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*Topic 4 - Innovation in Organic farming: "thinking out of the Box"*

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### INSTITUTIONAL INNOVATIONS FOR ORGANIC AGRICULTURE IN AFRICA

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**Abstract:** What are the main drivers and bottlenecks that shape the development of the organic sector in Africa? Which factors can support an organic transition in Africa? In this paper, we hypothesize that in order to scale up organic agriculture, food system actors must engage not only in technological innovations in production and processing, but also in institutional innovations. A change in scale means here an increased geographical presence and organizational capacity, distributed and autonomous activities, and a strong movement to share experiences across Africa. By institutional innovations, we mean new rules of exchange for fair and inclusive markets, new technologies and practices to guarantee organic quality, and innovative public policies. Based on three national cases (Uganda, Tanzania, Morocco), we propose a methodology to explore the potential synergies among these three types of institutional innovations.

**Introduction:** Organic and agro-ecological production is now increasingly recognized as an essential component of African strategies for climate change mitigation and adaptation, as well as for ensuring food and nutritional security for a rapidly growing and urbanizing population (see the African conferences on organic agriculture in Lagos 2015 and Dakar 2018). Indeed, we sometimes hear that due to the lack of widespread access to synthetic chemical inputs, African agriculture is generally organic "by default". However, chemicals, although not widely distributed (relative to French agriculture for example - which is one of the largest users of pesticides in the world), are still widespread, and are often used in inappropriate and dangerous ways (as evidenced by the results of scientific work presented at the "Pesticides Politics in Africa" conference in Arusha, Tanzania in May 2019). While short food supply chains cut out the middlemen, they are often produced in small-scale peri-urban production systems, which are often subjected to various types of pollution, with some very high pesticide residue levels at the time of consumption. The development of a domestic organic sector is therefore also a very important public health issue for African countries.

The obstacles to developing a strong African organic sector are multiple and can pose powerful challenges. Stakeholders in the African organic sector have felt the need to create synergies across the continent that can help establish organic agriculture as a fundamental pillar of African development. It is precisely for this purpose that AfrONet – the network of National Organic Agriculture Movements (NOAMs) – was developed. Awareness is also raised at the political level and in

particular within the African Union, which has been developing since 2011 (decision of the 18th ordinary session, 24-28 January 2011, EX.CL/Dec.621 (XVIII)), a Programme for Ecological and Organic Agriculture (<https://eoai-africa.org>).

In this paper, we hypothesize that in order to scale up organic agriculture, food system actors must engage not only in technological innovations in production and processing, but also in institutional innovations. A change in scale means here an increased geographical presence and organizational capacity, distributed and autonomous activities, and a strong movement to share experiences across Africa. By institutional innovations, we mean new rules of exchange for fair and inclusive markets, new technologies and practices to guarantee organic quality, and innovative public policies. Based on three national cases (Uganda, Tanzania, Morocco), we propose a methodology to explore the potential synergies among these three types of institutional innovations.

**Material and methods:** We explore the possibilities for scaling up the organic sector in Africa by reflecting upon the first results of an action research project (IIABA – Innovations Institutionnelles pour l'Agriculture Biologique en Afrique, 2020-2023) that is designed to initiate and study these three types of institutional innovations that are occurring in Morocco, Tanzania and Uganda. The IIABA project is financed by the French Agency for Development (AFD) and implemented in collaboration with AfrONet, the African network of national organic movements. These three countries were purposively selected because they have varying situations in terms of agro-ecological zones, number of organic farmers, area of converted farmland and climate change pressure on natural resources. They are at different stages of innovation in market and guarantee schemes, with different levels of integration of small farmers into export and domestic markets, with different institutional and policy frameworks for the organic sector.

Organic agriculture first developed in Morocco through the export sectors of fruit and vegetables (olives, citrus fruits, etc.), aromatic and medicinal plants (mint, etc.) and harvesting products (argan). According to the few statistics available on this sector, the certified area increased from 200 ha in 1997 to 2455 ha in 2007, and 7,955 ha if wild plants such as the argan tree are taken into account (Alaoui, 2009). Today, the latest figures would be 9,500 hectares certified (source FIMABio). 90% of organic agricultural products are exported (Alawi, 2012). A domestic market is developing, even if there are no statistics on the subject. Although many Moroccan consumers have heard of organic farming, it is still a niche market. According to a consumer survey (Marzouk and Gbemenou, 2014), the main obstacles to its expansion are linked to very high prices, difficulties in finding organic products on the markets and lack of information on production methods and guarantees.

Morocco is the second African country to have adopted national organic legislation after Tunisia in 1999. Organic farming in Morocco is thus regulated by Law 39-12 on organic production of agricultural and aquatic products, which was promulgated in 2013. Although a regulation, specifications for plant and animal production and certification procedures were provided for in the 2011 framework agreement and the 2013 law, these did not enter into force in Morocco until September 2018. In parallel, a growing agro-ecological movement, led by RIAM, has developed a participatory guarantee system (PGS) associated with a private label, and set up local markets. The development of the PGS began in 2017, in the pilot area of Rabat, at the initiative of RIAM, with CIRAD's support. The second labelling campaign in 2019 resulted in the certification of 26 farms. The local group in Rabat, which brings together producers, but also consumers and intermediaries (distributors, restaurateurs, etc.), now has about 50 people. Workshops to implement the PGS in other regions have already started in Marrakech and Casablanca.

Uganda is one of the most dynamic countries in sub-Saharan Africa in terms of organic agriculture. It has the largest number of organic producers on the continent with 210,352 certified producers according to the latest available data from 2016 (Fibl and Ifoam, 2018). Organic production covers 262,282 hectares (in-conversion plots are recorded here) (Fibl

and Ifoam, 2018). Uganda has often been considered as the "success story" of organic agriculture development in sub-Saharan Africa (Adebiji, 2014; Bendjebbar, 2018). There are several reasons for this: a production largely derived from family farming; the presence, structured since 2001 of a national organic movement, NOGAMU (National Organic Agriculture Movement of Uganda); the country's level of progress in establishing an institutional environment conducive to the development of organic agriculture with the creation of a Ugandan certification body UgoCert in 2004; the active participation of the Ugandan movement in the development of the East African organic public standard, Kilimo Hai; a national organic policy that was just approved in July 2019 by the national government. However, the increasing use of synthetic chemical inputs and the large influx of GMO promoters into Uganda directly threatens the organic sector in that country.

Initially promoted by humanitarian NGOs to rebuild the country after decades of war (Hauser, Lindtner, 2016; Bendjebbar, 2018), organic farming has grown strongly due to projects and programmes to export certified organic products. The country now has many certified export sectors for products such as cotton (until 2008), coffee, sesame and tropical fruits (pineapple in particular), but also certified export sectors for processed products such as dried fruits. The value of this export market is estimated at USD 55 million. Export certification is generally achieved through the implementation of an internal control system (ICS) and then by control by a third-party certification body. In Uganda, the implementation of ICS has led to a wider diffusion of organic farming and facilitated exports for many family producers. Certification support is provided through the support of exporting companies, projects and development assistance programs that most often bear the cost of certification. However, this leads to several problems: the dependence of producers on development aid companies or projects because it is the person who pays for the certificate who owns it, organic crops that do not find outlets, surpluses that are not always valued as organic when they do not meet importers' criteria, etc. An internal crisis at NOGAMU led to the creation of a new management in 2018 and the renewal of its board of directors. The organization was thus able to resume its functioning based on the active participation of its members in determining the movement's priorities and in building national and local markets.

Tanzania is the fourth largest country in terms of the number of certified producers (148,610 in 2015 according to FIBL - IFOAM statistics), out of 186,537 hectares certified in 2015 according to the same statistics. Tanzania is also the third largest country in the world in terms of the area of wild land collected certified organic (2.4 million ha). The national Tanzanian agricultural movement is TOAM (Tanzania Organic Agriculture Movement). It is an umbrella organisation that coordinates and promotes the development of the organic sector and collaboration between organic producers, traders and consumers. It has 115 members as diverse as farmers' associations and cooperatives, NGOs, organic professionals, companies (15 processors, 28 exporters), distributors, researchers, teachers. TOAM collects and disseminates information on organic agriculture. TOAM hosts AfrONet and manages its financial accounts. Mr Jordan Gama, who is the Chief Executive Officer of TOAM, is also the President of AfrONet.

Similarly to NOGAMU, TOAM - registered as an NGO in 2005 - is a result of initiatives undertaken in the second phase of the EPOPA (Export Promotion of Organic Agriculture Products) project funded by Sida (Swedish Cooperation). More generally, the structure of the inter-profession is the same as in Uganda - with a national movement, a national certifier and producer groups. Products certified for export are mainly spices, black tea, coffee, cotton, and tropical fruits (avocado in particular) (Akyoo and Lazaro 2010; Gibbon et al. 2010; Loconto 2010). In addition to the export challenge, in Tanzania the contribution of agro-ecological production to food security (e.g. 50,853 ha in legume production) and climate change mitigation is recognized (Bakewell-Stone et al. 2008). Third party certification is the most common form of guarantee. Certificates are often paid for and controlled by traders: initially this configuration was intended to limit costs for small

producers, but this has resulted in domination of export markets by large companies (Loconto 2010). With the publication of the Kilimo Hai standard in 2007, TOAM worked with NOGAMU to enable SPG certification, to empower small producers. Mainly used by women's producer groups, PGSs for local consumer products (sorghum, millet, sunflower, fruit and vegetables) have grown significantly. Since the first implementation in Morogoro in 2011, their number has increased to 11 PGSs in 2018 (only 3 of which are operational with 515 certified producers out of 2,045 involved). TOAM is in charge of developing a national PGS system.

Tanzania still does very little for organic agriculture in terms of public policy. While the 2013 National Agriculture Policy refers to it as a 'window of opportunity' that could improve both 'national and farmers' income', there are many factors that block and hinder the development of organic agriculture. A recent report commissioned by TOAM entitled "Poor farmers' barriers to markets for organic trade: documentation and analyses of policy barriers to poverty reduction through trade in organic products in Tanzania" lists them. The most important barrier is the very high certification costs. They mean that producers can only benefit from higher prices for their organic products if they enter into contracts with processing and/or exporting companies, which causes them to lose a large part of control over trade and thus lose their independence. Another problem is that only certain products are certified (main cash crops), while other products that farmers grow under the same conditions are not sold as organic, but sold on domestic markets at the conventional price. To avoid this loss for the farmer, it would be necessary to facilitate the certification of secondary products, beyond the main cash crop(s), and to develop new markets for these additional products. The implementation of more favourable public policies for organic agriculture would allow Tanzania to exploit its advantages in this area much further. TOAM calls above all for certification support and clear regulations to prevent any conventional farmer from selling his products as ecological or organic. This raises the problem of the lack of real guarantee for the consumer, and unfair competition in relation to organic farmers who follow very strict production criteria and are subject to costly certification schemes. The current challenge for TOAM is to lobby the government to move from rhetoric to practice and include specific and concrete provisions in ASDS2 (Agriculture Sector Development Strategy & Policy).

An interesting feature of Tanzania is located in Zanzibar, an autonomous region of this country. Zanzibar is a leader in the processing and marketing of organic spices and tea, and a pioneer in public policy for organic. Indeed, the region recently declared that its two islands of Unguja and Pemba would become organic islands, implying the establishment of a global policy in this direction, not at all restricted to the agricultural sector. Thus, the Ministry of Trade, Industry and Marketing has implemented a multidisciplinary and multisectoral plan for the protection of biodiversity and landscapes, which prioritizes conservation over economic development. The idea is to make biodiversity a comparative and competitive advantage at the heart of industrial, commercial, management and tourism issues. The plan deploys a multi-level strategy. At the national level, the aim is to promote the reform of the global institutional environment. At the regional level, this involves developing, implementing and supporting initiatives by farmers and other private sector actors in pilot phases with demonstration sites and satellite business districts (satellite business park), organic farming, standards and certification in order to capitalize on the various opportunities in organic markets, tourist attractions and conservation and protection of biodiversity and landscape. At the sectoral level, it is a matter of working directly with the private sector to make its activities compatible with biodiversity and ecology. The idea is to make the "Zanzibar" brand a green, ecological brand.

In the project, we are employing a range of qualitative and quantitative methods to collect empirical data from the action-research process: market analysis (collecting volumes and prices), focus groups, bilateral semi-directed interviews, participatory workshops and public policy analysis. For the results presented in this paper, we rely upon the baseline data

collected through a participatory workshop held in February 2020 that was dedicated to identifying institutional innovations to study. The workshop included 13 participants who are working in the NOAMs in the three countries of studies and the authors of the paper. Through facilitated discussions, a typology of institutional innovations were identified along three areas: markets, guarantees and policies. These were further discussed and criteria for innovation were classified to further differentiate these innovations. Theories of change were used to identify possible impact pathways, but the results of this analysis will not be available until 2023.

**Results:** This paper explores three main types of institutional innovations in the three countries under study, specifically:

1. Fair and inclusive markets. A traditional approach is to "connect smallholders to markets" by organizing farmers into groups and cooperatives that can group individual products together to sell them in "value chains". This approach has helped to organize smallholders for the production of tropical organic products for export, but it has not encouraged diversified organic production systems rooted in territories and inclusive value chains that provide organic food to local consumers. Instead, organic producers have been isolated from their neighbours and potential consumers, and production costs have increased. Many innovations linking organic producers to consumers in territorial markets that are more equitable and inclusive than global value chains have emerged in Africa over the past decade. Producers and consumers are thus beginning to meet more regularly to exchange inputs, technologies and products and to build new models of ownership, equity, time sharing and solidarity purchasing. Social media and Internet platforms allow greater transparency for intermediaries and new logistics solutions offer interesting solutions for product aggregation and storage.
2. Innovations in guaranteeing organic quality. While third-party certification, required for export, is the default form of certification, other forms of organic quality assurance, more in line with the social and production systems of smallholders, are currently being tested in 67 countries: participatory guarantee systems (PGS). PGSs are certification systems based on the active participation of the stakeholders concerned (farmers, craftsmen, consumers, distributors, restaurateurs, local associations, land users, etc.) in the development of the standard, the specifications and the implementation of verification procedures and certification decisions. Through peer reviews and regular exchanges, PGSs also aim to solve practical problems and contribute to a continuous learning process for producers. PGSs provide a framework to facilitate the individual or collective marketing of quality products and a means of creating a local fabric of actors within a territory in a sustainable manner. Finally, insofar as the PGS's specifications are intended to remain compatible with public standards, it may be a first step towards other national or international certifications for certain producers and enable them to combine several markets. For Africa, the latest IFOAM data show 24 operational PGSs corresponding to 8140 producers. Internal rules and the allocation of responsibilities within PGSs vary considerably from one case to another.
3. Innovative public policies. Two African countries have organic legislation and corresponding national implementing bodies (Tunisia and Morocco). The Economic Community of East Africa has approved the East African Organic Standard (EAOPS), which is administered by the national organic movements in that region. An organic technical standard has also been adopted by the African Organization for Standardization and African Union Heads of State have adopted the Ecological and Organic Agriculture Initiative (EOA), which supports policy development in member countries. The current public policy challenge facing African countries is to support both export and domestic markets for organic products that provide economic opportunities for producers, reward ecosystem conservation and protect the health and safety of local consumers. Beyond the strictly regulatory aspects, for organic agriculture to develop, public policies must support the development of a variety of production systems and markets in this field, while eliminating the various policies (agricultural or not) that have disincentive effects.

**Discussion:** These three institutional innovations offer insights into the possibilities for scaling up the organic sector. As part of our participatory evaluation of institutional innovations over the next three years, we will further identify synergies among innovations and possible impact pathways where engagements between investments in production and innovation in markets, guarantees and public policies can lead to a change in the scale of organic agriculture. Specifically, we will discuss the range of territorial market types currently operating for organic in the three countries and the innovations that are being developed. We will explore the range of organizational and control practices found in the PGS across the three countries and elaborate a comparative analytical framework. Finally, we will explore the incentivizing (and disincentivizing) effects of the existing policy instruments used in the three countries. We bring these elements together for the paper presentation in Rennes in order to explain the proposed methodology for studying institutional innovations.

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