 2007). To that end, the *Kilimo Hai* label, though unsuccessful in its first years of existence, could be used as a foundation for a guarantee system that would fit the needs of the population (ProFound and Markus Arbenz, 2020). Indeed, the label was already known by a certain number of institutional stakeholders, and was comprehensive enough to fit the reality of small-scale diversified production. There was in addition a will from some actors to make this label – along with the works of the OSEA-CBTF project – useful at least for something. If it could not be relied on for exports, at least it could be used on local markets. Since products bearing the *Kilimo Hai* mark were expected to be traded in the entire region, actors started looking for a system that would reflect a consistent level of guarantee offered to consumers (Katto-Andrighetto, 2013). To a very large extent, TPC and ICS were perceived as inappropriate for local markets because of their costs and cumbersome procedures (Rundgren, 2007). IOs argued that it would be counterproductive to adopt too rigorous regulations on certification and that mandatory TPC should be avoided (Rundgren, 2008; Twarog, 2008b; UNEP-UNCTAD CBTF, 2008). In fact, the EAOPS itself stipulates that "*The East African Organic Products Standard can be used for self-assessment by producers, declarations of conformity in the marketplace, certification by certification bodies in the region, or other kinds of verification*" (EAC, 2007), thereby opening the path to alternatives such as Participatory Guarantee Systems (PGS).

4.1.2. Sustainable local markets become a collective concern

In 2008, Uganda, Tanzania, and Kenya were respectively the first, second and third countries in Africa in terms of the number of organic farms (UNEP, 2010). As it was highlighted in the previous part, export markets have profoundly shaped the formalised organic sector in the region, as well as shared representations of the organic sector: "*If we could have had the equivalent [locally embedded production and marketing] since 1994 when the people started preaching organic here, if it was being preached to entrench it in our communities, by now, you would have organic markets full of products. And the demand would go so high! But people just look at it as mzungu*[11] *things, something that was brought from Europe. They did not link it with the environment where they live, where they produce crops. They did not link it to their health, nothing*" (Interview with Academic stakeholder, 2022). For

[11] *Mzungu* refers here to occidental people.

financial purposes, almost all certified organic farms were producing for international markets, though producing for export meant bending to foreign requirements which, to many actors, were ill-adapted to East African agriculture. Many interviewees who have worked in certification bodies shared the frustration of having to enforce rules no one in East Africa agreed to. Some auditors even resigned because they did not want to participate to such a system, asking "*Why am I doing this to my people?*" (Interview with former CB representative, 2022).

In parallel, in the early 2010s, countries in East Africa had amongst the world's highest population growth rates, especially in large cities like Nairobi. Consequently, the region faced a growing demand for food and natural resources, leading to more pressure on local ecosystems and to episodes of severe food insecurity. Farmers were being pushed into dryer, marginal areas where they become increasingly vulnerable to drought and changing climatic conditions. In addition to the impact on food production and on farmer livelihood, these dynamics increased conflicts over natural resources between farmers and pastoralists (D'Alessandro, 2018). Due to changing weather patterns, market pressure and public incitements, more and more producers started using synthetic inputs in the hope of improving their yields and income. However, the lack of knowledge on chemical use led to a widespread chemical abuse, contributing to increasing health issues in the population. In reaction to these health issues, many consumers started giving importance to the quality of their food. Consumer groups and associations appeared – especially in urban areas – to look for better and safer products on local markets, requesting proof of said quality. This rising demand for quality and traceability justified the birth of the first outlets with organic certified products in the cities (Bendjebbar, 2018; Matovu, 2012; Turley et al., 2022). A minority of stakeholders started considering that focusing on export only was short term thinking, and that aiming for exportation does not necessarily mean excluding local markets. They started advocating about the relevance of local markets as a way to develop the organic sector. Once a vibrant organic sector would be there, openings would appear for regional and export markets. It soon appeared that regional and international markets can be very complementary: exporters are usually looking for large volumes of cash crops that local markets could not absorb; whereas East African consumers require a diversity of vegetables that would not be suitable for export. To some extent, the *Kilimo Hai* label could provide a solution to one of international organic trade major shortcomings: since organic products exporters only buy a fraction of farmers' production – the crops for which there is a market abroad – organic farmers traditionally had to sell their leftovers as conventional. Being certified with both foreign and *Kilimo Hai* organic labels, however, could make the quality of all their leftover products visible on local markets.

In order to address issues of food insecurity and degradation of environment, the EAC set up a Food Security Action Plan that encouraged the improvement of market access for the marginalized, such as smallholder organic producers. The Action Plan contained a focus on agroecological farming practices in order to preserve natural resources (SIDA, 2014). In the ministries as well, some actors started recognising that, in addition to high-end foreign markets, opportunities should be open for domestic consumption of affordable organic products. A choice should be given to both producers and consumers to sell and buy according to their preferences. Though this inclination was not shared by all, the discourse on local organic markets was increasingly taken seriously. For many private sector stakeholders – especially NGOs – sending healthy products away and let local people eat contaminated products was no longer an option, although export remained a valid strategy.

4.1.3. PGS from a third-party influenced perspective

The term PGS was coined during a meeting of IFOAM Latin America in 2004, and gradually gained in popularity ever since. In 2007, IFOAM commissioned a study on the possible establishment of PGS for certifying East African farmers with the *Kilimo Hai* label (Rundgren, 2007) and a workshop

was organized during the launch of EAOPS to introduce the concept (Bendjebbar, 2018), but it was not thoroughly applied until 2010. The knowledge about organic certification and the different forms of guarantee schemes had difficulties to be disseminated, and remained in a narrow group of stakeholders. In their reports, Rundgren (2007) and Katto-Andrighetto (2013) mention farmer groups presented as PGS by NOGAMU and KOAN in 2007, though they seem in fact more similar to ICS and unclear in their governance. They were externally designed by the NOAMs and the farmers' role in the guarantee process was described as "*weak or inexistent*". The control was performed either by NOAMs or by national certification bodies. These first PGS attempts have not been documented and today, among interviewees, no one seem to remember any PGS being established before OSEA II (2010-2013). Consequently, TPC and ICS remained the main certification schemes for the EAOPS in the first years of *Kilimo Hai*. Between 2007 and 2010, some actors who were promoting organic agriculture for domestic consumption discovered PGS on their own and started implementing it, with their own production rules, and their initiatives later spearheaded the implementation of PGS in East Africa. Nevertheless, the concept was mostly introduced by IFOAM. Notions of self-regulation, peer review, collective management, trust and social control gradually percolated among actors who adopted the IFOAM method (Katto-Andrighetto, 2013).

In relation with the priority given to export markets, the representation that "*there is no other valid way to certify but third-party*" had gained the mind of government members and private sector stakeholders alike (Bendjebbar and Fouilleux, 2022; Katto-Andrighetto, 2013). As a result, still today, many perceive any alternative to TPC as a lesser guarantee. PGS are also sometimes perceived as too complicated and cumbersome to manage for some traders, for whom calling on a private auditor is much simpler. It has even been recommended by experts commissioned by SIDA that PGS "*should be linked to third party certification to establish and develop affordable and credible certification services*" (SIDA, 2014, p.10), thereby implying that PGS alone would not be credible. In the same way, the first attempts of NOAMs to build PGSs resulted in schemes where there was no clear inclusion of other stakeholders and where farmers were not engaged in verification process (Rundgren, 2007). From that perspective, it seems that there was initially a confusion between PGS and third party schemes[12], and that the common understanding of PGS was a cheaper and simpler Internal Control System (ICS) led by a NOAM which did not comprise the elements of participation and horizontality underpinned by the concept, and where the role of farmers peer-reviews is reduced to make the work easier for the certification body (D'Alessandro, 2018; Rundgren, 2007). Moreover, it was advocated by IFOAM that relying on local NGOs and project sponsors to organise farmers and manage certification processes was the least constraining option for smallholder farmers, thereby establishing a *de facto* verticality in the implementation of the concept (Bendjebbar, 2018).

4.3 Creation of the PGS scheme

4.1.4. Strategic objectives of the OSEA II project

Since the formalisation of the IFOAM PGS Committee in 2006, IFOAM started to accompany NOAMs and governments in the development of new PGS. IFOAM interest for PGS and domestic markets grew rapidly (Rundgren, 2007; Rundgren and Lustig, 2007), and they progressively became a central institution for PGS facilitation and implementation worldwide (Bendjebbar, 2018). In 2010,

[12] Even today, confusions between PGS and ICS are very common because of their technical similarities. They both entail production standards, peer reviewing, compliance verification procedures, collective management and seals. However, the two guarantee systems present fundamental differences in their governance models, in the nature of participation, in involved financial resources, in processes and scope of certification, in targeted markets as well as in transparency of decision making. For a review of differences between PGS and third-party certification schemes adapted to the Eastern African context, we can recommend the works of D'Alessandro (2018).

since recognition by EU authorities was compromised, NOAMs and IFOAM were still looking for new ways to promote the *Kilimo Hai* label. PGS could represent a promotion tool for the label, to show that it was active, that it was used, and that the involvement of government in the organic sector was justified. The OSEA II project (2010-2013) was thus created based on the experience of the OSEA-CBTF project, with objectives of coming back on EU standard equivalence, adaptation and revision of standard, dissemination of standard, advocacy for organic policies and improved local markets (Rundgren, 2011). An emphasis was set on the uptake of the *Kilimo Hai* label on local and regional markets, on making conformity assessment accessible for small producers and on improving market opportunities through PGS. The project was coordinated by IFOAM, and most actions were established by NOGAMU, TOAM and KOAN and facilitated by Grolink, who also took charge of monitoring and evaluation. Although various stakeholders including government representatives, NGOs and UN organisations were consulted (SIDA, 2014), decision-making was limited to a consensus between organic movements, funders and foreign consultants. The range of involved stakeholders was much more reduced than during the creation of the *Kilimo Hai* label due to limitations of time and resources.

The EAOPS was not originally meant for PGS, but it would have been counterproductive and costly to develop yet another standard. The idea of PGS encountered little resistance in the private sector. For many stakeholders, the principal advantage of PGS was its capacity to open up the bottleneck on the local market for smallholders by bringing down the costs of certification. For some NOAM and NGO actors, the noteworthy aspect of PGS was their ability to facilitate dissemination of knowledge on good agricultural practices adapted to their surroundings. The perspective of organising farmers into groups would also allow joint marketing, community banks and advocacy for public support (TOAM, 2021). It was also a potential "*training ground*" for TPC, as it would allow farmers to get used to organic production practices and to record keeping (Bendjebbar, 2018). Finally, PGS provided the opportunity to be scaled up and to reach many farmers, so that a level of high impact would be reached (Bonabana et al., 2022). PGS certification for the *Kilimo Hai* label originally intended to cover all East Africa, but soon faced barriers from the differences of development between national organic sectors, and from the regional market itself.

4.3.1 Vertical implementation

Voluntary sustainability standards such as EAOPS can have many positive outcomes on the livelihood of the farmers who are able to use them to their advantage. However, many individuals are too precarious or to isolated to gather the resources and knowledge required to become certified, and end up being left behind (Turley et al., 2022). PGS offer a chance to avoid this shortcoming by fostering collective empowerment. However, as introduced before, there seem to be a shared belief that East African farmers are not able to manage by themselves[13] (Rundgren, 2007). It is notably the case for the writing of inspection reports or standard-reading, because a significant part of rural population is illiterate or stopped school after primary, making it difficult for farmers to keep records (D'Alessandro, 2018). There is no denying that overburdening farmers with complicated administrative tasks would not help, and that the system should be adapted to such issues. However, even among NGOs, some

[13] In a report commissioned by SIDA, one can read: "*Farmers often are not convinced that they can change their situation themselves. They have little ambition; they have no middle class to motivate them. Although there is plenty of labour available and more work could be done on the farm, the prospect of doubling their income does not motivate them to actually do it. Farmers do appreciate the attention, the assistance given to them by the field officers. At the same time, they are easily bullied by other private buyers to sell their crop as conventional*." (van Elzakker and Leijdens, 2000, p.7). It is now generally accepted that farmer decision-making is not reduced to lack of ambition or laziness, like the report lead to believe, but is in fact the result of complex arbitrations between socioeconomic household conditions, psychological status, farm characteristics, social surroundings, but also health of consumers, workers and farm animals (Edwards-Jones, 2006). In spite of the disputable nature of the report's assertions, this extract underlines the top down – and sometimes patronizing – perspective of key institutions in the early 2000s.

actors see farmers as untrustworthy, since they just "*plant seeds and wait for the harvest*"[14] and many of them "*know nothing about organic*" (Interview with NOAM representative, 2022).

In contrast, several interviewed farmers have the feelings their ideas are not listened by NGOs. This perspective had an impact on how the PGS groups were established, since when asked about the limited horizontality of the current PGS scheme, some answered "*You can't have sheep without a shepherd*" (Interview with NGO representative, 2022). This representation of farmers as passive and dependent on higher authorities may be increased by the fact that the system has left, so far, few spaces for independent farmer groups. Most of them have to rely on NGOs and project sponsors to provide them funds and trainings, which does not encourage empowerment. Information remains centralised. In 2011, the OSEA II project funded the translation (Kirundi and French) and dissemination of short versions of the EAOPS for it to be used and understood by more farmers. Handbooks for the development of PGS were supposed to be developed and published as well, but the activity was aborted (SIDA, 2014). As a result, NOAMs remained, through their trainings, the main source of information on PGS.

4.1.5. Initial reference frame for PGS, and the birth of a hybrid form

As soon as 2007, Rundgren started providing recommendations for the establishment of a PGS in East Africa. She highlighted the importance of accountability of the system, ownership by the farmers, integration of cultural and social features, transparency (Rundgren, 2007). Though each PGS is unique and tailored to fit its context, the mainstream perception is that PGS should give individual certificates and should be based on decision making at the level of the farmers. Based on that, there can be an "external look" (NGO, competent authority…). The cornerstone is that the farmers are fully aware they can really make decisions and shape the system to their liking, peer learning and horizontality being what differentiates PGS from ICS (D'Alessandro, 2018).

In the case of the *Kilimo Hai* PGS, since the first attempts of implementing the system, its governance has mimicked third-party approaches in its top-down functioning and in the limited involvement of farmers in decision-making (D'Alessandro, 2018; Rundgren, 2007). To some, crafting a hybrid between PGS and ICS was a conscious choice made for several reasons. First, as seen above, the dominant narrative was that the end-all of organic farming should be exportation, and PGS would be all the more an adequate stepping stone towards ICS if it reproduced its functioning with simplified requirements. Secondly, with the introduction of a new organic guarantee scheme for the *Kilimo Hai* label, it had been foreseen early that the credibility of PGS was going to be questioned by many actors, especially CBs. To avoid such issues, strong bonds were kept between CBs and NOAMs, in the hope that cooperation among actors would help PGS and TPC to develop in harmony (Rundgren, 2007). Consequently, the involvement of third-party auditors increased the hybrid aspect of PGS. In 2012, NOGAMU and TOAM were approaching PGS as networks they would manage and that would be audited by UgoCert and TanCert, respectively. The argument behind this arrangement was that it would avoid conflicts of interest by separating certifiers and trainers, in addition to the fact that NOAMs lacked the capacity to perform inspections (Matovu, 2012). In contrast, some initiatives followed different trajectories, like Freshveggies, which was a grassroot organisation that maintained its farmer-based governance and refused to become accredited by NOGAMU for *Kilimo Hai* certificates, or CHAKULA which was born from a long-term cooperation between a farmer community and a buyer (Katto-Andrighetto, 2013).

[14] Interview with NOAM employee in 2014 by (Bendjebbar, 2018, p.263)

4.4 Characteristics of the *Kilimo Hai* PGS scheme

4.4.1 Internal governance of local PGS groups

At local scale, most PGS groups gather 25-30 farmers, though some groups contain 10 members and others over 100. Every group has the possibility to craft its own internal rules and to implement its own initiatives (group marketing, community farm, collective saving, processing unit…), and to organise internal inspections as they see fit. This adaptative governance allows farmers to determine the internal governance that suits them best. Doing so, PGS allows farmers to help each other in case of non-compliance, to share knowledge and to foster positive group dynamics. On the other hand, all *Kilimo Hai* certified products serve the same market, which requires a minimum level of consistency in the quality of the products of the different groups.

The internal governance is based on the same core structure for all groups, though the names may change: an executive committee/secretariat for administrative tasks, a training committee, a standard and inspection committee, and a marketing committee. Some PGS groups have created new committees to answer their local needs, but these four bodies remain constant. Internal inspections are performed by inspection committee members. In case of non-compliance, decision of sanction or exclusion of a producer was taken by the secretariat or during general assemblies. However, in order to be allowed to used the *Kilimo Hai* label, local groups must be inspected and accredited by their respective NOAM.

4.4.2 NOAMs as central authority and overseers of the control

Traditionally, in order to link the diverse actors of their respective food systems, and to build trust amongst users of the label, PGS in the world involve a diversity of actors. Most of them notably involve consumers, which requires a high level of awareness. In East Africa, in 2010, too few consumers were inclined to spend time visiting farms. Some traders occasionally participated in visits, but the organizations which have been quickly identified to be in the best position to promote and oversee PGS were NOAMs. Indeed, given their central position in the governance of the *Kilimo Hai* label and due to their nature of umbrella organizations, they were seen as the most legitimate to oversee PGS with limited conflicts of interest or associated costs. Moreover, they were presented as having the knowledge necessary to guide new farmers towards compliance with EAOPS and with the East African PGS approval criteria (Katto-Andrighetto, 2013). It was also a political way for the NOAMs to have a "*firm grip, a control over the affairs of the different PGSs in the country. They [the NOAMs] would do advise, technical backstopping... But at the same time, politically, they would be in charge and therefore coordinate the actions of the different actors*" (Interview with NOAM representative, 2022). The ambition of NOAMs was not to have a monopoly on setting up PGS, but to provide trainings and a common reference frame that would make harmonization of PGS-certified products easier.

Though based on understandable arguments, the posture of NOAMs was not approved by all. To some, PGS was mostly a way for NOAMs to strengthen their authority on the *Kilimo Hai* label, but also on the organic sector. Those who were already familiar with the concept of PGS criticised the option proposed by the OSEA II project, which provided too much power to NOAMs and too little to farmers: "*The NOAMs are very powerful organisations who almost decide what farmers do. And the farmers don't know how much power they have, or they are not exposed. They are just there to accept. So, they accept unknowingly the wrong thing. So, the whole issue about how PGS operate in East Africa should be about increased awareness, increased dialogue. […We want] the farmers to be in charge, and the participation of all stakeholders, the consumers, and what, to be well broadly reflected. Not a team of technocrats to decide for farmers*" (Interview with PGS representative, 2022). The central position of NOAMs also quickly raised the issue of capacity building, as the entire system rested on

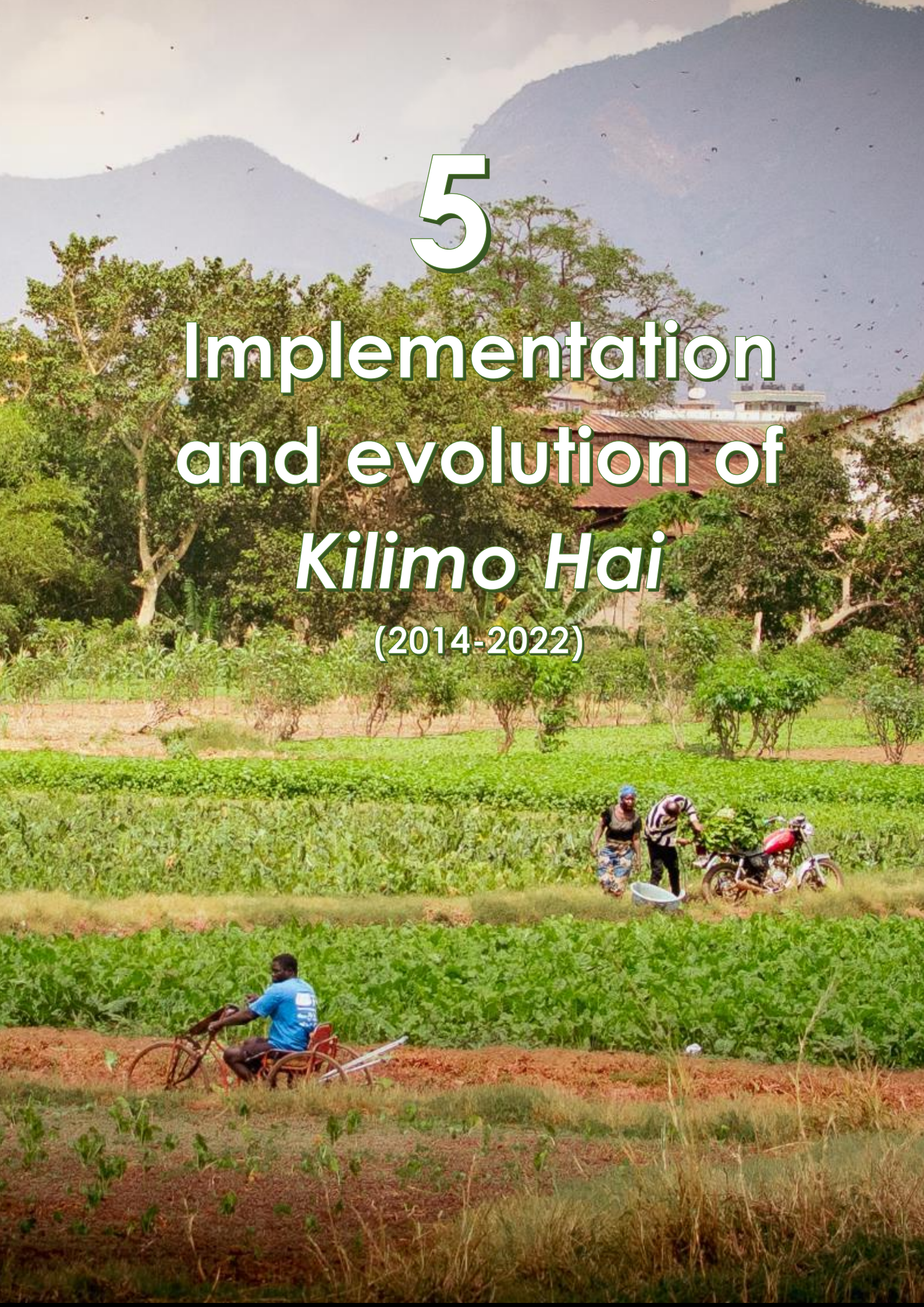
them. Managing an organic guarantee system was neither the initial mandate nor the field of expertise of NOAM employees, and the organisations did not have the capacity or resources to manage an accreditation system.

Per definition, PGS are supposed to provide room to farmers to take part in decision-making. Peer-review and social control are supposed to be the core of the guarantee, and the basis for decision to certify a farmer or to sanction in case of noncompliance. However, due to the significant place NOAMs occupy in the system, peer review seems under rated: "*These people are there just to guide other members of the group. "Do this and not do this". But we don't receive official reports from them. … You know, sometimes even documenting is a challenge for some farmers. They can understand the production process. But to document and submit their report is something also different*." (Interview with NOAM representative, 2022). As a result, aspects of participation and transparency are still rather weak in most groups, especially regarding NOAMs decision for approval of the group (D'Alessandro, 2018). In terms of management, the *Kilimo Hai* PGS is mainly run by experts and the role of farmers and consumers is limited to inexistent (Bendjebbar, 2018).

4.4.3 The Joint Management Committee (JMC) and certification fees

In order to foster coordination between the NOAMs and to ensure the consistency of PGS certification in the EAC, a Joint Management Committee (JMC) was created. It was composed of representatives of each NOAM and was responsible for management of the *Kilimo Hai* label and PGS (SIDA, 2014). The JMC developed the inspection protocols for PGS assessment and approval during OSEA II, and it was supposed to approve the validation of each new PGS group to use the *Kilimo Hai* label in the EAC. However, the lifespan of the JMC was very brief. Due to mismanagement of funds, the resources planned for hosting the JMC could not be used. Without a dedicated budget, it was unrealistic to ask the heads of NOAMs from various countries to gather at least once a year. Since PGS was not the main focus of NOAMs, the JMC never properly existed as such. The institution still perdured more or less formally until communication issues and an institutional crisis at NOGAMU led to the disintegration of the JMC[15]. The disappearance of JMC was done so informally that still today, few actors can tell for sure if they still meet or not.

[15] The idea of the JMC was afterwards taken up as the « Joint Mark Committee » by UgoCert, which is trying to gather other certification bodies in the EAC to coordinate *Kilimo Hai* certification.



5

Implementation and evolution of *Kilimo Hai*

(2014-2022)

5.1 The first PGS groups

5.1.1 Implementation of *Kilimo Hai* PGS during the OSEA II project

In 2010, NOAMs started prospecting for existing farmer groups that would fit PGS certification in order to train them on *Kilimo Hai* PGS procedures (Katto-Andrighetto, 2013). Even though PGS offered cheaper certification than TPC, their implementation required significant initial investments that could hinder involvement of smallholder farmers. A majority of PGS groups have been supported by NGOs to finance capacity building, development of the internal structures and final assessment and approval (D'Alessandro, 2018). In a few occasions, NOAMs took a connecting role between farmer groups and potential sponsors. The training of farmer groups held several components: organic production practices; PGS procedures; structure of the group and different roles (chairperson, secretary, committees…), production standards. Once all these concepts had been introduced and the group leadership was well established, a conversion period of one year started. Then, NOAMs assessed the PGS based on an external inspection which could be performed by a NOAM employee or an auditor from the national CB, depending on the country. This inspection ensured that the group was in line with the EAOPS and the PGS approval criteria. It could be completed by reports from the support NGO or from the group, though internal reports soon became optional because many farmers had difficulties to keep records. Once approved, the PGS group was to be presented to the JMC for endorsement, and then received collective organic certificates[16] (Katto-Andrighetto, 2013; NOGAMU, 2012b). External assessments were relaxed in terms of requirements, as most actors wanted to keep an inclusive dynamic and to recognise efforts rather than punishing errors.

The fact that well-established international organisations such as IFOAM participated was a significant contribution to help sceptical stakeholders reconsider their positioning on PGS, and to encourage people who were already aware. By the end of 2013, there were a total of 15 functional PGS groups in the region (6 in Uganda, 5 in Kenya and 4 in Tanzania), representing a total of 5086 farmers (4086 of which were women), and 10 of those 15 groups were approved by the JMC for use of the *Kilimo Hai* label. In parallel, NOAMs were intending to open new outlets (stores, supermarkets, restaurants, hotels, organic markets…) to welcome the newly certified products (Matovu, 2012). PGS producers started supplying organic outlets in both capitals and minor cities, in addition to pre-existing selling circuits. Selling prices varied greatly from one outlet and one product to another, but it soon appeared that the ability to sell their products quickly was sometimes just as valuable as higher prices. These groups demonstrated that organic food can be accessible and affordable to local communities and opened the path for a new consumer base of organic products (Katto-Andrighetto, 2013; Ninnin, 2021; SIDA, 2014). Though many PGS groups were initiated during the OSEA II project, each country had precursor initiatives which spearheaded their implementation.

5.1.2 Freshveggies, Uganda

In Uganda, the first PGS to be established and recognised as such was Freshveggies. The initiative started as an informal network of organic *de facto* producers supported by the NGO Caritas, who started to organise collectively to share transports and selling activities. In 2009, after being sensitized on the concept by IFOAM, NOGAMU was providing trainings on certification which contained elements on PGS. Doing so, they started building the capacity of the network and to connect its members to other stakeholders, resulting in the formalisation of the Freshveggies PGS (Katto-Andrighetto, 2013; Loconto et al., 2016; Nakalanda and Kugonza, 2016). The Freshveggies initiative was already fit for a PGS scheme, as members were looking for a marketing tool that would be owned

[16] Although it changed with time in some areas, PGS groups initially received collective certificates only. Certified farmers were not allowed to use the *Kilimo Hai* mark individually.

by farmers and that would offer with consumers. Producers could set their own prices and consumers could give direct feedback on freshness and quality. Although there was initially no real demand for guarantee from consumers, communication between actors has progressively generated trust between farmers and consumers that opened new outlets for producers. Cooperation has inspired PGS farmers to participate to collective activities. Though most selling prices were not much higher than on conventional markets, the simple fact that farmers were able to cut out intermediaries improved their livelihoods (Nakalanda and Kugonza, 2016).

Freshveggies was functioning as a loose network, where a coordinator was ensuring dissemination of information and coordination of production and marketing. Producers had elected representatives that participated in general assemblies, and smaller groups that met regularly. All groups had an executive committee to ensure administrative tasks, and inspection, production and marketing committees to run the daily operations of the PGS. The members of the PGS decided to align their production to comply with the EAOPS (Katto-Andrighetto, 2013). On the basis of Freshveggies' success, NOGAMU was quickly interested to participate to new commercialisation and valorisation of organic products through PGS. When the OSEA II project arrived, it provided the resources to enact this will (Bendjebbar, 2018). However, in spite of their close collaboration with NOGAMU, Freshveggies' members did not request accreditation to use the *Kilimo Hai* label, as they were not looking for what they perceived was another form of TPC.

5.1.3 Sustainable Agriculture Tanzania (SAT), Tanzania

Sustainable Agriculture Tanzania (SAT) was an NGO created in Morogoro, Tanzania, in the late 2000s. They encouraged the adoption of sustainable agricultural practices in order to limit ecosystem degradation and increasing soil erosion caused by demographic pressure. They facilitated the creation of the Maendeleo group of farmers in 2010 and started providing agronomic trainings. However, since there was no dedicated market, they had no way to make these practices economically sustainable. Organic certification could provide a framework that would focus on agroecological practices and implementation of terraces, but they had no desire to turn towards export markets. In 2011, SAT stakeholders learned about PGS and realised that the Maendelo group could qualify, which would allow them to sell their products with a recognizable seal of quality. They contacted TOAM to request training on PGS, and Maendelo soon became a functional PGS group supported by SAT. Maendelo farmers received their first certificate in 2012, for collective use only. Simultaneously, SAT opened an organic shop in Morogoro to showcase organic products at affordable prices, and TOAM opened another organic shop opened in Dar Es Salam (Katto-Andrighetto, 2013). In 2021, SAT supported 47 local PGS groups and almost 1,000 PGS-certified farmers (SAT, 2021).

5.1.4 Ngong Organic Farmer Association (NOFA), Kenya

The Ngong Organic Farmers Association (NOFA) was launched in 2008 by 47 smallholder farmers who had been trained on organic production by the NGO Community Sustainable Agriculture and Healthy Environmental Programme (CSHEP). The farmers had the capacity to sell organic products to the nearby markets of Nairobi, but buyers were demanding organic certificates and TPC was not affordable. Therefore, the group engaged in a transition towards PGS in 2010. KOAN provided the initial training and guidance on PGS documentation, and invited other stakeholders such as CSHEP, the Ministry of agriculture, and restaurants interested in organic products. Inviting restaurants was a way to open new outlets for farmers (Katto-Andrighetto, 2013). Members of NOFA were among the few producer groups involved in the development of procedures, regulations, and PGS documentation. They developed themselves a simplified version of the EAOPS, which consists of 10 requirements. They managed and implemented PGS activities through six committees (executive, welfare, marketing, inspection, production, sanction and products) and general meetings. Decisions were taken through

general consensus or through voting. The Sanctions Committee included representatives from the farmers, the staff of the NGO CSHEP and the Ministry of Agriculture. The presence of external stakeholders in the Sanction Committee was a way to add public credibility to the guarantee and to embed the PGS in its institutional environment. However, this involvement was challenged by the lack of time and interest of external actors in these activities. Peer reviews were performed by the inspection committee annually, and a peer review report was submitted to the KOAN Approval Committee annually. Once compliance had been validated, the group as a whole used to obtain a collective organic certificate from KOAN, enabling the group to use the *Kilimo Hai* label on their products – even when they sold their products individually (Katto-Andrighetto, 2013)

5.2 Implementation of new PGS groups

Experts commissioned by SIDA were aware that PGS implementation was a slow process that would require extended resources to be really effective (SIDA, 2014). Consequently, SIDA funded a follow-up project to ensure that a critical amount of PGS groups would be implemented, "Organic Trade and value chain development in East Africa" (OTEA 2014-2019). During this last project, many stakeholders were trained in organic guarantee systems and 130 producer groups have been trained in PGS, of which 40 were accredited by their respective NOAMs. Local NGOs were also trained in order to accompany at best the farmers into compliance. In alignment with OSEA II, OTEA simultaneously supported PGS groups and facilitated their linkage to new outlets (farmers markets, processors, organic traders, restaurants/hotels…). The expected outcomes of such linkages were to secure reliable value chains and to provide improved profit margins to producers. The *Kilimo Hai* label started to be increasingly used for both urban and rural outlets (SIDA, 2019). Today, in Tanzania, over 2000 producers are certified through PGS and accredited by TOAM, with thousands more in training / conversion period (Ninnin, 2021). There are a multitude of PGS groups supported by various NGOs, which apply the organic standard with their own governance system. In Kenya, six well-established PGS initiatives were accounted by D'Alessandro (2018), for a total of 178 certified farmers. In 2022, 14 PGS groups are validated by KOAN with distinct sizes and organizational structures (Ahlf, 2022). In Uganda, the PGS scheme collapsed in the late 2010's due to an internal crisis in NOGAMU (Bendjebbar and Fouilleux, 2022), and the system is currently being rebuilt with new actors involved as developed below. The statistical results of the OTEA project were impressive. If not for the crisis of NOGAMU, the PGS would have undergone an unprecedented growth. Nonetheless, some stakeholders feared that delivering certificates to these new groups was more aiming at fulfilling the project requirements than answering a demand from the market or from producers, leading to a limited impact of certification.

With the progressive withdrawal of the JMC, it seems that implementation started to prevail over regional harmonisation. The crisis of NOGAMU and the necessity of creating a quick uptake and diffusion of PGS across the countries left the remaining NOAMs to improvise their procedures for implementation. Previous procedures had already been established during OSEA II (notably through the PGS approval criteria) and through OTEA project requirements. However, these were interpreted and understood differently by the diversity of actors involved in PGS implementation, and project implementors had limited capacity for monitoring and evaluation activities. As such, PGS groups started to appear with very distinct validation protocols. Some groups were validated based on a simple file, whereas others still require an annual inspection from their respective NOAM. In addition, when the JMC started looking for revenues, some NOAMs started requesting certification fees around 2017, which put many label user in difficult positions and delayed the self-sustainability of PGS groups (SIDA, 2019). This diversity of procedures was born from necessary adaptations to changing institutional and socioeconomic contexts. However, because it was born without proper

communication between actors, it started to affect the consistency of certification, along with the mutual recognition of PGS certification between countries.

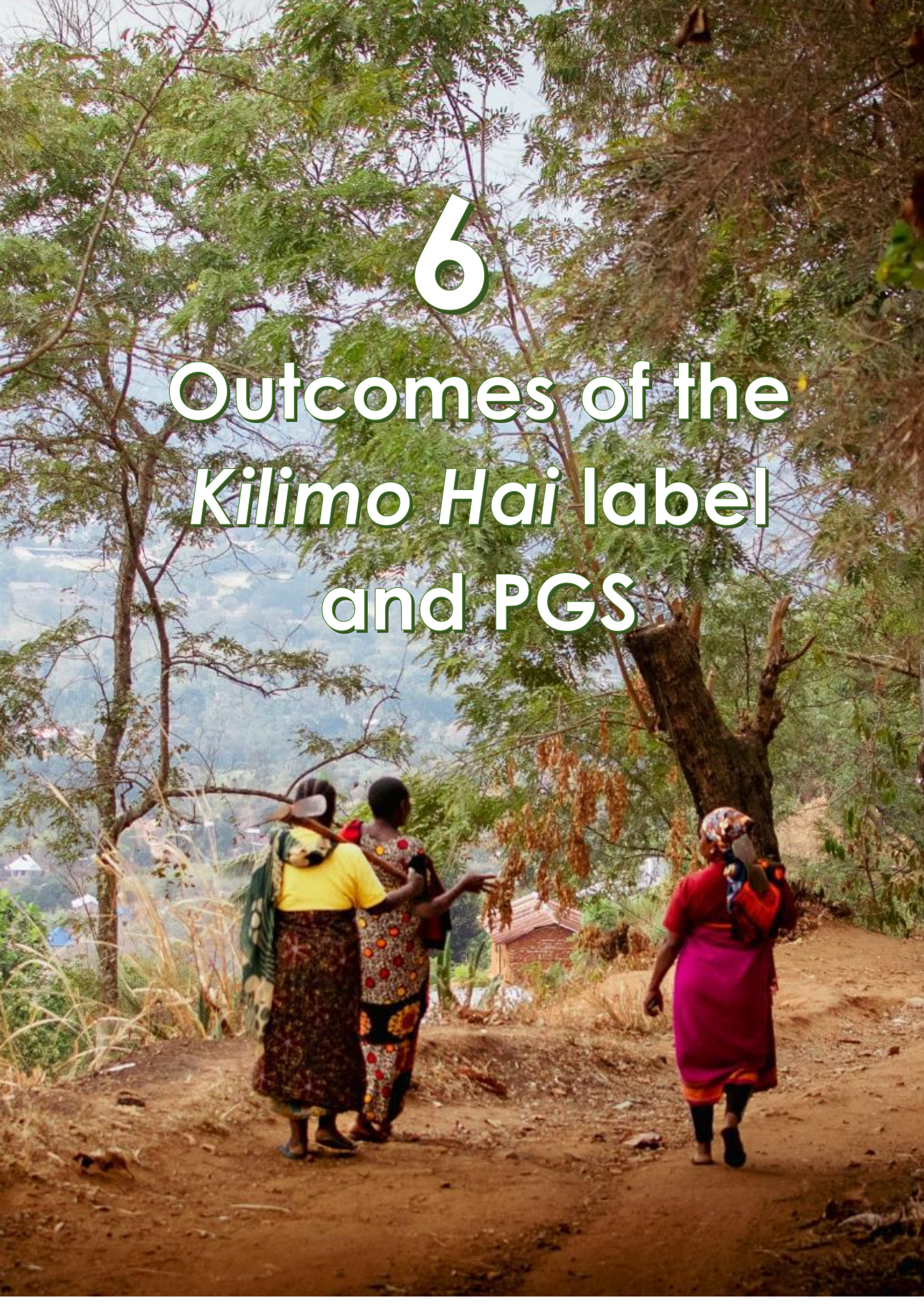
5.3 NOGAMU's institutional crisis

In the mid-2010s, Uganda was leading the region in terms of *Kilimo Hai* implementation. In 2016, with over 210,000 organic producers, the country had the second largest number of certified organic producers after India. NOGAMU had established business contact with Dubai, Bahrain, Saudi Arabia and Qatar, who all recognised the validity of the *Kilimo Hai* label. At the beginning of OTEA, NOGAMU mobilised, trained and certified four new PGS groups for a total of 603 farmers, who were linked to organic markets in Kampala and Entebbe as well as a buyer from Dubai (SIDA, 2019). However, from 2017 to 2020, NOGAMU suffered a critical crisis from which the organisation is still recovering. The trust stakeholders placed in the organisation deteriorated, and the withdrawal of donor's support caused most of their activities to cease (Gourion, 2022b). To date, the organisation still has a limited team who is working hard in order to get back on track. The impact of this crisis on the sector is difficult to assess. PGS farmers had no one to turn to for validation of their certification. Some groups continued their activities without NOGAMU, when they had market outlets. However, most of them stayed in an idle situation because of the lack of information. The absence of NOGAMU left a void in the Ugandan organic sector. Progressively, new actors started to take over some parts of its activities. For example, UgoCert started taking responsibility for both inspecting and certifying PGS groups in Uganda, using the UOS or the EAOPS according to the targeted market.

5.4 Revision of the EAOPS

A regular revision process is essential for organic agriculture standards, for them to stay adapted to the needs of the population and of the market. In the case of the EAOPS, it was agreed upon that a revision should take place every 10 years. In fact, the certification scheme for the *Kilimo Hai* label and targeted markets in 2017 diverged radically from the ones considered in 2007. As such, adaptations were required by producers, dealers as well as NGOs. The EAOPS has been revised to cover aquaculture production, requirements on child labour as well as other social aspects. The revised version has been drafted by NBSs based on meetings with a limited number of organic agriculture stakeholders. It was afterwards submitted by email for public review and comments were considered. Finally, the new version of the EAOPS was endorsed by the EAC countries in 2019 (SIDA, 2019). The new version was eventually posted on national catalogues of standards, but not for free[17], and with no budget for advertisement campaign. As a result, most interviewed stakeholders – from farmers to institutions leaders – have not been informed the EAOPS has been revised.

[17] In the end of 2022, it costed 55,000 Tsh (USD 24) to obtain the new EAOPS in Tanzania and 65,000 Ugx (USD 17) in Uganda. In Kenya, the EAOPS does not even appear on KEBS catalogue of standards.



6

Outcomes of the *Kilimo Hai* label and PGS

6.1 Outcomes on local organic markets

6.1.1 New local market outlets

Beyond the training and certification of a large amount of new PGS groups, the last decade gave birth to numerous local outlets for organic products, and the volume of organic commodities sold domestically grew significantly (AFSA, 2017). The reliability and consistency of supply were a major issue for urban outlets, which require fresh products on an almost daily basis. To address this issue, some NGOs established contract farming with PGS groups, which allowed them to coordinate and strengthen the whole value chain. The opening of new markets was made significantly easier by the collective nature of PGS. Farmers from the same group can join their productions and work as a consortium to become gain visibility, reduce transport costs and negotiate fair prices with buyers. Issues of production appeared to be encouraging as well, as average yield increases of over 100% were measured after training of smallholder farmers in agroecological practices. The author of this study attributes this success to the performance of agroecological systems in a context of drought and climate change, which increasingly affect East Africa (Ton, 2013).

Most NGOs initially focused on opening outlets for wealthier consumers in capital cities, but they gradually moved towards affordable organic markets for everyone. Costs of transports and logistics were not always worth the relatively higher urban prices, and intermediaries are not able to market all the products that come out of these highly diversified farms. Local markets and farm-gate sales keep on representing the principal source of income for many farmers. In direct sales, the *Kilimo Hai* mark is not requested by the consumers, since the quality of products from PGS producers can be physically attested. Some traders and upper class consumers, however, do value the presence of organic labels (Ahlf, 2022; Ninnin, 2021). Therefore, PGS farmers produce organic food for all types of markets and consumers, and by extent answer the initial vision of providing healthy and sustainable food to the whole population at fair prices. The *Kilimo Hai* label itself, however, is mostly visible in a minority of high-end markets. Although most organic sector activities still rely on NGOs or external funds, domestic market appeared to grow rapidly after the introduction of PGS. As evidenced by the apparition of new businesses, the increasing numbers of organic certified farmers, and the growing interest in the sector from consumers, medias and researchers, the sector seems to move closer to self-sustainability threshold (D'Alessandro, 2018; Kamau et al., 2018).

6.1.2 Improved consumer awareness

Overall, consumer awareness is still described as very low. The urban organic consumer base is mostly expatriates and upper-class citizens ready to pay higher prices. Even when average consumers are aware, few have the purchasing power to choose healthy products. Though PGS gave a large field of action for the development of domestic and regional markets, *Kilimo Hai* has not gained limited momentum so far. To some, this is due to a lack of awareness campaigns during PGS implementation: "*If you don't have the markets, what would be the drive of making the PGS scheme to develop more? So, we established the PGS scheme without making the public aware on why they should eat organic food. The first thing is we need to educate first. It is like you are buying a ball without having a ground to play! […] We need to create environment and we need to sensitize people, educate people to buy organic product*" (Interview with NOAM representative, 2022). Volumes of certified products are still limited, but increasing. This steady progression gives hope to many stakeholders: "*We have not yet reached the threshold. But we are assuming that when we will be there with a lot of quality products, it will go very quick. But it's a long way to go and it needs a very strong vision*" (Interview with PGS representative, 2022).

In Kenya, interviewed stakeholders are optimistic. Consumer awareness has grown considerably, along with the diversity of domestic outlets, and the market is approaching one billion Kenyan shillings. The leading position of Kenya in terms of domestic organic sector can partly be explained by the stronger economy of the country, by the difficulties encountered by Uganda in the last year, but also by the different initial strategies of organic advocates. While in Uganda and Tanzania, stakeholders invested lots of time and resources in advocacy for public recognition and policy, Kenyan actors started working early on organic markets, which results today in improved consumer awareness.

6.1.3 Cohabitation between PGS and certification bodies

The implementation of the PGS scheme in East Africa gave smallholder farmers the possibility to afford being certified. Indeed, in the first years, PGS certification fees were limited to non-existent, and were mostly covered by support NGOs or by projects. Consequently, the demand for third-party certification for the *Kilimo Hai* decreased drastically, which impacted the activities of national CBs in Uganda and Tanzania.

In Uganda, when the OSEA II project ended, UgoCert had to rely on their partnership with the foreign certification company CERES and inspect for them as subcontractors. In parallel, tensions appeared between NOGAMU and UgoCert about who should take responsibility for PGS group validation. Eventually, NOGAMU took ownership of the *Kilimo Hai* label and provided PGS certificates by themselves, thereby depriving UgoCert of a significant part of their activities. The Ugandan Organic Standard (UOS) had been removed from the national catalogue with the adoption of EAOPS in 2007. Nevertheless, around 2014, UgoCert based its certification activities for the domestic market against the UOS, and keeps on using the former national standard today. The UOS belonged to no one, and thus allowed for minimal certification fees. Afterwards, a new team arrived in UgoCert with limited knowledge on domestic organic standards. Due to the confusion regarding standards managements, it was commonly accepted that the UOS was still a national standard recognised by public authorities. After the collapse of Ugandan PGS in 2017, UgoCert started offering certification services against both national and East African organic standards, depending on whether the targeted market is national or regional. Today, they are handling PGS management back to NOGAMU, and will most likely participate in the national PGS committee currently under construction.

In Tanzania, TanCert relied a lot on TOAM, and received no support from public authorities. In the first years of PGS, TOAM did not have the capacity to perform external group inspections. They relied on TanCert inspectors. However, in the mid-2010s, TOAM started to perform external PGS assessments themselves. TanCert suffered from what was lived as a competition with TOAM, and the company kept working as subcontractor for foreign certification companies. Eventually, the latter managed to hire all trained staff, leaving only one employee to keep TanCert running, leading to the collapse of the CB (SIDA, 2019). Today, because of the absence of national CB, foreign companies have control over the certification market for export, and PGS is the only remaining certification scheme applied for *Kilimo Hai* in the country.

Finally, in Kenya, new CBs were created. Today, four national CBs are providing TPC services to 500 organic farmers using the *Kilimo Hai* label. From complete disappearance to pacific cohabitation, the different certification bodies reacted in very distinct ways to the apparition of PGS. The reasons and implications of such reactions are based on complex associations of factors that would require a stand-alone study to be analysed.

6.2 Outcomes on communities

6.2.1 Improved livelihood and social link

Rural precarity is an issue that is not to be neglected and that should be assessed in priority. To that extent, improving the livelihood of farmers has always been in the mind of the organic sector stakeholders. The benefits of export-oriented organic production were quickly apparent. In theory, TPC-certified farmers should receive an increased income because of their higher selling prices on international markets. PGS certification for domestic markets, however, presents more diversified outcomes on farmer communities, but somehow less tangible. The selling prices of a PGS farmer may increase after joining the group, but never as spectacularly as with TPC. However, a significant part of TPC added value goes to certification companies, exporters and intermediaries, most of them being foreign. In the end, the net profit left for the TPC-certified farmer and for the exporting national economy may not be as impressive as originally announced. In contrast, producing for national markets grants resilience faced with global crisis. The recent experiences demonstrated how vulnerable our international value chains may be confronted to global sanitary or geopolitical issues: "*The export markets are becoming too complex. A lot of procedures, a lot of barriers... like you have seen, there is war in only two countries in the world, but export is becoming difficult. Also because of corona, export is not possible anymore. But PGS still farmers can produce, they can sell consistently with no barriers or anything*" (Interview with PGS representative, 2022).

The development process of PGS involves the creation of new group of farmers or the mobilisation of pre-existing ones. Through their collective organisation, members of the community can easily receive trainers on organic production techniques, but also organise collective marketing, community banks and group activities (Katto-Andrighetto, 2013). On these occasions, farmer involvement in PGS appears to foster solidarity, transparency and exchanges of knowledge between farmers far beyond a simple certification scheme. For some farmers, these social aspects represent the major motivation to participate, even before the economic incentive (Ninnin, 2021; Turley et al., 2022). PGS groups themselves often implement activities (general meetings, collective farm…) and volunteer-based committees, which allow anyone to become a member and to get involved commensurately to their capacities and desires (Ahlf, 2022; Ninnin, 2021).

6.2.2 Transmission of knowledge

PGS farmers often describe themselves – and are often described – as eager to learn more. Trainings from outside experts are most welcome, in particular related to new agricultural practices. Some trainings are done collectively with the whole group, others only engage a small number of farmers who are then to share the knowledge with their peers. The organisation of PGS farmers into groups make it much easier for trainers to reach them, as compared to isolated farmers. Complementarily, horizontal transmission of knowledge is a capital dimension of PGS. During collective activities and peer inspections, farmers exchange a significant amount of knowledge. Collective interactions give them the opportunity to learn from each other. This is particularly obvious during internal inspections: when a non-conformity is identified, the group first tries to find a solution based on collective knowledge, rather than simply punishing the fault. The combination of vertical and horizontal knowledge transfers allowed PGS farmers to develop advanced skills in organic agriculture practices and ecosystems management. In turn, farmers could pass on knowledge and create awareness in their own communities. This neighbourhood effect inspired some consumers to start seeking PGS certified products, new producers to engage in PGS groups, as well as village leaders willing to support their activities.

6.2.3 Preservation of environment and health

In spite of all the institutional work that has been realised in the last two decades, the final decision-makers who will decide if good agricultural practices are going to be implemented or not are the farmers themselves: "*Training is one thing, but getting farmers to practice is another*" (Interview with NOAM representative). Understandably, reducing their carbon footprint is not the first priority of most East African smallholder farmers. Through the different projects and the activities of CSOs, farmers have not only been trained, but have been given responsibility – albeit limited – in the management of an organic label to add value to their production. Providing quality products to their communities gave farmers the possibility to feel appreciated for their work, all of which has been major motivations to get involved in PGS and implement organic practices. The democratisation of trainings and the collective incentive to apply agroecological practices has many impacts on the livelihood of smallholder farmers and their communities. The limitation of landscape degradation ensures the long-term preservation of natural resources necessary for agriculture (soil, water…) but also for daily activities (firewood, building timber, game…). Avoiding synthetic pesticides limits the negative effects of harmful chemicals on the health of both producers and consumers[18] (Matovu, 2012).

6.3 Outcomes on the regional sector

6.3.1 Sector coordination

In spite of its limitations, the Joint Management Committee (JMC) was supposed to constitute a platform for NOAMs to share experiences and knowledge (SIDA, 2019). Indeed, common PGS procedures provided a certain form of homogeneity and consistency of *Kilimo Hai*. However, this homogeneity was not reliable enough for some actors. The differences in quality and management of PGS certification between the East African countries notably led to Ugandan and Tanzanian organic commodities being underrated in Kenya markets, and refused to be recognised as equivalent to the Kenyan *Kilimo Hai* (Lwasa, 2015): "*You get Uganda, you say you want a produce of pineapples or bananas, and they tell you we don't have farmers. Two or three months later, they tell you they have 300 farmers. Then you ask yourself, when were the farmers trained? Where they trained to keep records?*" (Interview with NOAM representative, 2022). Issues of limited trust and mutual recognition of certification were increased by logistical issues. In spite of the measures taken by the EAC, regional trade remains limited by the lack of rural infrastructure (roads, irrigation, energy, storage…). These barriers increase the costs and risks of building long value chains, especially across borders (Turley et al., 2022).

6.3.2 Policy outcomes

In parallel to the implementation of PGS and to the revision of the EAOPS, a regional organic policy forum was conducted in 2017. The involvement of government in the organic sector kept on being encouraged and advocated for, showing improving signs of public goodwill. In Uganda, the National Organic Agriculture Policy was released and enacted. In Kenya and Tanzania, government officials have been appointed in ministries of agriculture to ensure a liaison with their respective organic sectors. Nevertheless, the pressure from the green revolution paradigm is maintained. In Kenya, the government has recently legalised GMO seeds. In Tanzania, public legislation requires transformed products to be fortified, which would go against any organic agriculture standard. Such issues can be addressed through a continuous collaboration between the label users and public authorities.

[18] During the OTEA project, some NGOs in Kenya focused on supplying PGS-certified products to the most vulnerable persons such as cancer patients (SIDA, 2019).

The Ugandan organic policy took 15 years to be finalised. This rather slow process can be partly explained by a lack of dedicated resources for advocacy and development activities. In fact, due to the limited resources of governments, most policies depend on foreign funding in order to be developed. But when the policy was passed, it was described as an "eye opener" to the public. Publicity campaigns were performed at different level, raising awareness and curiosity among the population. Even upper classes started opening up land for organic agriculture.

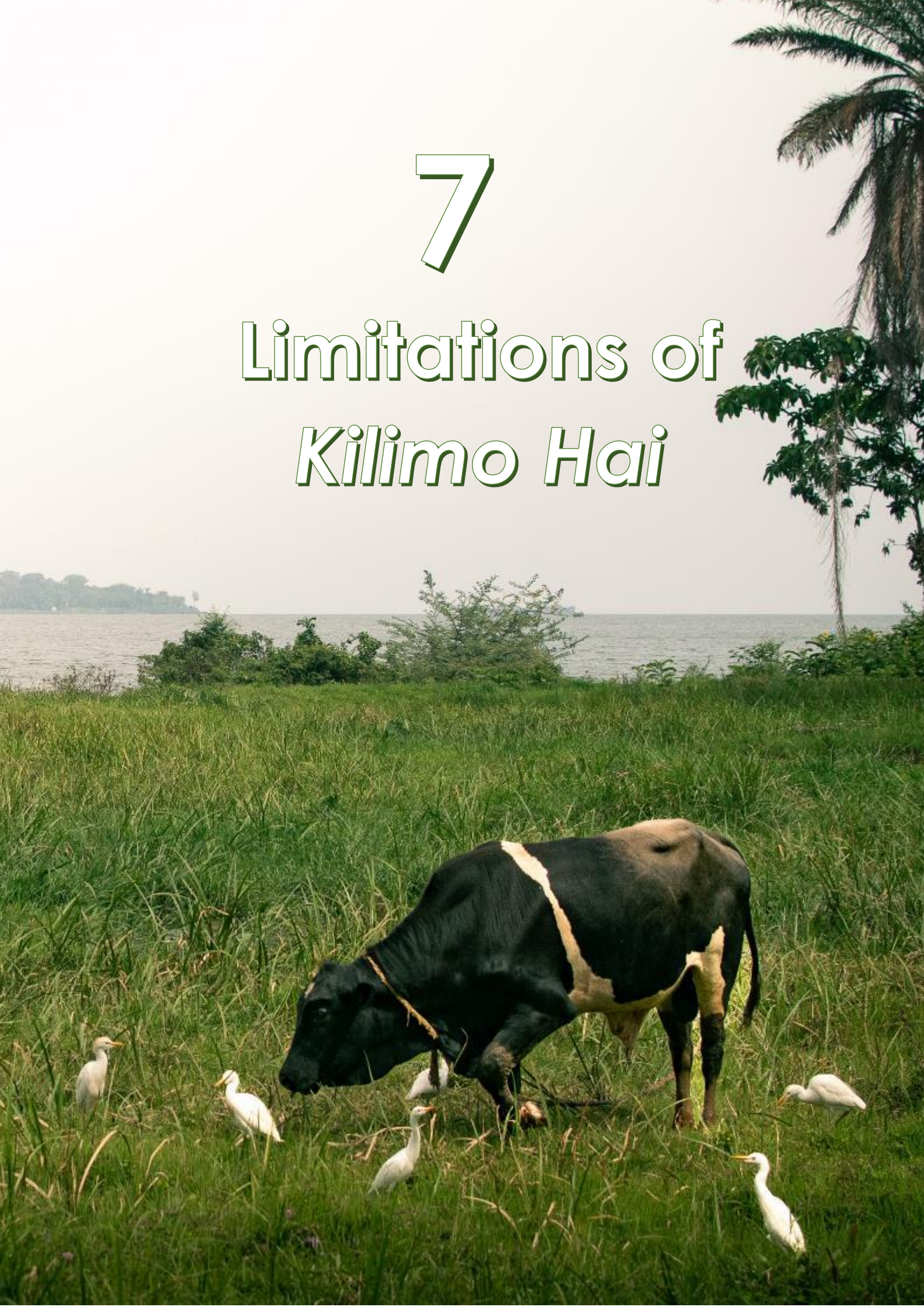
6.3.3 Changes of discourses and priorities

As established, the export market has been a major incentive for the development of the organic sector in its first decades. But since 2010, key actors from the organic agriculture sector started shifting narratives and inciting others to move towards national and regional markets. A new trend incited the community of stakeholders to increasingly consider the opportunities that exist at national and East African level: "*We have been a bit selfish on what we focused on. We are more concerned about what is going out rather than on the 45 million people living in Uganda. […] We need to protect the generations to come*" (Interview with Academic representative, 2022). This trend took effect gradually, and still today many actors are mostly interested in more profitable export markets. Nonetheless, instead of focusing only on improving the income of farmers, many organic CSOs now assimilate the relevance of promoting social responsibility, health and conservation of environment of their own populations through local organic markets: "*We are not for profit making, but we are for something that makes the world a better place*" (Interview with NGO representative, 2022).

However, few actors agree on the way domestic organic markets should be built. The sector was held back for a long time due to the question of pricing. Because of the "premium price" narrative, most actors initially focused on connecting farmers to high-end markets. The experience of PGS helped to demonstrate that, although high-end outlets can be a significant incentive, they cannot carry alone the whole sector. Because of the limited certification costs of PGS, it has been possible to establish fair prices that improved farmers livelihood without caring away regular consumers. The democratic aspect of PGS still faces scepticism of many actors who don't believe farmers can be entrusted with a guarantee system. To some, doubts on integrity are notably caused by recurrent problems of corruptions related with organic certification: "*It is supposed to be based on trust, but for us, you don't even trust your shadow*" (Interview with CB representative, 2022).

7

Limitations of *Kilimo Hai*



7.1 Limitations of *Kilimo Hai* label and PGS

7.1.1 Weak linkage between producers and consumers and inconsistent supply

The limited consumer awareness is a major limitation of the *Kilimo Hai* PGS. A vast majority of East African consumer is not aware of the existence, definition and stakes of organic agriculture. They are thus little inclined to seek and to pay for a quality of which they don't see the value (D'Alessandro, 2018). Awareness campaigns have reduced scopes, as they are performed by CSOs and NOAMs, which have limited resources. In comparison, when Uganda released its organic policy, public awareness campaigns have reached a far wider audience. Yet, even those who received knowledge on the subject still face limited accessibility of organic products. The value of organic products is most recognised by consumers when it is explained by farmers to consumers, but in those cases the *Kilimo Hai* label becomes useless. In longer value chains, where the organic label would actually be relevant as a token of trust, labelled products are found only in a very reduced number of outlets. Establishing sustainable value chains in this context is far from simple, since the few outlets that seek certified organic products need a consistent supply to run their business, which means to be connected with a significant amount of coordinated smallholder farmers. In turn, before such outlets open, organic farmers would work for obtaining the label without any added value. In this context, NGOs and development projects play a key role by funding and maintaining the first value chains, until the whole system is mature enough for local entrepreneurs to take over.

7.1.2 Low profitability of PGS certification

One cannot expect organic farmers to work without expecting a decent payment. As mentioned before, PGS relies mostly on volunteer work by farmers, which implies a high degree of involvement and of motivations, notably financial. However, in spite of rumours about a high and unmet demand for organic products, the local consumer base is too poor to indicate PGS would lead anywhere in terms of profit, for now. The projects were designed in the hope that, by the end of OTEA, the market would be well-established and would be able to sustain by itself the PGS scheme. This objective was not reached and the organic domestic sector is still mostly carried by funds from CSOs. This notably translates into the fact that NOAMs request a fee to provide *Kilimo Hai* certificates, and most PGS groups would not be able to pay for it without the support of local NGOs, which limits even more the self-drive of PGS from the farmers.

In the region, most consumers are not used to look for quality labels and marks when they are buying food. Additionally, the small price margin between organic and conventional markets has led many farmers to keep selling their products as conventional for matters of simplicity, which may complicate the establishment of reliable supply chains. Some have renounced on renewing their license for use of *Kilimo Hai*, since the added value of the certification is still low for many PGS farmers (SIDA, 2019). All these factors have profoundly hampered the development of PGS so far. However, there is a hope that, with the current uprising demand and growth of market, *Kilimo Hai* may be much more successful in the years to come.

7.1.3 Limited farmer empowerment and slow adoption rates

Many reports issued from the projects praise the popularity of PGS among farmers and its potential to greater empowerment of farmers (SIDA, 2014). Implementers of PGS groups agree on the importance of farmer empowerment, which currently manifests as the possibility to set up internal rules for group management, and sometimes to participate in collective discussions on price-setting. However, as developed above, PGS in East Africa is a foreign concept introduced by IOs. In each country, it was then passed from a central authority (the NOAM) to partner NGOs which mobilised and trained their own groups. The way PGS have been implemented in the region and the influence of TPC

representations gave birth to a top down management of the PGS, which in reality provides limited rights on label management to producers. Though this verticality may be explained by the lack of basic education of many farmers (D'Alessandro, 2018), there is room for improvement of East African farmers empowerment through PGS. For example, several studies showed that few PGS-certified farmers actually know about the EAOPS (Matovu, 2012; Ninnin, 2021). They may know the core concepts of organic agriculture, and the simplified requirements they are expected to follow, but the regional organic standard in itself remains unknown, which means some trainers don't deem necessary to give farmers a broader understanding of a label nobody they rarely asked for. Standards, handbooks and PGS-related documentation are hard to find, especially in the languages of farmers, leaving farmers dependent on experts to explain procedures and requirements.

To date, a vast amount of East African farmers still produces without synthetic inputs nor organic certification. These *de facto* organic farmers already comply with EAOPS and could easily be involved in PGS scheme, and they are estimated to represent the biggest share of the regional food market. To the newcomers, PGS would provide all the social benefits cited above and new commercial outlets for a minimal fee. Reciprocally, the *Kilimo Hai* label needs to include a large number of farmers (and other stakeholders) in order to reach the self-sustainability threshold and start having a real impact on national and regional markets. However, PGS implementers have often been confronted to issues with the slow adoption of the system. Since its core concepts are brought from outside, farmers rarely perceive the point of certification and peer inspection. Some see PGS as another bureaucratic process for useless marketing. That process seems all the more useless so as consumers themselves do not value organic labels. In spite of awareness activities, the system encounters difficulties to pick up for lack of market incentive, and often still requires local NGOs to drive collective activities. Because they are not familiarised with the potential social benefits of PGS and without the economic incentives of reliable market outlets or premium prices, many have been understandably reluctant to invest time and energy in collective PGS management and in application of new production practices. Moreover, many farmers are not comfortable with the principle of peer reviewing, as it looks like internal police that could create tensions in the community, more than like an opportunity for collective learning. The slow adoption of PGS and certified organic farming is an issue both for awareness on the *Kilimo Hai* label, but also for already certified farmers. Many farmers complain that their neighbours do not take organic farming seriously, and therefore do not take precautions when applying chemicals in their own fields. Since smallholders plots are usually fragmented and in close contact with other farms, the risk of involuntary contamination is high (Ahlf, 2022).

7.1.4 Overlapping and public extension

Being mostly implemented and carried on the field by NGOs, PGS development faces the issue of competition among farmer "supporters". Indeed, in some areas, farmers groups are solicited by a diversity of NGOs and traders who provide different forms of services and trades. These services sometimes align with the policy of the groups and with their production standards, and thereby only improve farmers' working conditions. However, it may happen that other NGOs or traders offer synthetic inputs to PGS farmers without communicating on the implications their use will have on organic compliance. Another issue is when several organizations work in the same village, they may create different – but overlapping – groups, leading to confusion among members, authorities and consumers. So far, public authorities do not protect PGS groups from such interferences.

To some, the absence of enabling national policies on organic agriculture is still the major challenge hindering African governments to develop sustainable, resilient and productive farming systems (EOA, 2015). Indeed, without a legal framework or guidelines for organic farming, public actions are difficult to implement. For example, apart from Uganda, training programs in organic

agriculture remained a minority. Most public extension agents are trained in industrial farming, and advise producers in consequence. Thereby, they contradict organic trainings provided by NGO agents, and cause non-compliances with organic standards.

7.2 Shortcomings in *Kilimo Hai* governance

7.2.1 Centralised governance

The *Kilimo Hai* PGS scheme has so far had a pyramidal governance, with NOAMs at the top. This organisation had indubitable advantages, such as quick and cost-saving decision-making, homogeneity of procedures and easy identification of PGS representatives. However, NOAMs do not have the sufficient internal resources to provide the consistency of action a PGS needs. Donor dependency leads most NGOs to plan their action on a short-term basis to answer the expectations of project funders, hence the initial propension of the private-led organic sector to look for quick profit in international markets. PGS and domestic market development cannot be sustained by such quick-end measures and require a long-term strategy (D'Alessandro, 2018). In time, some PGS implementors started to express their disappointment with the leadership of the *Kilimo Hai* label. To some, it felt like PGS was considered as an auxiliary activity which received limited attention in the absence of external funds. But like any form of collective activity, PGS needs to be driven: "*It's like a wheelbarrow, when you stop pushing it, it stops*" (Interview with PGS representative, 2022). This driving force could be undertaken by anyone: committed community members, consumer associations, buyers, government bodies, NGOs… It would require active dedication and consistency, which have a cost that few actors have been willing to pay for now, although many believe it would not require much more to jumpstart PGS. The example of NOGAMU is another proof of the vulnerability of a pyramidal system. The withdrawal of the NOAM caused many Ugandan PGS groups to collapse and the label to almost disappear (if not for UgoCert). Although Uganda had been leading the regional organic sector for decades, the crisis at NOGAMU restrained its development. The introduction of more horizontality in the governance – while respecting the roles and responsibilities of each actor – could help the organic sector to become more resilient to internal or external perturbations.

In addition, centralised decision-making powers of the *Kilimo Hai* PGS induces a conflict of interest that soon posed a challenge to the perceived credibility of the label: the same organisation – the NOAM – is in charge of both providing certificates and of promoting the label in the region (Taylor, 2006). Moreover, since NOAMs rely on a limited number of employees for doing both training and inspection, there is a high risk of favouritism or of bias due to intra-NOAM relationships during accreditation of groups. In other words, "*visiting those groups is like checking your own work*" (Interview with NGO representative, 2022).

7.2.2 Donor dependency

Most organic NGOs in East Africa rely mainly on foreign funds, few organisations have working capital to ensure the upkeep of their activities when funding stops. In fact, all NOAMs encountered difficulties in maintaining their activities, paying salaries, or even organising their general meetings because of resources limitations: "*Certification bodies have been relying on NOAMs, who have been relying on programs. NOAMs depend on programs and when programs close, they become incompetent*" (Interview with NGO representative, 2022). A NOAM that can be autonomous to finance its own daily activities is more likely to be stable in time. When payment of salaries depends on successive short-term foreign development projects, the organization is more likely to be fragile, or to sap its own energy in seeking funds (Bendjebbar and Fouilleux, 2022). Additionally, donor dependency pushes beneficiaries to implement activities to please new funding partners at the risk of losing their own vision, which makes it hard for CSOs to implement consistent actions and for projects to have

long-lasting outcomes: "*Once projects phase out, then it has gone with the wind*" (Interview with PGS representative, 2022). Likewise, most PGS groups rely on local NGOs to cover the costs of training and certification, which leads to limited self-sustainability and to a lack of awareness of the relevance of certification by producers. Donor dependency also affects public authorities, most public programs and policies are donor-funded. This complicates advocacy and policy development activities, since the actions of the government depend both on the political regime – which defines the priorities and interests – and on development programs – which provide the necessary resources to implement actions or enact new policies.

Consequently, irregular funding and growth crisis led donor-dependent NOAMs to leave their role of umbrella organisations and to start competing with their own members for funds in order to ensure the survival of their secretariats. In reaction, the role played by NOAMs began to be questioned, as well as the interests of different stakeholders in the sector: "I*t has become more of an organic tradition that you should have a national movement that manages the organic sector. But at whose benefit?*" (Interview with NGO representative, 2022); "*NOAMs are suffocating their members*" (Interview with PGS representative, 2022); even though their utility as central coordinators and representatives remains undoubtable: "*If the sector wants to be self-sufficient, it can only be done through NOAMs. So, unless we have strong NOAMs, we shall take a very long time and depend on support from outside*" (Interview with NGO representative, 2022). The competition between NOAMs and other NGOs leads to reduced cooperation among stakeholders, and thus limits the opportunities for organic producers to have access to training, certification services and market outlets (Taylor, 2006). In consequence, based on the lessons of the last decades, some NOAM actors wish to restrain their role to coordination, and leave their members implementing project activities.

The combined effects of centralised governance of the label and NOAMs' limited resilience significantly hampered the development of the *Kilimo Hai* label as well, as illustrated by the period 2007-2010 during which the label had no allocated resources to be properly established; or by the JMC which could not be maintained by organisations which were themselves merely "*surviving*" (Interview with NOAM representative, 2022). The collapse of Ugandan PGS after an internal crisis stroke NOGAMU highlighted the vulnerability of the *Kilimo Hai* label governance, and, correlatively, of how unprepared most producer groups are for autonomous functioning.

7.2.3 Standards ownership

There is a conspicuous issue on information flows among the actors of the East African organic sector. Questions about governance, functioning of the sector or about events that shaped the current situation often find contradictory answers in interviews. Reports and studies find themselves with missing or erroneous data. For instance, the study from SIDA (2019) mentions TBS does not endorse EAOPS, whereas Turley et al. (2022) indicate that TBS has only recently started recognising the EAOPS, that they participate in inspections, and that NBSs are the only public bodies recognising the EAOPS in East Africa. All those assertions contradict our results, which is probably due to the difficulty of finding reliable information and the numerous misunderstandings on who does what in the organic sector. These confusions are likely to impede its recognition and development, and we identified some in relation to *Kilimo Hai* governance.

In Uganda, the complex relation between UNBS, NOGAMU and UgoCert led to misunderstandings about the use and the status of the various organic standards. While today, some actors are convinced that the Ugandan Organic Standard is still active and recognised by public authorities, the UOS is actually absent from UNBS catalogue, whose representative confirmed that only the EAOPS was kept after its enactment in 2007, and no other organic standard has been shelved in the UNBS since then.

In Kenya, the EAOPS does not appear on KEBS catalogue. The only standard related to organic agriculture is a national one, published in 2014 as "Agriculture-Sustainability and eco-labelling-Requirements" (KEBS, 2023). KEBS representatives kindly declined to answer questions[19], though it seems Kenyan public authorities have diverted from the organic sector and may not play their role of custodians of the EAOPS anymore, especially with the recent authorisation of genetically modified seeds.

In Tanzania, most stakeholders are aware that the EAOPS is shelved by TBS (on behalf of the EAC), that TOAM is custodian of the mark and that it is the only organic standard owned and recognised by public authorities. However, few stakeholders, even ministry representatives, have access to a copy of the standard. There was a clear lack of communication during EAOPS revision in 2019, since most stakeholders are not aware the standard has been revised, and keep on using the 2007 version. Moreover, since most public standards are enforced and certified by TBS, some processed and value-added products are required to be certified twice: once by TOAM (against the EAOPS) and once by TBS (against public food hygiene and nutrition standards). The fact that these standards overlap not being acknowledged by TBS may indicate a lack of faith from public authorities towards PGS certification and EAOPS requirements.

7.2.4 PGS certification scope and procedures

The shortcomings in intra-sectorial communication not only impacts the management of the EAOPS, but also its certification schemes. Because the ownership of the label is shared between NBSs and NOAMs; because PGS emerged after the *Kilimo Hai* label was created and forgotten; and because the role of performing external group inspections was passed from CBs to NOAMs, it has become unclear for many actors who should certify who, against which standard, and following which procedures. The absence of accessible and reliable information led some interviewed ministry representatives to believe they are the ones providing organic certification. Nowadays in Uganda, some believe only UgoCert is the righteous PGS overseer, and many actors do not differentiate PGS and ICS. Even some PGS overseers seem confused about its functioning, and interpretations vary greatly on the scope of certification, whether the *Kilimo Hai* label should be used collectively or individually, for single crops or for the whole farm.

These confusions may lead to higher risks of certification flaws due to absence of clear and established procedures. For instance, a former freelance CB auditor who now lives in Europe, but still manages to issue organic certificates with his signature to local farmers. Some grey areas in certification governance may also weight on the economic viability of the system. For instance, in Kenya and Tanzania, most PGS groups are assessed annually by their respective NOAMs. This regularity puts a high pressure on both groups and NOAMs, since it requires time, procedures, costs of transports, inspector salaries, etc. NOAMs alone cannot sustain these costs, and thus require a fee to most groups. This also puts a high pressure on NOAM employees, since there are thousands of farmers to inspect each year by a small team. However, the annual external inspections were not initially required. It was indicated in the JMC guidelines for PGS approval that the initial approval of a PGS group is valid 1.5 years, subsequent are valid for 3 years (JMC, 2013). PGS approval procedures (and associated costs) could thus be divided by 3.

In some areas, PGS has been well established. Farmers have a sustained production and are pleased with their commercialisation, which opens the path for exploring new possibilities. They

[19] In an interview by Turley et al. (2022), a KEBS representative expressed that the bureau now supports the EcoMark Africa, which was established by the African Regional Standard Organisation for local and international markets, because to their liking, the EAOPS has not been adequately maintained since its establishment in 2007.

started to diversify their production and transform their products in order to gain added value. However, they often face difficulties with standard compliance, as the EAOPS does not provide guidelines for many forms of production practiced in the region. For instance, dairy production is not covered, neither are pastoralist systems, in spite of the important place of pastoralism in the East African landscape and the necessity of integrating livestock in organic production systems. The lack of guidelines contributed to the difficulties of establishing processing units for organic agro-inputs such as seeds, fertilisers and pesticides, and this problem could not be resolved during the revision of the EAOPS because of the reduced number of stakeholders involved in the process.

7.2.5 Dissemination of information

Both reports and interviews have put an emphasis on the lack of consistent up-to-date information on the organic sector in East Africa. The sector is fragmented, and few actors can tell how many producers, exporters, input dealers, certification companies are active in their countries and doing what (Ahlf, 2022; Bonabana et al., 2022), which limits the capacity of actors to design long-term strategies and to implement coordinated actions for the growth of the sector. Knowledge is concentrated in a handful of key actors whose choices and decisions are mostly informal. Once these persons leave their positions, their knowledge is not passed down. New generations of organic actors have arrived on stage, but because knowledge transmission is limited, they may not be aware of the works done by their predecessors. Even “trainers of trainers”, responsible for disseminating knowledge among supporting organisations, lack information. For example, the process of approval and the basic data about PGS groups were to be made accessible to interested parties – including the general public – early in the OSEA II project (JMC, 2013). Nonetheless, in every country, very few actors actually know how decisions for PGS group validation are made, and by whom. Some groups were created in 2012 but never received their *Kilimo Hai* certificates, but have never received an explanation of why, thereby revealing a lack of transparency in decision-making mechanisms.

The difficulty to find reliable data hampers the credibility of the whole sector, especially with the increasing accessibility of new technologies. If, with a few clicks, one could find up-to-date information about organic farmers in Kenya, about certification procedures in Tanzania, or about organic standards in Uganda, it would make the whole food system clear, understandable, and therefore more trustworthy. It would facilitate both consumer awareness and policy advocacy. But information cannot be found. Even data provided to IFOAM Statistics or to foreign experts are not consistent, especially regarding PGS. The present study, in spite of the number of reports analysed and people interviewed, may comprise erroneous information. Because of the lack of communication and coordination, public advocacy for organic agriculture has lacked efficiency for decades. When stakeholders started acting as a network, however, they became able to answer the uncertainties of public authorities. If the organic sector cannot to present documentation on its activities, their strategies and their challenges, external actors willing to support them – including public authorities – might struggle to find their place. Concentration of knowledge is a huge liability in the system, as it limits cooperation and it hides the work of many.

8

Perspectives of evolution

8.1 Cooperation for a natural growth of organic value chains

It has been seen along this report that the lack of organic outlets is one of the major shortcomings of the current regional market. Most projects focused on setting up high-end markets, assuming the supply would be there as soon as organic markets open. However, most farmers were not in a position to offer consistent, diversified and stable supply to high-end outlets. Some cannot even afford the transport costs from their farms to urban markets. As a result, most organic outlets encounter difficulties filling their shelves. Many interviewees now believe that there is a need to change the mindset according to which organic products should be dedicated to upper classes. Most actors agree on the necessity to let the sector grow gradually. Supporting local farmer markets, allowing producers to sell directly to their communities, seems to be the best way to begin positive dynamics. The low maintenance and entry costs to local markets could allow businesses to develop naturally and to be quickly self-sustainable, and gradually improve post-harvest processing, handling and packaging. Once local markets are established and saturated, they would provide a solid basis for farmers to seek new value chains.

Once local markets will be stable, there will be a need to address several bottlenecks to national and regional value chains. This requires not only to establish proper outlets where the demand is present, but also to coordinate all stakeholders involved between the farm and the plate, such as traders of organic agro-inputs. Establishing national and regional markets calls for strengthening the networks of organic farmer groups, NGOs, traders and consumer associations. In a first time, since most PGS groups are supported by a local NGO, and most NGOs have their own local outlet, it may be interesting for everybody to craft commercial partnerships between these NGOs. This would enhance the diversity of proposed commodities and create new commercial opportunities for farmers. To that extent, NOAMs could play the role of “hub”, collecting all works and achievements of their members and making them visible, and connecting funding partners to their members. In addition, enhanced coordination at all scales would resolve issues of insufficient and inconsistent volumes in organic production (Nakalanda and Kugonza, 2016). To adapt the costs of certification to the reality of farmers a “pay as you earn” system was considered, where groups would pay according to the volumes they sold. This system, however, could only be applicable in a context where all sales (or harvests) are registered and shared with no risk of alteration. Once these national PGS value chains are secured, the network could be able to grow further. Many opportunities exist for establishing domestic and regional organic value chains. For example, in Kenya, the demand for Tanzanian organic honey is high. However, there is currently no organised system to gather, package and export certified organic honey, for now.

8.2 Inclusive PGS councils and harmonised certification

In order to improve the functioning of PGS certification and to address the shortcomings of its governance (conflicts of interests, lack of resilience, lack of embeddedness…), the idea of a national PGS council gradually spread as a way to give more credibility to the certification and to inspire trust to consumers. Since its reorganisation, NOGAMU has been working on the establishment of a national council that would provide guidance to local groups, review and approve the delivery of PGS certificates. It was first constituted of experts from both public and private sectors such as NOGAMU, UgoCert, NGOs, ministry of agriculture, UNBS, along with a representative from the academia and a single representative of farmers (Gourion, 2022b), and is starting to be considered in Tanzania and Kenya as well. Including public authorities is, to some, the best way to improve the credibility of PGS certification in the eyes of consumers, as compared to a system where only farmers are making decisions. Some stakeholders believe that this PGS council could be an opportunity to escape TPC and hierarchical mindsets. Without denying the interest of having experts and public representatives sitting at the PGS council, they advocate for a farmer-led decision-making process. It would allow farmers to

entirely appropriate the PGS and to reduce the dependency of the label to other institutions. This could be achieved with a majority of PGS farmers representatives sitting at the council, for example. Whether they are producers or institutional representatives, the flip side of gathering a large number of stakeholders into collective governance is the associated costs, that may eventually fall upon the producers or consumers. Another issue with open councils is how to include actors who are not aware or sensible to the stakes of organic agriculture, be it consumers or experts (D'Alessandro, 2018). One uncertainty that remains so far is to what extent should the PGS council be inclusive, and who should bear its costs. With the generalisation of new communication technologies, organising virtual meetings becomes much more affordable. This offers perspectives for national PGS councils, but also for the JMC. Taking each group accreditation to the JMC may not be realistic, especially if PGS councils start being implemented. Nonetheless, maintaining a dialogue about PGS certification between the different countries may help to harmonize the system and to prevent new mutual recognition issues.

8.3 Accessibility of the label over reliability of guarantee

The market landscape is changing in every country. Along with improved livelihoods, global trends are spreading through social medias towards health issues and climate change, raising awareness on food safety and organic agriculture. When those new consumers will start looking for organic food around them, the *Kilimo Hai* label may be there to guide them (D'Alessandro, 2018; Turley et al., 2022). Naturally, PGS in itself cannot address all awareness issues: "*PGS would work where there is system for marketing. PGS is not like a miracle that would make things move where there is no system. It is just a guarantee system to somebody who is approaching the market*" (Interview with NOAM representative, 2022). For now, awareness is limited due to lack of advertisement. Most producers and consumers are still not aware of what is needed to comply to organic requirements, or why certification is useful. Nevertheless, many stakeholders are convinced that once they will obtain funds to create awareness on the label, the demand will increase all the more. This awareness can be created through a variety of media: broadcast media (radio, newspapers, TV…), forums and exhibitions, organic fairs, educational programs, booklets… (D'Alessandro, 2018; Turley et al., 2022).

All actors agree with the importance of having a reliable and credible certification scheme, though some don't see it as a priority. Indeed, given the low awareness of consumers and the limited interest of cheating certification, it seems that making organic products visible and accessible to the public is more relevant than crafting an irrefutable guarantee scheme: "*I think people would consume organic, if they could find it. I think the greatest challenge at the moment is access to organic rather than confidence. Maybe if organic products were more easily found, probably then, confidence [issues] would arise. But at the moment, access appears to me to be the main challenge*" (Interview with Academic representative, 2022). For now, local organic sales mainly rely on mutual trust, and the *Kilimo Hai* label only occupies a minor role in longer value chains. By focusing on reliability of the certification through several layers of control and of decision-making, rather than on giving the market an opportunity to thrive, it seems that the current PGS scheme is counterproductively ahead of its market. A label hardly inspires trust if it is not known, and it is hardly known if new producers can only become certified when an NGO can pay for their certification.

On the other hand, few actors question the relevance of external inspections. The majority considers that the assurance of quality should not be compromised. One idea that emerged to adapt costs without sacrificing the quality of the guarantee is to have several levels of PGS certification. For instance, a "silver PGS group" would be a producer group running its own internal inspections, while a "golden PGS group" would be inspected and accredited by a higher body (NOAM or PGS council) in addition to its internal control.

8.4 Facilitating trust by PGS assessors and new technologies

Many actors have been developing new ways to improve credibility of PGS control. They believe that once guaranteed traceability and quality will be visible to consumers, an avenue for a vibrant domestic organic market will be open. In Kenya, KOAN is trying to adapt the system by training external PGS assessors all over the country. Those assessors would be registered and approved by KOAN, and they would take up the task of controlling PGS groups. Doing so, KOAN hopes to diminish PGS certification costs without compromising the quality of the guarantee.

New technologies are another way to facilitate transparency of information and traceability of products. Some initiatives are already beginning to use applications to connect consumers and producers, or to upload and make public all information related to farmers inspections. Others are developing tools that would allow easy and cheap residue tests on the markets, such as the device called *Kevera* in Uganda.

8.5 PGS and ICS

Internal Control Systems (ICS) are commonly used to provide access to international markets to smallholder farmers. Indeed, since the TPC companies only inspects a randomly selected sample of farms within the group, and since the organic certificate is not granted to individuals, but to the group as a whole, ICS allows to reduce costs as compared with individual TPC. However, in many cases, the costs of establishing a group, training farmers, going through procedures and being certified remains prohibitive. It is very difficult for local groups to initiate an organic certification process with ICS without support. In Tanzania, SAT used the experience acquired in over a decade of PGS to foster the establishment of an ICS for exporting organic spices. Though the associated cooperative was composed of both elder PGS groups and newly formed farmer groups, the difference was clear. Farmers who had previous experience with PGS were already familiarised with organic practices, standard requirements, inspection protocols. Therefore, in spite of the increased bureaucracy associated with third party certification, it was much easier for PGS farmers to adapt to ICS requirements. ICS and PGS certification schemes in East Africa offer complementary advantages, and the two systems can be used in combination. PGS allows ICS-certified farmers to sell on local organic markets what they cannot export (ACSA, 2022; D'Alessandro, 2018), and while ICS generates increased income on each shipment – which can be scattered –, local commercialisation of PGS products offer a more stable income, thereby contributing to the resilience of household livelihood. However, in order to avoid further confusion, it is essential to make a clear distinction between ICS and PGS. PGS are not primarily dedicated to export trade, and are supposed to provide most decision-powers to the farmers.

8.6 Involvement of government and zoning certification

Today, government representatives from all levels are aware of the potential of organic agriculture and challenges faced by the sector, notably in terms of market access and costs of certification. Legislation is advancing and key actors are willing to support solutions that would allow the sector to thrive. But to date, the enforcement of public statements is limited, and exact actions to be implemented are yet to be identified, which calls for further collaboration and deeper exchanges between organic sector representatives and public authorities. Public action is notably limited by the current lack of enforceable legal framework, which limits the scope of current public.

Some actors advocate for the involvement of government in PGS certification – for example through contribution of public authorities in overseeing the system and to control fraudulent uses of the *Kilimo Hai* label – as a way to improve public support and recognition of organic agriculture. Improved relations with public authorities may open the path to new outlets for organic products, such

as specialised markets, public schools or hospitals, and government could improve the sustainably of the system by subsidising PGS certification, whose positive externalities on health, environment and communities are not rewarded by the market. It would also open a gate for research and subsidies on agroecological practices, organic inputs, indigenous seed varieties and local animal breeds.

Training curriculum specialised in organic agriculture are essential to have skilled experts able to spread knowledge on agroecological practices and certification schemes. Giving organic agriculture legitimacy in mainstream training programs also limits the issues of conflicting trainings provided by organic NGO agents and public extension officers. To this extent, organic agriculture has been streamlined within Ugandan extension services after the development of the National Strategy for Agroecology, and Tanzanian public universities now teach both organic and industrial agriculture.

A very common issue for organic smallholder farmers who produce on fragmented plots is the proximity with other plots where synthetic inputs are sprayed, thereby contaminating their organic products. Some propose to address this issue by combining PGS with a zoning aspect by making all producers of a given area organic. Mapping organic producers would also allow to avoid issues such as the DDT affair in Uganda, when 15,000 farmers lost their certification due to a public malaria-control campaign (UNEP et al., 2010). However, since not all farmers are eager to apply organic practices, this option can only be viable if implemented directly by government.

In spite of the promising public actions and statements that have emerged lately, policy work is slowed down by institutional factors such as back and forth procedures and dependency on external funding, but also by key actors "*dragging their feet*" (Interview with IO representative, 2022). To address these challenges, public involvement in organic agriculture needs to be maintained and secured by a continuous effort of advocacy and lobbying by the civil society, and by providing tangible data on the advantages of organic agriculture compared with industrial. One of the main challenges of the sector to that extent is the limited resources the organic sector can dedicate to advocacy in comparison to agroindustrial companies.

Conclusion

At the enactment of the *Kilimo Hai* label and its associated East African Organic Product Standard in 2007, the outcomes were many, though not the ones expected. Initially, EU equivalency program was the main incentive for public and private sector actors to participate in the creation of the label. Indeed, having a regional standard recognised as equivalent to the European would have cleared the way for improved access to lucrative international markets, both in terms of adapted requirements and reduced certification costs. Factually, the label most prominent outcomes have been in harmonizing and facilitating cooperation in the organic sector, as it provided a common reference frame for organic agriculture and it provided a platform for different actors to interact. To that extent, the involvement of public authorities in the creation of the *Kilimo Hai* label was a key achievement, which sensitised many industrial agriculture-oriented public actors to the potential benefits of organic agriculture, with subsequent facilitating effect on policy advocacy.

With the failure of EU equivalency recognition, stakeholders decided to fall back on domestic markets to promote the label. The OSEA-CBTF project did not comprise enough awareness campaigns to advertise for the label. As a result, demand for both certified products and certification services were very low, which was reinforced by inadequate certification schemes. The OSEA II project (2010-2013) intended to answer these issues by introducing Participatory Guarantee Systems (PGS), in the hopes it would enable the domestic and regional organic markets to thrive. However, several factors had an influence in the shaping the *Kilimo Hai* PGS governance. First, the concept was introduced in a vertical way, and few stakeholders were involved in the constitution of the scheme, which generated a risk of mismatch with the needs of the community. Secondly, the ownership of the label provided most decision-making authority to a single national body in each country, therefore introducing a centralisation of powers in the PGS scheme. Third, most actors were deeply influenced by third-party certification representations, and may not have perceived to what extent PGS differ from it, resulting in a hybrid governance midway between mainstream PGS and third-party ICS. Fourth, the implementation and certification activities of the *Kilimo Hai* PGS have costs which, currently, are mostly covered by supporting NGOs or NOAMs, which themselves rely on external funds, thereby transmitting a donor dependency to the whole system.

Nevertheless, the *Kilimo Hai* label and PGS have had numerous positive impacts on East African food systems, among which we identified: new market outlets, improved consumer awareness, improved farmer livelihood, enhanced social link and transmission of knowledge, improved and secured preservation of health and ecosystems, enhanced sector coordination and public recognition, improved perception of the importance of food sovereignty. These promising outcomes may lead, according to a majority of interviewed stakeholders, to vibrant organic sectors and domestic markets. In order to up-scale *Kilimo Hai* to reach this effective threshold, however, some limitations are yet to be addressed in the use of the label (low consumer awareness, lack of incentives for involvement of producers, adverse trainings…) and in its governance (centralised powers and donor dependency, confusions in standard ownership, lack of transparency in PGS certification procedures, limited circulation of information…).

Many stakeholders are working on addressing the identified issues to remove the barriers to the up-scaling of domestic organic markets in East Africa. Among these, many stakeholders identified the fact that high-end outlets could not be sustainable if there was no gradual growth of the sector. NOAMs could play a coordination role within their respective networks, to facilitate cooperation and coordination of actors for a gradual strengthening of organic value chains. Secondly, PGS councils holding a significant proportion of farmer representatives, along with public and civil society representatives, could contribute in resolving both the issues of lack of horizontality, and of institutional embeddedness of the *Kilimo Hai* label. Third, although simplification of PGS procedures

may risk to deteriorate the quality of the guarantee, it could also allow the *Kilimo Hai* label to become more visible to consumers, more accessible, and thus to accelerate the birth of a thriving market. Fittingly, a multi-level label could answer the need for a more accessible organic label, without sacrificing the guarantee provided by NOAM-approved PGS groups. Finally, the introduction of PGS assessors, new technologies, association with ICS or involvement of public authorities all hold potential for addressing specific needs of *Kilimo Hai* users, and to develop the East African organic market.

References

ACB, 2016. Changing Seed and Plant Variety Protection Laws in Tanzania.

ACSA, 2022. Can certification strengthen smallholder farmers access to remunerable markets?

Adebiyi, J., 2014. Organic agriculture development strategies in Tunisia and Uganda: Lessons for African organic. Iowa State University.

AFSA, 2017. A study of policies, frameworks and mechanisms related to agroecology and sustainable food systems in africa. Kampala.

Ahlf, A.-L., 2022. PGS4CHANGE. KOAN.

Bendjebbar, P., 2018. Vers un modèle bio africain?: trajectoires comparées d'institutionnalisation de l'agriculture biologique au Bénin et en Ouganda 425.

Bendjebbar, P., Fouilleux, E., 2022. Exploring national trajectories of organic agriculture in Africa. Comparing Benin and Uganda. J. Rural Stud. 89, 110–121. https://doi.org/10.1016/j.jrurstud.2021.11.012

Bonabana, J., Kabi, F., Walusimbi, F., Ogenrwoth, B., Omony, P., 2022. Organic agriculture statistics in Uganda: A comprehensive outlook into recent developments and trends in the sector. NOGAMU.

Bowen, D., 2013. Review of key systemic issues and findings resulting from activities of the international task force on harmonization and equivalence in organic agriculture (ITF) and the Global Organic Market Access (GOMA) project.

Brisbois, M.C., Morris, M., de Loë, R., 2019. Augmenting the IAD framework to reveal power in collaborative governance – An illustrative application to resource industry dominated processes. World Dev. 120, 159–168. https://doi.org/10.1016/j.worlddev.2018.02.017

Carlsson, L., Berkes, F., 2005. Co-management: concepts and methodological implications. J. Environ. Manage. 75, 65–76. https://doi.org/10.1016/j.jenvman.2004.11.008

Clement, F., 2010. Analysing decentralised natural resource governance: proposition for a "politicised" institutional analysis and development framework. Policy Sci. 43, 129–156. https://doi.org/10.1007/s11077-009-9100-8

Clement, F., Amezaga, J.M., 2009. Afforestation and forestry land allocation in northern Vietnam: Analysing the gap between policy intentions and outcomes. Land Use Policy 26, 458–470. https://doi.org/10.1016/j.landusepol.2008.06.003

Cole, D., 2017. Laws, norms, and the Institutional Analysis and Development framework. J. Institutional Econ. 13, 1–19. https://doi.org/10.1017/S1744137417000030

Cole, D.H., Epstein, G., McGinnis, M.D., 2019. The Utility of Combining the IAD and SES Frameworks. Int. J. Commons 13, 244. https://doi.org/10.18352/ijc.864

Cooksey, B., 2011. Marketing Reform? The Rise and Fall of Agricultural Liberalisation in Tanzania. Dev. Policy Rev. 29, s57–s81. https://doi.org/10.1111/j.1467-7679.2011.00520.x

D'Alessandro, C., 2018. Participatory Guarantee Systems for the development of small-scale organic agriculture: The case of Ogiek Honey in Kenya.

de Lima, F.A., Neutzling, D.M., Gomes, M., 2021. Do organic standards have a real taste of sustainability? – A critical essay. J. Rural Stud. 81, 89–98. https://doi.org/10.1016/j.jrurstud.2020.08.035

Desmarais, A., 2007. La Vía Campesina: Globalization and the Power of Peasants.

EAC, 2011. EAC Food Security Action Plan (2011-2015).

EAC, 2009. Protocol on the establishment of the East African Community Common Market. Arusha, Tanzania.

EAC, 2007. East African Organic Product Standards (No. First edition). Arusha, Tanzania.

Edwards-Jones, G., 2006. Modelling farmer decision-making: concepts, progress and challenges. Anim. Sci. 82, 783–790. https://doi.org/10.1017/ASC2006112

EPOPA, 2008. Organic exports: a way to a better life? Grolink ; Agro Eco, Höje, Bennekom.

Ericksen, P.J., 2008. Conceptualizing food systems for global environmental change research. Glob. Environ. Change 18, 234–245. https://doi.org/10.1016/j.gloenvcha.2007.09.002

FAO, 2015. Climate change and food security: risks and responses.

Goldberger, J.R., 2008. Non-governmental organizations, strategic bridge building, and the "scientization" of organic agriculture in Kenya. Agric. Hum. Values 25, 271–289. https://doi.org/10.1007/s10460-007-9098-5

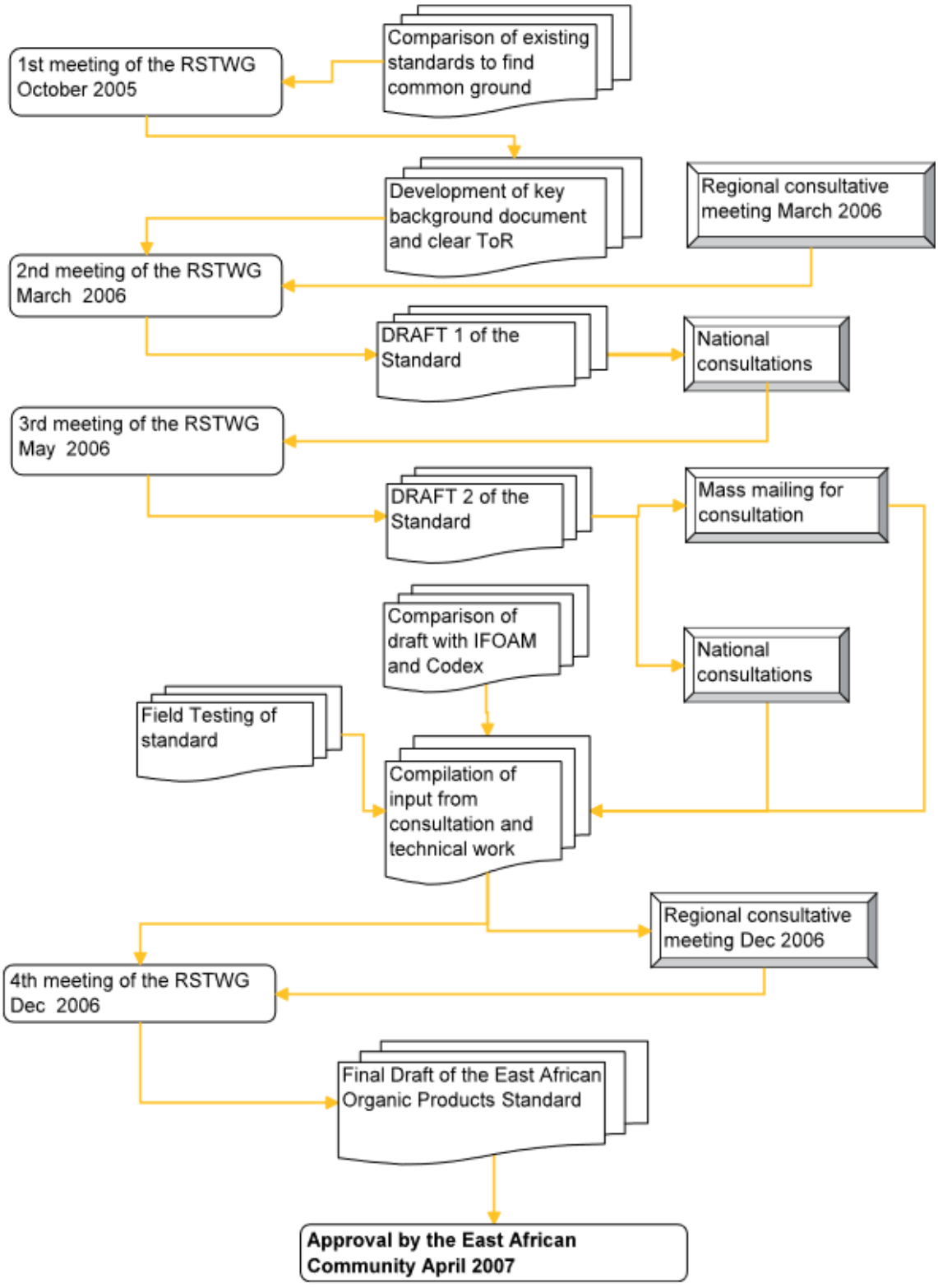
Gourion, M., 2022a. Report on the institutional framework and public policies in relation with agriculture in Uganda.

Gourion, M., 2022b. Report on the institutional framework and public policies in relation with agriculture in Uganda. IIABA.

Hauser, M., Lindtner, M., 2017. Organic agriculture in post-war Uganda: emergence of pioneer-led niches between 1986 and 1993. Renew. Agric. Food Syst. 32, 169–178. https://doi.org/10.1017/S1742170516000132
Hine, R., Pretty, J., 2008. Organic agriculture and food security in Africa. CBTF.
Home, R., Bouagnimbeck, H., Ugas, R., Arbenz, M., Stolze, M., 2017. Participatory guarantee systems: organic certification to empower farmers and strengthen communities. Agroecol. Sustain. Food Syst. 41, 526–545. https://doi.org/10.1080/21683565.2017.1279702
Iannucci, G., Sacchi, G., 2021. The evolution of organic market between third-party certification and participatory guarantee systems. Bio-Based Appl. Econ. 10, 239–251. https://doi.org/10.36253/bae-10470
IFOAM, 2008. IFOAM General Assembly.
IFOAM, 2007. Development of a Regional Organic Agriculture Standard in East Africa 2005-2007.
Imperial, M.T., Yandle, T., 2005. Taking Institutions Seriously: Using the IAD Framework to Analyze Fisheries Policy. Soc. Nat. Resour. 18, 493–509. https://doi.org/10.1080/08941920590947922
IPCC, 2021. Climate Change 2021 – The Physical Science Basis: Working Group I Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, 1st ed. Cambridge University Press. https://doi.org/10.1017/9781009157896
Jaffee, S., Henson, S., Diaz Rios, L., 2011. MAKING THE GRADE: Smallholder Farmers, Emerging Standards, and Development Assistance Programs in Africa.
JMC, 2013. Annex I East African Criteria for PGS approval.
Joughin, J., Kjær, A.M., 2010. The Politics of Agricultural Policy Reform: The Case of Uganda. Forum Dev. Stud. 37, 61–78. https://doi.org/10.1080/08039410903558277
Jouzi, Z., Azadi, H., Taheri, F., Zarafshani, K., Gebrehiwot, K., Van Passel, S., Lebailly, P., 2017. Organic Farming and Small-Scale Farmers: Main Opportunities and Challenges. Ecol. Econ. 132, 144–154. https://doi.org/10.1016/j.ecolecon.2016.10.016
Kamau, J.W., Stellmacher, T., Biber-Freudenberger, L., Borgemeister, C., 2018. Organic and conventional agriculture in Kenya: A typology of smallholder farms in Kajiado and Murang'a counties. J. Rural Stud. 57, 171–185. https://doi.org/10.1016/j.jrurstud.2017.12.014
Kareko, D.E., 2018. The Legislation and Policy Environment For Ecological Organic Agriculture in Eastern Africa 80.
Katto-Andrighetto, J., 2013. Participatory Guarantee Systems in East Africa. Case Studies from Kenya, Tanzania and Uganda, Ifoam. IFOAM.
KEBS, 2023. Agriculture-Sustainability and eco-labelling-Requi/KS ARS/AES 01:2014 - Full Catalogue Listing [WWW Document]. URL http://onlinecatalogue.kebs.org/amlibweb/webquery.dll?v1=pbMarc&v2=amend&v4=0&v5=5A&v8=599604&v9=0&v10=N&v13=4A&v20=4&v23=0&v25=ORGANIC%20and%20%20PRODUCT%25&v27=14594&v29=5A&v34=1&v35=%7b%5d0%5b%7d%7b%5d0%5b%7d%7b%5d0%5b%7d%7b%5d0%5b%7d&v40=599602&v46=599604 (accessed 8.7.23).
Kledal, P. et al, 2009. Organic Food and Farming in Kenya, The world of Organic Agriculture - Statistics and Emerging Trends 2009.
Knight, J., 1992. Institutions and Social Conflict. Cambridge University Press.
Loconto, A., Simbua, E.F., 2017. 'Tinkering' with tea: science, technology and innovation policies in Tanzania's agricultural research system, in: Research Handbook on Innovation Governance for Emerging Economies. Edward Elgar Publishing, pp. 265–291. https://doi.org/10.4337/9781783471911.00016
Loconto, A.M., Poisot, A.S., Santacoloma, P., Vicovaro, M., 2016. Institutional Innovations in Ecological Organic Agriculture in Africa 11.
Lwasa, D.S., 2015. Policy Gaps Analysis 37.
Massarella, K., Sallu, S.M., Ensor, J.E., Marchant, R., 2018. REDD+, hype, hope and disappointment: The dynamics of expectations in conservation and development pilot projects. World Dev. 109, 375–385. https://doi.org/10.1016/j.worlddev.2018.05.006
Matovu, N.J., 2012. Effectiveness of Participatory Guarantee Systems (PGS) In Marketing of Organic Products among Small Scale Farmers in Uganda: A Case Study of Vegetable Growers in Wakiso and Kampala Districts. Uganda Martyrs University.
Mella, E.E., Kulindwa, K., Shechambo, F., Mesaki, S., 2007. The Integrated Assessment of Organic Agriculture in Tanzania 62.
Nadvi, K., Wältring, F., 2002. Making Sense of Global Standards.
Nakalanda, J., Kugonza, B.I., 2016. Facilitating social networks by linking smallholder organic farmers in Uganda to markets for sustainable products the Freshveggies Participatory Guarantee System, in: Institutional Innovations in Ecological Organic Agriculture in Africa. pp. 219–235.
Nelson, E., Tovar, L.G., Gueguen, E., Humphries, S., Landman, K., Rindermann, R.S., 2016. Participatory guarantee systems and the re-imagining of Mexico's organic sector. Agric. Hum. Values 33, 373–388. https://doi.org/10.1007/s10460-015-9615-x

Niederle, P., Loconto, A., Lemeilleur, S., Dorville, C., 2020. Social movements and institutional change in organic food markets: Evidence from participatory guarantee systems in Brazil and France. J. Rural Stud. 78, 282–291. https://doi.org/10.1016/j.jrurstud.2020.06.011
Ninnin, P., 2021. Governance of the "Kilimo Hai" Participatory Guarantee System in Tanzania. CIRAD.
NOGAMU, 2012a. Sustaining Momentum for Organic Farming in Uganda.
NOGAMU, 2012b. Participatory Guarantee System (PGS) Handbook of the smallholder organic farmers.
Ostrom, E., 2007. A diagnostic approach for going beyond panaceas. Proc. Natl. Acad. Sci. U. S. A. https://doi.org/10.1073/pnas.0702288104
Patel, R., 2009. Food sovereignty. J. Peasant Stud. 36, 663–706. https://doi.org/10.1080/03066150903143079
ProFound, Markus Arbenz, 2020. Boosting Organic Trade in Africa. IFOAM, Bonn.
Rundgren, G., 2011. OSEA Newsletter.
Rundgren, G., 2008. Best practices for organic policy: What developing country governments can do to promote the organic agriculture sector. CBTF.
Rundgren, G., 2007. PGS in East Africa. Study Commissioned by the International Federation of Organic Agriculture Movements (IFOAM). Bonn, Germany.
Rundgren, G., Lustig, P., 2007. Organic markets in Africa. IFOAM.
Sarkar, P., Singer, H.W., 1991. Manufactured exports of developing countries and their terms of trade since 1965. World Dev. 19, 333–340. https://doi.org/10.1016/0305-750X(91)90180-P
SAT, 2021. SAT PGS program manager online interview.
Schwindenhammer, S., 2016. Authority Pooling and Regional Organic Agriculture Standard-Setting: Evidence from East Africa. J. Environ. Policy Plan. 18, 102–120. https://doi.org/10.1080/1523908X.2015.1053109
SIDA, 2019. Evaluation of SIDA's Support to the Project "Organic Trade and Value Chain Development in East Africa" 2014–2019.
SIDA, 2014. An Evaluation of SIDA-Funded Project on Regional Cooperation for Organic Standards and Certification Capacity in East Africa – "OSEA phase II" (2010-2013).
Taylor, A., 2006. Overview of the current state of organic agriculture in Kenya, Uganda and the United Republic of Tanzania.
TOAM, 2021. TOAM Employee online interview.
Ton, P., 2013. Productivity and profitability of organic farming systems in East Africa. IFOAM.
Turley, L., Bermudez, S., Voora, V., Wilkings, A., Elder, S., 2022. Voluntary Sustainability Standards in East Africa 132.
Twarog, S., 2011. International Partnership for Sustainable Development: Promoting production and trade of organic agricultural products in East Africa. UNCTAD.
Twarog, S., 2008a. East African Organic Products Standard and more, in: The World of Organic Agriculture: Statistics and Emerging Trends 2008. H. Willer, M. Yussefi-Menzler, & N. Sorensen, pp. 71–72.
Twarog, S., 2008b. The ITF – The FAO/IFOAM/UNCTAD International task force on harmonization and equivalence in organic agriculture., in: The World of Organic Agriculture: Statistics and Emerging Trends 2008. H. Willer, M. Yussefi-Menzler, & N. Sorensen, pp. 78–81.
UNEP, 2020. Sustainable Agriculture in Africa, focus on organic agriculture.
UNEP, 2010. Aid for Trade Case Story: The East African Organic Products Standard.
UNEP, UNCTAD, CBTF, 2010. Organic agriculture: opportunities for promoting trade, protecting the environment and reducing poverty. Case studies from East Africa.
UNEP-UNCTAD CBTF, 2008. Organic agriculture and food security in Africa.
van Elzakker, B., Leijdens, M., 2000. Not aid but trade: Export of organic products from Africa. SIDA.
Wangari, M., 2004. Grow for the Future workshop.
Wezel, A., Bellon, S., Doré, T., Francis, C., Vallod, D., David, C., 2009. Agroecology as a science, a movement and a practice. A review. Agron. Sustain. Dev. 29, 503–515. https://doi.org/10.1051/agro/2009004
Whaley, L., Weatherhead, E., 2014. An Integrated Approach to Analyzing (Adaptive) Comanagement Using the "Politicized" IAD Framework. Ecol. Soc. 19. https://doi.org/10.5751/ES-06177-190110
Winans, E.V., Haugerud, A., 1977. Rural Self-Help in Kenya: The Harambee Movement. Hum. Organ. 36, 334–351.

Annex - Main flow in the development of the EAOPS



Source: (IFOAM, 2007)