Cogestion publique-privée des ressources intellectuelles : l'analyse de la gouvernance du label biologique Est-Africain par le « politicized IAD framework »

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Résumé. Les labels de l'agriculture biologique sont des ressources intellectuelles qui transmettent l'information le long d'une chaîne de valeur qu'un produit donné est conforme à un certain standard. Leur gestion nécessite une diversité d'acteurs pour leur création, leur entretien et leur certification. Certains labels biologiques, comme *Kilimo Hai* en Afrique de l'Est, sont le fruit d'une collaboration entre les secteurs public et privé. Bien que ce modèle de cogestion puisse présenter des avantages en termes de coordination et de reconnaissance du secteur, il est également vulnérable aux asymétries de pouvoir et aux manques d'adaptation. De fait, la popularité du label *Kilimo Hai* reste faible après 15 ans d'existence, et le Système Participatif de Garantie (SPG) qui lui est associé diffère de la définition classique d'un SPG en tant que système de certification décentralisé et horizontal. Dans cet article, nous analysons le la création du label *Kilimo Hai* et de son SPG au Kenya, en Tanzanie et en Ouganda. En nous appuyant sur le « politicized IAD framework » proposé par Clement (2010), nous examinons comment des variables exogènes peuvent influencer la cogestion d'une ressource intellectuelle telle qu'un label biologique. Nous décrivons deux arènes de négociation, en nous appuyant sur des données issues d'entretiens semi-directifs avec des acteurs clés, et sur une revue thématique de la littérature. Nous montrons que malgré la terminologie participative mise en exergue dans les rapports, le label et son SPG ont été façonnés par des asymétries de pouvoir, des intérêts politiques, ainsi que des narratifs de panacée ou de solution-type. Pareillement à la gouvernance collective des ressources communes, ces lacunes dans la cogestion ont induit des vulnérabilités structurelles qui peuvent expliquer le succès limité du label, ainsi que d'autres ressources intellectuelles. Une compréhension plus approfondie des processus de cogestion peut permettre d'identifier et de prévenir ces problèmes.

Mots-clés : Agriculture biologique - Label - Norme - Cogestion - Ressource intellectuelle - Système participatif de garantie - SPG.

Co-management of intellectual resources: using the "politicized IAD framework" to analyse the governance of the East African organic label

Abstract. Organic agriculture labels are intellectual resources which transmit information along a value chain that a given product complies to a certain standard. Their management requires a diversity of actors for their creation, maintenance, and certification. Some organic labels, like *Kilimo Hai* in East Africa, are the product of a collaboration between public and

private sector. Though this co-management model may present advantages in terms of sector coordination and recognition, it is also vulnerable to power asymmetries and to maladjustments. In fact, the popularity of the *Kilimo Hai* label remains low even after 15 years of existence, and its associated Participatory Guarantee System (PGS) differs from the mainstream definition of PGS as a decentralised and horizontal certification scheme. In this paper, we analyse the creation process of the *Kilimo Hai* label and of its PGS in Kenya, Tanzania and Uganda. Drawing on the politicized IAD framework proposed by Clement (2010), we discuss how exogeneous variables can influence the co-management of an intellectual resource such as an organic label. We describe two negotiation arenas, by drawing on data from semi-structured interviews with key informants and on a thematic review of literature. We show that in spite of the participatory terminology used in the reports, both the label and its PGS have been shaped by power asymmetries, political interests, as well as panacea and blueprint narratives. Similar to the collective governance of common pool resources, these shortcomings in co-management induced structural vulnerabilities that can explain the limited success of the label, as well as other intellectual resources. A deeper understanding of co-management processes may participate in identifying and preventing these issues.

Keywords: Organic agriculture – Label – Standard – Co-management – Intellectual resource – Participatory Guarantee System - PGS.

Classification JEL: Q12, Q18; Q57

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1. Introduction

Organic agriculture is defined as a sustainable food production model based on the principles of Health, Ecology, Fairness and Care (IFOAM, 2017). By taking advantage of ecosystemic processes and promoting biodiversity, agroecological practices underpinning organic agriculture hold potential to improve resilience and sustainability of food systems (Wezel et al., 2020). In many low-income countries, organic systems achieve equal or higher yields, as compared to agricultural systems based on synthetic inputs (Scialabba and Müller-Lindenlauf, 2010). Organic food systems rely on organic labels for coordination of actors, dissemination of information and guarantee of product quality. However, these intellectual resources are subject to risks of mismanagement leading to their under-exploitation (Simcoe, 2014). To address this issue, co-management designs, which actively involve public authorities and food system stakeholders, have gained popularity in the last decades (Sacchi et al., 2015; Wezel et al., 2020). Some organic labels have become examples of co-management, whereby powers regarding the common resource – namely the label – are shared through formal arrangements between public authorities and community users (Berkes, 2009; Lemeilleur et al., 2022), notably through the creation and revision of standards and certification campaigns (Ninnin and Lemeilleur, 2023).

Participatory Guarantee Systems (PGS) are certification schemes which offer guarantee that a labelled product complies with an organic standard. In opposition to the dominant Third Party Certification (TPC), PGS rely on the involvement of food system actors (producers, consumers, experts…) in farm inspections and decision-making, thereby ensuring the development of trust-based relationships among actors (Hruschka et al., 2021). Through the participation of peers in inspection and decision-making processes, PGS foster knowledge dissemination and affordable certification for the recognition of organic practices (Hruschka et al., 2021). 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, and a step towards food sovereignty (Nelson et al., 2016). However, 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 makes it crucial for PGS to build a governance apparatus that answers the needs of involved communities while being adapted to its institutional settings. Moreover, because PGS can only be viable if tailored to their respective socio-ecosystemic contexts, they are vulnerable to risks of new panaceas or blueprint approaches (Ostrom, 2007a). Finally, the principle of inclusivity underlined by PGS raises the question of the role of public authorities in such initiatives, along with the repartition of powers within the system (Cuéllar-Padilla and Ganuza-Fernandez, 2018; Lemeilleur et al., 2022; Niederle et al., 2020). The East African organic label called *Kilimo Hai*, for example, was created with the participation of representatives from both the public and the private sector, and is the first organic label to have a shared ownership between government bodies and civil society organisations (UNEP, 2010), and today thousands of organic producers use PGS to obtain certificates for this label across East Africa (Ninnin, 2021). Nonetheless, the label was soon neglected by public authorities and the governance of its associated PGS is currently much closer to third party Internal Control Systems (ICS) than to the mainstream definition of PGS (D'Alessandro, 2018). PGS rely on organic labels whose governance models are themselves the product of negotiations and adaptation to specific institutional environments (de Lima et al., 2021). Identifying adequate governance models for food systems is a complex task due to their

adaptive nature (Ericksen, 2008). Their specificities lead to advantages and vulnerabilities that may explain the development or collapse of both organic labels and PGS initiatives.

In this paper, we discuss how power dynamics intertwined with changing narratives can shape the collective management of an organic label and impact a whole food system. We draw upon the politicized Institutional Analysis and Development (IAD) framework created by Clement (2010) based on the works of Ostrom (1990). The original IAD was used in situations to analyse collective negotiation and decision-making in situations of collective management. Though it was originally dedicated to governance of common pool resources, the IAD was adapted to bridge the gap between institutional analysis, power-centred and historical approaches, and discourse analysis by Clement (2010), who added the "Discourse" and "Political-economic context" dimensions to the analysis. Doing so, the politicized IAD allows for a recognition of the potential consequences of social-economic foundations, political power, and public discourse on the creation of institutional arrangements. The politicized IAD framework was mobilised to shed light on how historical context, power dynamics, normative, cultural and discursive processes play out in adaptative co-management interactions and negotiations of natural resources such as forestry land allocation (Blouin et al., 2020; Brodrechtova et al., 2018; Clement and Amezaga, 2009), farmer irrigation groups (Whaley and Weatherhead, 2015), community-based natural resource management (Prateek and Carr Kelman, 2016) and water management (Dennis and Brondizio, 2020). It has then been successfully applied to larger and less traditional fields such as collaborative processes in large energy industries (Brisbois et al., 2019). However, it has never, to our knowledge, been applied to co-managed intellectual resources such as participatory certification-based organic labels. Accordingly, Weinstein (2013) identified a lack of attention of Commons scholars on articulations and complementarities between local institutionalized arrangements and their political, social and institutional settings and Imperial (1999) stressed how this lack of understanding is likely to result in inappropriate policy recommendations.

The *Kilimo Hai* organic label, along with its standard and its PGS, offers insightful perspectives on the co-management of intellectual resources, whereby power is shared between public authorities, civil society and producers (Katto-Andrighetto, 2013). Indeed, the governance of the label has mainly been shaped by successive development projects involving a diversity of actors with different interests and different narratives, and was affected by power asymmetries (Knight, 1992). We hypothesise that organic labels as intellectual resources are profoundly linked to their social-ecosystemic environments, and that that their governance designs are the product of negotiations operated by a diverse set of actors with specific interests (Ericksen, 2008; Niederle et al., 2020), whose rule-making processes are the product of successive path-dependent action arenas influenced by power dynamics (Brisbois et al., 2019; Clement, 2010).

To test this hypothesis, we studied the evolution of dynamics among actors along with the evolution of discourses in the organic sector of Kenya, Tanzania and Uganda regarding the *Kilimo Hai* label and its application, starting from the first initiatives that led to the creation of the label in the mid-2000s until present day. A preliminary analysis of grey literature based on 75 project reports and studies related to the East African organic sector has been performed to gather data on the food system and the challenges faced by its actors. On-site semi-structured interviews were organised with key actors from the three countries including representatives from PGS initiatives, Civil Society Organisations (CSO), public authorities and International Organisations (IO). 4 workshops and meetings have been organised, leading to a total sample

of 57 interviewees. The objective of theses interviews was to gather knowledge on the events that shaped the collective management of the *Kilimo Hai* label, and to have a deeper understanding of the roles and representations shared by the various institutions at play. Using the politicized IAD framework (Clement, 2010), we analyse the role of each institution to identify the role of power dynamics and narratives within negotiation arenas regarding the *Kilimo Hai* label and its use.

We begin this paper by providing insights on the politicized IAD framework applied to co-managed intellectual resources. We proceed by describing the method followed in this study. We then elaborate upon the settings, interactions and outcomes of the two action arenas of interest, before linking these interactions to relevant exogeneous variables. Finally, we discuss how narratives and power asymmetries can impact food system governance, and we conclude by summarizing the major insights conveyed herein.

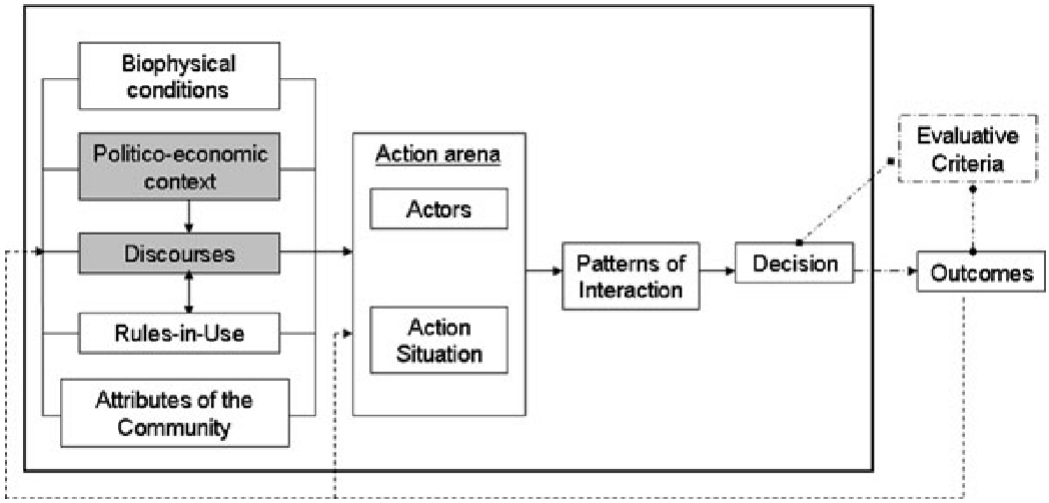
2. Theorical framework – The politicized IAD

The *Institutional Analysis Development Framework* (IAD) was created by Elinor Ostrom and the Bloomington scholars (Ostrom et al., 1994). This framework allows a better understanding of the negotiation and application process of new institutional arrangements in situations of collective management for a common pool resource. It focuses on action situations which result in formal or tacit rules that apply at an operational level (practical decisions on the use of the resource), collective choice (construction of institution and policy decision to manage operational level) and constitutional choice levels (definition of collective choice procedures), and may be influenced by a meta-constitutional level of analysis (long-lasting cultural constraints on the processes considered legitimate) (McGinnis, 2011a). The IAD framework has been used in numerous studies to explain and identify possible improvements to the diversity of forms of collective governance (Ostrom, 2007b). Initially tailored for the analysis of natural common pool resources such as forests and fisheries, it has been expanded to include new forms of common resources, such as knowledge commons (Frischmann et al., 2014; Hess and Ostrom, 2007) as well as new forms of institutional change (Imperial, 1999; Ostrom and Basurto, 2011). In addition to the three initial property-right regimes identified by the Bloomington scholars, namely the State, the market and the community, co-management emerged as a fourth archetype of resource governance based on formal arrangements of power sharing between a community of resource users and public authorities (Berkes, 2009; Imperial and Yandle, 2005). Co-management was also defined as "a continuous problem-solving process, rather than a fixed state, involving extensive deliberation, negotiation and joint learning within problem-solving networks" (Carlsson and Berkes, 2005), which implies that research on co-management would be more efficient by analysing the dynamics and functions of a system, rather than its structure.

Though the IAD framework offers a robust analytical frame that facilitates comparative studies and dynamic analysis of governance issues, shortcomings were identified in its design for being both ahistorical and apolitical whereas institutional work is a path dependent and iterative process influenced by political representations (Agrawal and Yadama, 1997; Klooster, 2000; Mosse, 1997), for failing to account for power dynamics and context (Jentoft et al., 1998; Kashwan, 2016; Ribot et al., 2006), and for overlooking the source of rules-in-use and the role of discourses, cultural norms and values (Clement, 2010; Cole, 2017; Milchram et al., 2019; Whaley and Weatherhead, 2014). In order to bridge the gap that remained between institutional analysis, power-centred and historical approaches, and discourse analysis, Clement (2010)

extended the framework by adding two additional categories of contextual variables to the original IAD framework (Figure 1). The integration of "Discourse" and "Political-economic context" dimensions to the analysis allows for an identification of the potential consequences of social-economic foundations, political power dynamics, and public discourses on the creation of institutional arrangements in favour of influential actors. Based on the original IAD framework, the politicized IAD is centred on an *Action arena* containing *Actors* who participate to collective choices in *Action situations*. Their *Interactions* result in institutions, knowledge, or operational *Outcomes* that may be *Evaluated* according to specific criteria. Action situations are influenced by a set of *External variables* (*Biophysical conditions, Politico-economic context…*) which shape collective decisions, and which are directly influenced by the outcomes of previous adjacent action situations (McGinnis, 2011b). By drawing attention on political and economic events and their impact on the action situation, Clement (2010) invites to consider the evolutionary nature of the process.

Figure 1: Extended politicized Institutional Analysis and Development (IAD) framework



Source: (Clement, 2010) based on (Ostrom et al., 1994).

As reflected upon by Frischman et al. (2014), taking into consideration actors narratives from an historical perspective provides a clearer understanding of the attributes of a commons governance, and of how they changed and adapted over time. Studies based on an historical approach can also provide elements to anticipate further challenges (Whaley and Weatherhead, 2014). As such, by applying the politicized IAD on a series of adjacent action arenas, one can observe how social and political factors shaped the trajectory of a governance system (Clement and Amezaga, 2009). Following from these assertions, we consider organic labels as intellectual resources whose governance evolve in time, and may involve a wide diversity of actors in the process. We propose to apply the politicized IAD framework to two successive actions arenas that shaped the current governance of the *Kilimo Hai* label to shed light on the impact of power distribution and political context on iterative decision mechanisms regarding their governance systems.

3. Method

3.1 Data collection

In this research, we selected one of the three main regional organic labels in the word, namely the *Kilimo Hai* label based on the East African Organic Product Standard (EAOPS) – the other

regional organic labels being the European organic label based on EU regulation 2018/848, and the BioPasifika label based on the Oceanian Organic Agriculture Standard. A preliminary scoping review was performed on both research-oriented and mainstream search engines (Google scholar, Web of Science / Google, Ecosia) looking for documents with relations to organic agriculture and/or PGS in East Africa. The initial corpus was then extended through backward snowballing of appearing references. In total, 75 project reports and studies have passed full-text screening. Based on the variables provided by the politicized IAD framework, 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.

3.2 Data analysis

Once interviews have been performed, data has been compiled under written form and merged with the review of literature. In order to make visible the dynamics at play within the sector, information has been segmented into several periods: the emergence of the East African organic sector (1980-2000), the creation of national organic standards and of the EAOPS (2000-2007), the delayed implementation of the EAOPS and the creation of PGS governance (2008-2013), implementation of PGS (2014-2017), evolution of PGS governance (2017-2022). Two main

action arenas have been identified regarding the co-management of the *Kilimo Hai* label: the creation of the label during the OSEA-CBTF project (AA1 – 2005-2007); the creation of the PGS scheme during the OSEA II project (AA2 – 2010-2013). One of the main advantages provided by the IAD framework is its ability to bring all potentially relevant factors to the attention of the analyst, though not all of them may not carry the same weight in the final outcome (Ostrom, 2007b). For both action arenas, taking inspiration from (Clement and Amezaga, 2009; Whaley and Weatherhead, 2014), we identified the involved actors and their relationships, the outcomes of their interactions, and the influence of prevalent contextual elements (politico-economic context, discourses, rules-in-use, attributes of community…).

4. Results

4.1 The setting: the organic sector in East Africa in the early 2000s

Biophysical context

Kenya, Tanzania and Uganda have diverse and mostly favourable climates for agriculture, and a topography that enables various crops to grow and diverse agricultural systems to be set up. This diversity is reinforced by the many different ethnic groups that coexist in the three countries (D'Alessandro, 2018; Jaffee et al., 2011). Nonetheless, 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 ecosystems and unsustainable agronomic practices have had numerous negative impacts on rural socio-ecosystems and increased their vulnerability to external shocks and stresses (Nakalanda and Kugonza, 2016). Climate change affects agricultural productivity and livelihoods in the region. Longer droughts, heavier precipitation, pluvial floods and tropical cyclones are increasing (IPCC, 2021). Moreover, pest and disease patterns change in response to human activities, raising the necessity for the sector to adapt to changing conditions (Turley et al., 2022). Due to losses of biodiversity, inconsistent water supply and climate change, smallholder farmers have been particularly 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 production decreases in already vulnerable areas (FAO, 2015).

Politico-economic context

Since the first wave of liberalisation in East Africa in the 1980s, foreign investments and enterprises started taking advantage of cheap labour and favourable soil and climatic conditions to promote the culture of cash crops dedicated to international markets (Cooksey, 2011; D'Alessandro, 2018). In parallel, as synthetic inputs were not easily accessible nor affordable, some NGO introduced agroecological practices to improve traditional agriculture (Rundgren, 2008). In the 1990s, new actors seeking to supply the European demand for organic tropical products started supporting these initiatives. By then, the vast majority of East African farmers were not using synthetic inputs (Ton, 2013). Most farmers were producing organic *de facto* in a political and economic context open to foreign investors, which facilitated the quick development of an export-oriented organic sector in the region, especially in Uganda (Bendjebbar and Fouilleux, 2022). Various projects 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. Following the "Trade not Aid" discourse, these project promoted export chains as a tool to empower producers through access to European markets (Bendjebbar and Fouilleux, 2022). At local scale, NGOs provided trainings and support to producers for decades. However, 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 order to achieve economic viability of agroecological practices, establishing dedicated outlets soon appeared to be necessary. On the other hand, organic buyers struggled to obtain consistent and adequate supply (Kledal, 2009; Taylor, 2006; UNEP et al., 2010). This mismatch between local offer and demand was mostly due to a lack of information domestic along value chains. On local markets, consumers had no guarantee of the organic quality of the products they bought. The absence of adequate and affordable certification scheme was becoming a barrier for the establishment of organic value chains.

Additionally, in 1999, the East African Community (EAC) was founded by three 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 formalisation of a regional organic market.

Discourses

In the 2000s, in a context of green revolution, industrialisation the dominant narrative for the future of East African agriculture. Farmers and government representatives alike were reluctant to adopt 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). Many farmers were generally sceptical about the use of agroecological practices, and believed inorganic fertilizer and hybrid seeds to be the safest choice to guarantee high yields and rapid increase of income. Nevertheless, in the mid-2005s, discourses from policy-makers started changing gradually towards an inclusion of agroecology (Mella et al., 2007).

Due to the precarious situation of many East African farmers, CSO focused on securing markets for organic products, and the main market was export (Bendjebbar, 2018). The profitable premium prices were perceived as a major incentive for farmers who could improve their livelihood (FAO, 2015), for entrepreneurs who saw business opportunities, and for government members through the perspective of increasing their respective GDP. Therefore, organic production in the early 2000s was almost exclusively 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 an NGO employee, 2022), and to the belief that organic agriculture cannot be profitable without premium.

Rules-in-use

The three main markets for East African products exporters were the European Union, the United States and Japan, which all require organic certification against their own standards in order to penetrate their markets. Two options exist: Third-Party Certification (TPC) for individual producers, or Internal Control Systems (ICS) for farmer groups. The latter was designed to be more affordable for smallholder farmers, and was implemented in the region in great numbers from the 1990s. As export-oriented organic agriculture developed, however,

farmers and CSO started realising the limitations of using foreign standards such as European Union (EU) regulation, which are not adjusted to the specificities of East African agriculture (Nadvi and Wältring, 2002). Moreover, only a limited number of crops were certified and exported, while small-scale farms still had diversified agricultural systems. The leftover production, though it complied to organic standards requirements, was sold locally as conventional products. 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. Likewise, the Kenyan Bureau of Standards (KEBS) produced drafts in collaboration with the newly formed Kenyan Organic Agriculture Network (KOAN), and the TanCert Organic Standard was designed and adopted by TanCert in 2004 (Taylor, 2006). However, none of these standards had been thoroughly implemented, and their use remained limited.

Attributes of the community

In the 2000s, countries in East Africa had amongst the world's highest population growth rates. Consequently, the region faced a growing demand for food, 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). 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 parallel, organic sectors were mostly driven by communities of like-minded actors from the private sector, mostly NGO financed by international donors. NGO were given increasing attention and consideration as key actors for economic development (Bendjebbar and Fouilleux, 2022). Between 2000 and 2005, the EPOPA project 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. In addition, local Certification Bodies (CB) were created: UgoCert in Uganda, and TanCert in Tanzania. In spite of the recent advances of the sector, there were still many misconceptions and misinformation about organic agriculture (Twarog, 2011). The creation of NOAMs was a major advance on that matter, 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). 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.

4.2 Action Arena: Governance of the *Kilimo Hai* label

In this part, we bring to light how diverse actors interacted to manage collectively the *Kilimo Hai* label at constitutional level (AA1: Creation of the label) and at collective-choice level

(AA2: Creation of PGS scheme). We proceed by linking these decisions to their respective outcomes of these action arenas on the characteristics of the label and on its use at operational level (AA3: PGS farmer certification). Some actors can have been involved in several adjacent Action Situations, Table 2 clarifies which actors intervene at which institutional level in the co-management of the label.

Table 2: Legal actors involved in *Kilimo Hai* governance at the three institutional levels

Actors	**Institutional level**			**Geographic area**
	AA1: Creation of the label (2005-2007)	**AA2: Creation of PGS scheme (2010-2013)**	**AA3: PGS farmer certification**	
UNEP	Lobbied, facilitated and co-financed the creation of the label.			Regional
IFOAM (with funds from Sida)	Lobbied, facilitated and co-financed the creation of the label.	Introduced the concept of PGS, provided trainings and funded the implementation of first PGS groups.		Regional
Public authorities (EAC, Ministries, NBS)	Participated in drafting the EAOPS. Own the EAOPS.			Regional
NOAM	Participated in drafting the EAOPS. Warrant of the use of associated *Kilimo Hai* mark.	Used the PGS as promotion tool for *Kilimo Hai* label. Established the *Kilimo Hai* PGS guidelines. Oversee the certification process.	Provide trainings to CSO and farmer groups on PGS procedures. Performs external group inspection Decides to accredit PGS groups.	National
CSO (NGO, organic traders…)	Participated in drafting the EAOPS.		Provide trainings to farmer groups on organic practices. Facilitate implementation and certification of PGS groups.	National / Local
PGS group		Craft their own rules for internal inspections, within the boundary of NOAM procedures.	Comply with the EAOPS and PGS Guidelines. Organise internal group inspections. Allowed to use the *Kilimo Hai* label once validated by NOAM.	Local

Source: Author

Actors and interactions in AA1

In the early 2000s, in line with their respective policies, 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). From 2005 to 2007, two projects merged to facilitate the creation of a regional organic standard that would fit the East African context, aiming 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 NOAM from each country, was called "Regional Cooperation for Organic Standards and Certification Capacity in East Africa" (OSEA). This hybrid public-private sectors alliance allowed to connect and merge the efforts of many stakeholders in one action situation: the creation and adoption of the *Kilimo Hai* label, along with its associated East African Organic Products Standard (EAOPS).

A Regional Standards Technical Working Group was created with the mandate to develop the EAOPS (Rundgren, 2007). The RSTWG was composed of: CBTF and IFOAM as facilitators and co-chairpersons; Grolink as trainer and facilitator; NOAM and national certification bodies; NBS; and EAC business council secretariat. In addition to two public consultations over the three countries and direct consultations with representatives from ministries, NBS and EAC secretariat, the project involved field-testing activities, trainings, workshops and consumer awareness campaigns (IFOAM, 2007). Taking inspiration on national organic standards, the Codex Alimentarius Guidelines for Organic Production, the IFOAM Basic Standards, and local expertise, three drafts of the EAOPS were developed and revised under OSEA-CBTF, and over 1,000 individuals were involved in the global process (UNEP et al., 2010).

Prominent outcomes of AA1

The EAOPS was adopted by the EAC Council of Minister in 2007 as the official organic standard of the EAC (EAS 456:2007), and provides production rules for plant production, animal husbandry, bee-keeping, wild collection, processing and labelling of products. The label exists to create a clear identification of products whose compliance has been certified in the marketplace (EAC, 2007; IFOAM, 2007). The standard was kept wide and comprehensive to avoid complex requirements that would have been a barrier for smallholder farmers. It also reduced consequently the budget for standard-making and of dissemination, compared with having one standard per production. Nonetheless, for some public sector actors, the EAOPS was unsettlingly vague as compared to the very precise public standards, which made it hard for them to mobilise and implement. On the other hand, the comprehensive nature of the EAOPS allowed to be adapted to each landscape and to specific challenges it faces. 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 withdrawn (EAC, 2007). Government involvement had been an asset for the development of the label, notably due to NBS expertise in standard-setting, and the shared ownership of the *Kilimo Hai* label opened the path for continuous collaboration between private and public sectors (Schwindenhammer, 2016; UNEP, 2010). The creation of the *Kilimo Hai* label was overall considered a success, and replicated in other regions. In 2008, the Pacific Organic Standard became the third regional organic standard after the EU's and the EAOPS (UNEP, 2010).

The creation of the *Kilimo Hai* label is widely described as a "participatory" with an "inclusive atmosphere", led by civil society, whereby foreign and public institutions had a facilitating role (UNEP, 2010). 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 of what is organic agriculture. Although the debate is still

ongoing for some, the confusion between "traditional", "natural", "organic by default" and "certified organic" became clearer as the drafting process advanced. 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, […] but it created that bridge of communication between different actors" (Interview with NOAM employee, 2022). It was decided that the EAC and NBS would own the standard, whereas NOAM would own its associated mark, *Kilimo Hai* (also called East African Organic Mark), and be the warrants of the use of the label. NOAM therefore had the authority to appoint certification bodies to control and certify farmers for compliance to the standard, as no specific procedure for verification has been defined during the project.

At the OSEA-CBTF deadline in 2007, financings from Sida and UN 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. NOAM at this period did not have the capacity to be financially self-sufficient, and were crippled without external funding. 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 label (Schwindenhammer, 2016; Sida, 2014). The EAOPS was expected to be taken in charge by the governments and the EAC secretariat, which had supposedly the bargaining power to negotiate with the EU for the recognition of the label as equivalent to the European regulation. However, governments had other priorities and could not commit resources for lobbying. Moreover, the project initiators seem to have underestimated the EU strict criteria for establishing a standard equivalence agreement. As a result, the *Kilimo Hai* label could not be used on the European markets. It has been used for niche export markets in a few occasions, but for lack of outlets, the label remained mostly circumscribed within the limits of the EAC in spite of the efforts of NOAM. Many actors perceive the outcomes of the creation of *Kilimo Hai* as if the standard had been put on a shelf and then forgotten by almost everyone. In addition, the limited public recognition of organic agriculture caused many farmers to receive 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. The limited knowledge and lack of tangible results led to even more limited commitments and political will to support the organic sector in the late 2000s, with consequences on the implementation of the label.

A regular revision process is essential for organic agriculture standards, as it increases their chances of staying adapted to the needs of the population and of the market. It was agreed upon that the standard should undergo revision at least every 10 years, and the inclusion of producers in standard-setting activities was recommended. The EAOPS was indeed revised in 2017-2019 to include aquaculture production, requirements on child labour as well as other social aspects. The revised version has been drafted by NBS 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 in 2019 (Sida, 2019). The new version was posted on national catalogues of standards, but not for free, 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.

Despite intents from NOAMs and concerned CSOs to advertise for the *Kilimo Hai* label, consumer awareness remained 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, few farmers requested certification for the *Kilimo Hai* label (Mella et al., 2007; UNEP et al., 2010), which pushed national CB in charge of assessing farm compliance to turn their business model towards subcontracting as inspectors for foreign certifiers (Sida, 2014). The implementation of the label required further work, notably due to shortcomings in communications about the standard, in local market and in certification schemes. In 2010, people were still searching how to use the *Kilimo Hai* label, but no significant action was set up. The organic sector was not described as a vibrant sector, and most people believed that organic agriculture could only be viable with commercial crops dedicated to export, certified against foreign standards. The OSEA II project (2010-2013) intended to answer these issues (Sida, 2014).

Actors and interactions of AA2

In 2007, based on the assumption that TPC and ICS schemes were inappropriate for the Eastern African market because of their running costs, IFOAM commissioned a study on the possible establishment of PGS for certifying smallholder farmers against the EAOPS (Rundgren, 2007). A workshop was organized during the launch of the *Kilimo Hai* label to introduce the concept of PGS (Bendjebbar, 2018), but it was not thoroughly applied until 2010. Knowledge on 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 seemed in fact more similar to ICS and unclear in their governance. These first PGS attempts have not been documented and today, among interviewees, no one seem to remember any PGS being established by a NOAM before OSEA II (2010-2013). Consequently, TPC and ICS remained the main certification schemes for the *Kilimo Hai* label in the first years.

Nonetheless, between 2007 and 2010, some actors who were promoting organic agriculture for domestic consumption discovered PGS and started implementing on their own, with their own production rules, and their grassroot initiatives spearheaded the implementation of PGS in East Africa. The OSEA II project (2010-2013) was created based on the experience of the OSEA-CBTF project with an emphasis on the uptake of the *Kilimo Hai* label on domestic markets, on making conformity assessment accessible for smallholder farmers and on improving market opportunities through PGS. The project was coordinated by IFOAM, implemented by NOAM and facilitated by Grolink. Although various stakeholders including government representatives, CSOs and UN organisations were consulted (Sida, 2014), the range of involved stakeholders was much more reduced than during the creation of the label. Decision-making was limited to a consensus between NOAM, funders and foreign consultants. During the discussions on PGS governance, tensions emerged on the repartition of roles in control and certification activities. Since the NOAM were the custodians of the label, it was finally decided that they should be the ones to oversee and provide accreditation of PGS groups, whereas CB would remain with TPC or subcontracting activities. NOAM started prospecting for existing farmer groups that would fit PGS certification (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 thus been supported by local CSO to finance training, development and accreditation (D'Alessandro, 2018). In parallel, NOAM were intending to open new outlets to showcase PGS-certified products (Matovu, 2012). In order to foster coordination between the NOAM and to ensure the consistency of PGS certification in the EAC, a Joint Management Committee (JMC) was created, composed of representatives of each NOAM. The JMC was responsible for management of the *Kilimo Hai* label and PGS (Sida, 2014), and was supposed to approve the validation of each new PGS group to use the label. The JMC took inspiration on the IFOAM PGS guidelines to write their "PGS approval criteria", which displays inspection protocols for PGS assessment and approval.

Prominent outcomes of AA2

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, while other groups were still under development. According to the decided design of the East African PGS, every group has the possibility to craft their own internal rules, as long as they remain in line with the PGS approval criteria and organise peer reviews to ensure compliance with the EAOPS. Once groups comply, they are assessed and accredited by NOAM (Table 2). Assessments are based on external inspections of the group performed by a NOAM employee or an inspector from the national CB. They relaxed in terms of requirements, as most actors wanted to keep PGS inclusive and to recognise efforts rather than punishing errors. Though peer review plays a minor role in PGS certification, it allows producers to share knowledge and to help each other in overcoming conformity issues. In fact, access to knowledge, solidarity and social links are often quoted as the main incentives of farmers to become part of a PGS group. Initially, certification costs for PGS were almost non-existent, projects took most expenses in charge. However, for lack of revenues, NOAM started requesting for certification fees around 2017, which put many label user in difficult positions and delayed the self-sustainability of PGS groups (Sida, 2019). Once approved by their NOAM, PGS groups were to be presented to the JMC for endorsement, which would then grant collective organic certificates[1] (Katto-Andrighetto, 2013; NOGAMU, 2012b). Due to mismanagement of funds, however, the JMC never had the resources to fulfil its role of regional overseer and NOAM started managing their respective PGS accreditation procedures independently.

The improved accessibility of organic certification allowed PGS producers to supply organic outlets in both capitals and minor cities in addition to pre-existing selling circuits. 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. Targeting only high-end outlets proved to present risks, as high-priced products would only target a limited fragment of the population. By promising farmers premiums like those found on international markets, one creates expectations that may result in disillusion and frustration, making farmers more likely to quit. PGS 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). Furthermore, the enhanced visibility of organic products in local markets started to change the common belief that organic agriculture should only be dedicated to export markets. Driven by questions of health, environment and food sovereignty, ever more East African initiatives started to promote consumption of organic

[1] In time, some PGS groups started to use the *Kilimo Hai* label for individual sales as well.

products. In parallel, as hoped by some stakeholders, PGS began serving as a stepping stone for ICS certification. The NGO Sustainable Agriculture Tanzania, for example, was among the firsts to implement PGS. In 2022, their accumulated experience facilitated ICS certification for sending some of their products to the European market, while supplying local outlets with PGS-certified products.

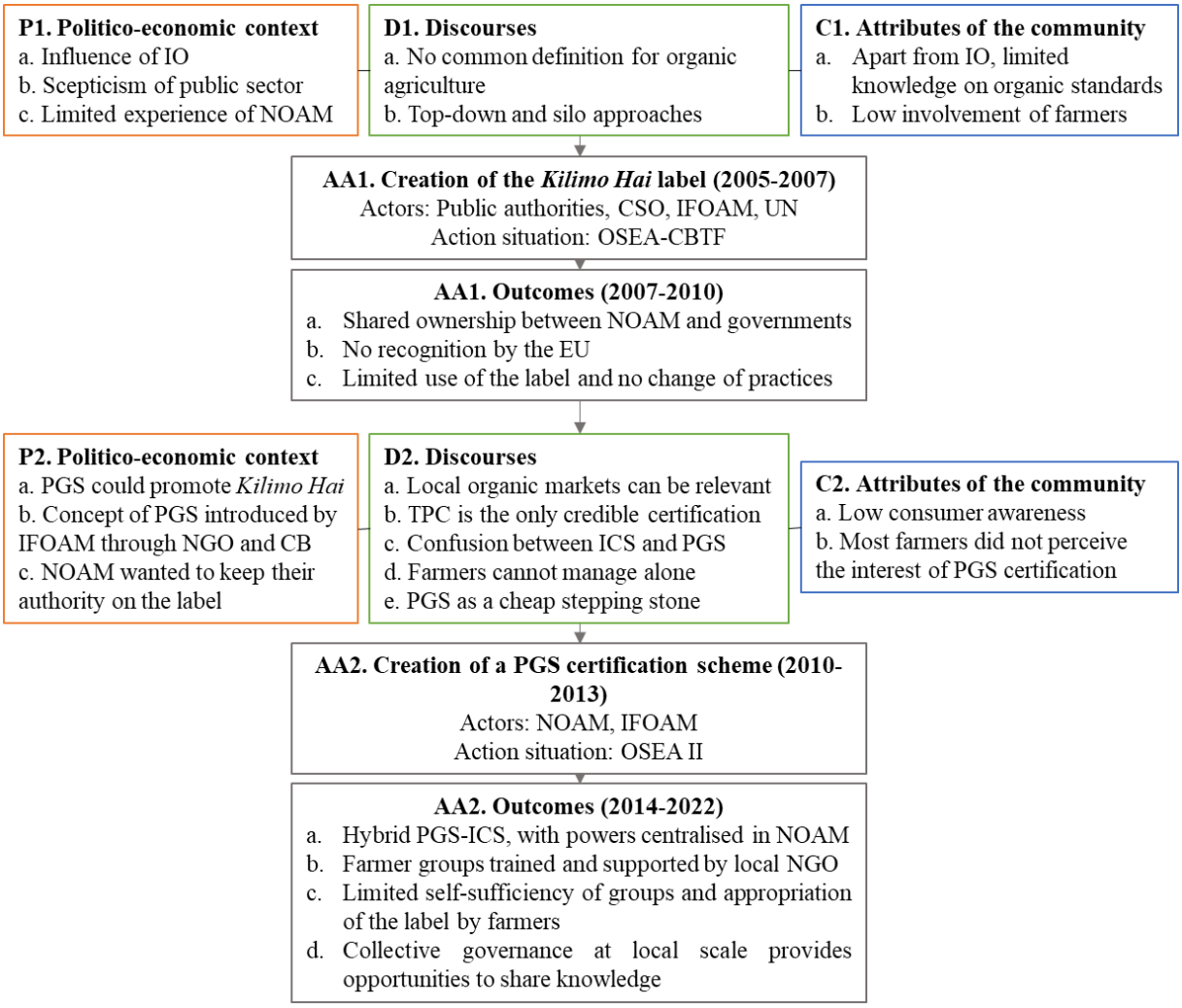
In spite of the inclusive discourse that accompanied the creation of the East African PGS governance and its positive outcomes on the sector, this scheme is widely perceived to mimic third-party certification (D'Alessandro, 2018; Rundgren, 2007). The system follows a top-down approach, as most producer groups rely on CSO for training and financial support, and would not have undergone PGS certification without their impulsion. Moreover, the centralised repartition of powers excludes farmers from main decision-making arenas, such as group accreditation, standard revision or label management, leading to limited empowerment and almost non-existent uptake of the label by farmers. Due to the significant place NOAMs occupy in the system, peer review is often under rated. As a result, aspects of participation and transparency are still rather weak in most groups (D'Alessandro, 2018). The centralisation of decision-making powers induces a low resilience of the East African PGS scheme. For instance, in 2017, NOGAMU suffered a critical crisis which deteriorated the trust stakeholders placed in the organisation, and the withdrawal of donor's support caused most of their activities to cease (Gourion, 2022). To date, the organisation still has a limited team, and all PGS farmers lost their certification. Some PGS 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. In response, UgoCert started taking responsibility for both inspecting and validating PGS groups in Uganda, using the UOS or the EAOPS according to the targeted market, thereby bridging the remaining gap between ICS and TPC. Nonetheless, a new PGS council is currently being set up, showing promises of improved horizontality in the system. In alternative to the third-party orientation of the *Kilimo Hai* label, some initiatives followed different trajectories, such as the Freshveggies PGS, which was a grassroot organisation that maintained its farmer-based governance and refused to be accredited by its NOAM.

Projects like OSEA-CBTF and OSEA II 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 many organically cultivated crops, with significant savings on inputs (Hine and Pretty, 2008). Today, many governments members have embraced the idea that organic and industrial sector answer different needs and challenges, and do not have to compete. Through national organic laws and strategies, public authorities are establishing an enabling environment allowing food system actors to choose the model that suits them best. Today, in spite of the numerous positive outcomes of the creation of the *Kilimo Hai* label and its associated PGS scheme, the popularisation of the label is still limited by slow adoption of the label and insufficient awareness on organic agriculture. These issues themselves could be addressed easily without the remaining shortcomings in communication among actors which create confusions in label ownership, repartition of roles and responsibilities, lack of transparency and limited – yet increasing – policy recognition and support.

4.3 Linking outcomes with external variables

Having reviewed the major outcomes of the co-management of the *Kilimo Hai* label, we now examine: (1) which range of incentives, interests and beliefs has influenced the decision-making arenas, and (2) how external variables have affected the interests and beliefs of involved actors. As indicated in Figure 2, 7 exogenous variables were identified to be linked with AA1 (creation of the label) and 10 were identified in AA2 (Creation of PGS certification scheme).

Figure 2: Overview of the prevalent exogenous variables associated with *Kilimo Hai* co-management



Source: Author

Politico-economic context

The idea of a regional organic label was initially mostly pushed by International Organisations (IO), using the European organic standard equivalency program as a main incentive to foster involvement of local stakeholders. A common regional standard and a joint lobbying effort would increase the likelihood of achieving equivalency and open 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 label, rather than a "proliferation" of organic logos, would reduce confusion for traders and consumers. 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). In spite of the participatory terminology used in the reports, there was a clear asymmetry of power between foreign and local actors due to differences in resources, knowledge on organic standards, and political influence, which allowed international organisations to have a major influence on the contents and governance of the label[2].

Though government decision-makers were increasingly aware of the importance of sustainable agriculture and preservation of ecosystems, many used to be sceptic about the potential for volume production, demand in markets and overall viability of organic agriculture in East Africa (ProFound and Markus Arbenz, 2020). In addition, many influent actors held personal interests in agrochemicals, and some used their influence to slow down public recognition and support to organic agriculture. Involving government members in the creation of the EAOPS exceeded the public recognition of the *Kilimo Hai* label, which in itself had a limited direct political impact (EPOPA, 2008). In fact, the process of creation itself aimed to create bridges for further collaboration between public authorities and private organic sector stakeholders. Government members, on the other hand, had barely finalised their own national organic standards, and thus were not eager to delete them at the request of foreign "*NGOs coming from outside and telling them what to do*" (Schwindenhammer, 2016, p.112). To answer this reluctance, Schwindenhammer (2016) demonstrated how IOs pooled authority from their resources and relations with the EAC and the private sector to convince governments. UN organisations, especially, had a political weight and legitimacy that made the involvement of public authorities easier (IFOAM, 2007; UNEP, 2010), though the influence of OSEA-CBTF was insufficient to initiate a sustained public support to the organic sector.

Organic CSOs were focused on export markets and were already used to work with IOs. Most NGOs relied on development programs such as the OSEA-CBTF project to finance their operational costs. Consequently, they had many reasons to collaborate. 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 was 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. By having ownership of the mark, they became the warrants of the *Kilimo Hai* label in their respective countries, which contributed in establishing their authority.

After the enactment of the EAOPS and the failure of its recognition by the EU, it appeared that regional and international markets could be complementary: exporters usually look 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 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 EAOPS was already known by a certain number of institutional stakeholders, and was comprehensive enough to fit the reality of small-scale diversified production. There

[2] In one of UNEP reports, the involvement of public authorities is presented as a way of building governments capacity through a process of "learning by doing", additionally suggesting IOs would have been more efficient working alone in the development of EAOPS (UNEP et al., 2010). In a report from IFOAM, public authorities are described as inclined to "*copy*" European regulation and to keep the label under their control, stating that "*It took major efforts to convince them that the model chosen [private sector-led] was the right one*" (IFOAM, 2007, p.23).

was in addition a will from NOAM and IFOAM to make the label – along with the works of the OSEA-CBTF project – useful at least for something. If *Kilimo Hai* could not be recognised by EU, at least it could be used and promoted on local markets. The EAOPS was not originally meant for local markets, but it would have been counterproductive and costly to develop yet another standard. Most *de facto* organic smallholder farmers could comply to the standard 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, 2012).

Although some local actors were sensitized on PGS through other means, the concept of PGS was mostly introduced in East Africa by IFOAM. Their presence as a well-established institution had a significant contribution to help sceptical stakeholders reconsider their positioning on PGS, and to encourage people who were already convinced. Notions of self-regulation, peer review, collective management, trust and social control then percolated among actors who adopted the IFOAM method (Katto-Andrighetto, 2013). The idea of PGS in East Africa thus did not come from a grassroot level, as it has been the case for many initiatives across the world. It was initiated at institutional scale and was gradually implemented from above. Moreover, IFOAM recommended to rely on local NGOs and project sponsors to organise farmers and manage certification processes as the least constraining option for smallholder farmers, thereby establishing a de facto verticality in the implementation of the concept (Bendjebbar, 2018). With the introduction of a new organic guarantee scheme for the *Kilimo Hai* label, it had been identified early that the credibility of PGS was going to be questioned by many actors, especially third-party certification bodies. To avoid such issues, strong bonds were kept between certification bodies 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.

The role of NOAMs as "PGS administrators" has not been questioned much during the OSEA II project, as they were already custodians of the label which would be used by PGS-certified farmers. It was also a political way for the organic movements to have a "firm grip, a control over the affairs of the different PGSs in the country. They 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 employee, 2022). To some, PGS was a way for NOAM to strengthen their authority on the *Kilimo Hai* label, but also on the organic sector as representatives and coordinators. The ambition of NOAM 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. However, the posture of NOAM was not approved by all: "[… 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 NOAM also quickly raised the issue of capacity building, as the entire system rested on a limited number of individuals. 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, which explains why TOAM and NOGAMU appealed to their respective certification bodies in the first years of PGS implementation.

Discourses

At the beginning of the OSEA-CBTF project, the different 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 produced in Africa is organic. However, all actors shared 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 common definition for organic products (EAC, 2007).

Though organic sector NGO act as boundary organisations between farming communities and agriculture-related institutions (international donors, research institutes, universities…) (Goldberger, 2008), it does not prevent the sector from replicating top-down approaches and "silo" mentalities (Kareko, 2018). Indeed, there seems to be, among many stakeholders of the sector, a belief that smallholder farmers are not able to manage a food system without the help of experts. At the end of the OSEA-CBTF project, the implementers (AgroEco and Grolink) expressed their regrets faced with the low impact of the project on farmers practices (EPOPA, 2008).

Before the OSEA II project, some stakeholders started claiming that only focusing on export was short term thinking, and that aiming for exportation does not necessarily means excluding local markets. They advocated development of local markets as a way to let the organic sector grow naturally, leading CSO to adopt the idea that, though export remained a valid strategy, sending healthy products away and let local people eat contaminated products was no option. Yet, when a consensus was reached on the importance of having a local market, a majority remained influenced by the belief that farmers should aim for high-end outlets 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).

Along with the export markets and premium price approach, the widespread representation that "there is no other valid way to certify but third-party" gained the discourses of government members and private sector stakeholders, local and international alike (Bendjebbar and Fouilleux, 2022; Katto-Andrighetto, 2013). As a result, still today, many perceive any alternative to TPC as a lesser substitute. Even experts commissioned by Sida recommended 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. For many stakeholders, there was a confusion between PGS and third-party schemes[3], and the common understanding of PGS was a cheaper and simpler Internal Control System (ICS) led by a NOAM. This perspective facilitated the role PGS could have as a stepping stone towards international markets, but occulted the elements of participation and horizontality. Consequently, the attempts to build PGS resulted in ICS-inspired schemes that

[3] 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 TPC schemes adapted to the Eastern African context, we can recommend the works of D'Alessandro (2018).

merely involve other food system actors and that provide limited decision-making power to farmers, and the role of farmers peer-reviews in this regard was just to make the work easier for the certification body (D'Alessandro, 2018; Rundgren, 2007).

In spite of some strong farmer-driven groups still in activity, farmers' groups were not considered to have enough capacity to self-organise[4] (Rundgren, 2007). Even among organic NGO, some actors see farmers as lazy and untrustworthy, and many of them "*know nothing about organic*" (Interview with NOAM employee, 2022), while some farmers have the feelings their ideas are not listened by NGO. This shared belief that farmers are not able to manage by themselves impacted PGS activities, notably on record keeping and standard-setting, whereby farmer involvement is limited by the high illiteracy rates in rural populations (D'Alessandro, 2018). When asked if it would have been possible to have a truly horizontal system without the overseeing of NOAM, some answered "*You can't have sheep without a shepherd*" (Interview with NGO representative, 2022).

Once the governance design of PGS was decided by NOAM, its implementation 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. 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 of the *Kilimo Hai* label would be reached (Bonabana et al., 2022).

Attributes of the community

During the OSEA-CBTF project, CSOs acted as intermediaries between farmers and decision-makers for both consultation and awareness raising. In addition, through their knowledge of organic agriculture, they could be technical advisors for the content of the standard. However, many interviewed actors recognise that, when they started being involved in the creation of the *Kilimo Hai* label, they had limited knowledge of organic standards. The first part of the project therefore consisted mostly in capacity building and knowledge information, implying that those who detained information (namely foreign consultants and international organisations) had a significant impact on the collective perception of organic agriculture standards and their use.

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 were consulted, some even participated in its experimental implementation. However, due to budget and time limitations,

[4] 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 leads 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). This extract underlines the top down – and sometimes patronizing – perspective present in key institutions in those years.

the participants in the development of this standard were organized groups of farmers. The vast majority who did not belong to any strong farmers organization engaging in organic agriculture could not participate. As a result of the limited involvement of practitioners, the appropriation of the organic standard by producers is close to non-existent. Furthermore, isolation of farmers and lack of skilled trainers has been identified as a limitation for dissemination of knowledge on organic production (UNEP et al., 2010). Even when the *Kilimo Hai* label was created, 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).

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 systems 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 NOAM. Indeed, given their nature of organic sector representatives and their nature of umbrella organizations, they had – initially – no interest in considering certification as a way of generating income, and therefore could ensure the validity of the guarantee without extra costs for the farmers. Moreover, they had the knowledge necessary to guide new PGS towards compliance with EAOPS and with the East African PGS approval criteria (Katto-Andrighetto, 2013).

In turn, the slow uptake of the *Kilimo Hai* label, even after implementation of PGS, can be explained by the fact that most farmers did not perceive the interest of certification and peer inspection for local markets. Some saw PGS as a cumbersome bureaucracy that did not present relevant incentives. Certification for local markets seemed all the more useless because consumers themselves, considering that "everything in Africa is organic", did not value organic labels. Because they are not familiar with the potential benefits of PGS and without the economic incentives of reliable market outlets or premium prices, many farmers have been understandably reluctant to invest time and energy in collective PGS management and in application of new production practices. Moreover, many farmers were not comfortable with the principle of peer reviewing, as it looked to them more like internal police that could create tensions in the community, than like a collective learning opportunity.

5. Discussion and conclusion

Identifying the interactions and outcomes of both the creation of the *Kilimo Hai* label and the creation of PGS scheme allowed to shed light on key mechanisms that influenced the outcomes of these action arenas. The inclusion of politico-economic context in the analysis, as indicated per the politicized IAD framework, seemed especially relevant to explain the evolution of the organic sector in East Africa. During the creation of the label, an unequal distribution of power among decision-makers was identified. IOs provided financial resources and expertise, and used this power to influence the outcome of the action arena. Personal and organisational interests were factors of major influence in the shaping process, as both the label and the PGS since they were used as tools for both opening market opportunities and political advocacy. Since both studied action arenas formalised a sector which was not regulated, few exogenous rules-in-use have influenced their outcomes. However, this case study demonstrates how discourses can affect the creation of new rules by reinforcing or undermining their credibility (Hajer, 1995). Indeed, discourses appeared to have a prevalent influence, through the ways in

which the various actors perceived: organic labels, including their use and management; each other in matters of trust and power sharing; clarity of followed objectives; or blueprint and panacea discourses. While the creation of the *Kilimo Hai* label was mainly motivated by the European equivalency program as a way to boost the sector and address its shortcomings, the governance of PGS was itself strongly influenced by ICS models at the detriment of local embeddedness. Those two dynamics, panacea discourse on the one hand and blueprint approach on the other, were identified by Ostrom (2007a) as major risks for the collective management of common pool resources such as organic labels. Finally, community attributes, which involve the level of common understanding and trust underpinned by Agrawal (2001), have especially influenced the creation and implementation of PGS. Indeed, the limited trust in the capacity of farmers to self-organise and regulate led decision-makers to adopt a vertical certification system. In spite of a terminology based on "participatory approaches" and "farmer empowerment", the label was born from a top-down hierarchy bound by unequal repartition of resources. In fact, PGS in East Africa is run by experts and the role of farmers and consumers is limited (Bendjebbar, 2018), thereby reducing the capacity of the label to answer the needs of the population. In contrast, the Brazilian co-management of their organic label was shaped by bottom-up initiatives which allowed communities to adapt the rules of the system, thereby ensuring the sustainability of the label (Lemeilleur et al., 2022; Niederle et al., 2020). In order to keep a detailed analysis, the present study only considers a fragment of the evolution of the East African organic sector. However, the analysis of power dynamics and evolution of governance designs over a longer period may provide a more in-depth perspective on the influence of shared narratives and path dependency in situations of co-management.

In this paper, we demonstrated how external variables can influence the shaping process of food systems, which in turn influence interactions between actors and food markets dynamics, thereby providing new insights on food systems as socioecosystems (Marshall, 2015). Indeed, in spite of their limited uptake, the *Kilimo Hai* label and PGS were instrumental in improving food sovereignty in East Africa by establishing the social importance of local organic markets as a precondition to genuine food security (Desmarais, 2007), and by initiating a redistribution of powers in favour of rural communities (Patel, 2009). Although it has been seen that horizontality was limited in PGS governance, the new PGS council in Uganda may open the path for involving farmer representatives in collective and constitutional choice arenas.

Though an organic label does not face the same threats as a traditional common-pool resource, its management is equally vulnerable to power dynamics and changes in its socio-ecosystem. Mismanagement of intellectual resources can lead to a tragedy of the anticommons (Heller and Eisenberg, 1998). Yet, the available knowledge on their collective governance is still limited and requires further studies. To this extent, the present study highlights the capacity of the politicized IAD framework to enable comprehensive analysis of the co-management of an intellectual resource, and its embeddedness in its institutional environment.

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