TAFS Project "Agroecological transitions for sustainable food systems: arguments for public policies"

Initiatives and policies for the agroecological transition of food systems: lessons from ten countries of the Global South

Final report of TAFS project step 1 (national policy survey)

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Introduction

This report presents the results of the first stage of the TAFS[1] project (Agro-Ecological Transitions for Sustainable Food Systems: Arguments for Public Policies) coordinated by the Centre de Coopération Internationale en Recherche Agronomique pour le Développement - CIRAD and implemented by several partners in ten countries in Africa, Latin America and Asia[2].

[1] The first phase of the TAFS project was co-funded by CIRAD and the French Ministry of Foreign Affairs through the CGIAR and the Viability Initiative through TPP Agroecology (https://www.cifor-icraf.org/agroecology-tpp/).

[2] The partners for each of the countries studied during the first stage of the TAFS project are Cape University - COE in South Africa, Université de Ouagadougou and INERA in Burkina Faso, IER in Mali, GSDM in Madagascar, ENDA Pronat and ISRA-BAM in Senegal. INTA and Conicet in Argentina, UFRGS-PGDR and UFRRJ-CPDA in Brazil, CIAT in Colombia, National University, Faculty of Agronomy in Laos and VAAS Vietnam Academy of Agriculture Sciences in Vietnam.

The main objective of the TAFS project was to provide decision-makers with convincing arguments for formulating and constructing public policies in favour of the Agro-Ecological Transition (AET) of food systems at territorial level (Stassart et al, 2012; Gliessman, 2016; Lamine, 2020). The arguments are based on scientific evidence, field data and practical experience. They correspond to three main challenges of the Agroecological Transition (AET): i) the year-round supply of sufficient, accessible, diversified, nutritious and healthy food for rural and urban populations; ii) the generation of jobs and decent incomes for farmers and their families and; iii) the sustainable management of natural resources at agricultural and regional level in the context of climate change.

The project drew on this knowledge to stimulate collective reflection on the instruments of public action and to co-construct, with decision-makers and territorial stakeholders in the food system, a strategic vision of the transition to sustainable food systems based on agroecological practices (Gliessman, 2016; Lamine, 2020).

In addition to the introduction and conclusion, this article is structured in three main parts: i) the methodological and theoretical approach, ii) a cross-sectional analysis of WT initiatives and policies in the ten countries studied and, iv) a discussion of the results in terms of the process of institutionalisation and implementation of WT policies.

1-Methodological and theoretical approach

The questions at the origin of the TAFS project were to understand how different types of WT emerge on a national or regional scale and what factors or associated transition trajectories contribute to institutionalising specific representations of WT (Mzoughi & Napoleone, 2013).

Our hypotheses considered that in Southern countries, the institutionalisation of WT depends both on the political regime and on international cooperation, on the one hand, and, on the other hand, the dominant model of conventional agricultural public policies constitutes the main obstacle to WT processes. On this basis, the common objective was to provide arguments for the formulation and construction of public policies in support of WT at territorial and national levels.

The ecological impacts of industrial agricultural development, the marginalisation of family farmers generated by industrial agriculture and, more recently, the growing development of nutritional problems have largely contributed to the recognition of a new approach to agricultural development based on agroecology (Altieri, 2018; Dale, 2020) . This critical approach to the Green Revolution gradually entered the public domain from the 1990s onwards through the discourse on the need for ecological transition (Altieri, 1989; Gliessmann, 2000). It has become a central area of intervention for cooperation agencies (Pavageau et al., 2020; Achterberg and Quiroz, 2021), as well as an important reference for public policies in several countries and even in several decentralised public entities (federated states, provinces or cities) (Guéneau et al., 2019; Sabourin et al., 2017). Although few countries have developed specific agro-ecological policies, a growing number of public actions incorporate guidelines and instruments to support the agro-ecological transition (Place et al., 2022).

The theoretical and methodological framework is that of public action (Hassenteufel, 2010 and 2011) and political sociology, with the concepts of agenda and windows of opportunity (Kingdom, 1995). To collect and process the data, we used the Lascoumes and Le Gales (2012) grid with the five components of public action (actors, interrelations, ideas, institutions, results).

We put forward the complementary hypothesis that political regimes and international cooperation have an influence on the trajectories of agroecological transitions at national level, but that this

influence depends above all on the initiatives and pressures or demands of organised civil society and social movements (Sabourin et al., 2017).

Data was collected through national and territorial studies in the ten countries, showing a diversity of situations in terms of institutional trajectories, AET initiatives and AET support processes or policies. The methodological challenge was to support the process of creating public policies based on the current performance of agroecological production systems at territorial level (stage 2) and on the desirable futures of agroecology-based food systems, as defined by stakeholders. The use of foresight tools (stage 3) is at the heart of the process of building policy arguments: the aim is to identify the desirable visions of TAE shared by the stakeholders and to identify the constraints to be removed and the public policy actions and instruments to be implemented to achieve this objective.

By applying a common methodology, the results can be systematised and generalised by sharing experience and good practice between countries. The wide range of countries and contexts facilitates cross-cutting (rather than comparative) analysis of data and specific knowledge on WT processes. It highlights how ad hoc and adapted policy instruments can provide decisive support for sustainable food systems in the short and long term.

Step 1, which corresponds to the content of this article, focused on the analysis of the agro-ecological transition and its institutionalisation at national level. It documented what is meant by agroecology and WT in each of the countries studied, identifying the debates surrounding the representation of WT. It also provides information on the ways in which WT has been institutionalised as a function of social movements, their political opportunities and the structural elements of existing policies.

A common analysis grid has been applied in each country. It is based on the sociological analysis of the components of public action proposed by Lascoumes and Le Gales (2012). It refers to the analysis of the main WT actors, their relationships, the set of ideas, references, institutions and existing public policy instruments (see Figure 1).

Figure 1: Analysis and information collection grid Source: Authors (2020) based on Lascoumes and Le Galés (2012)

1. STAKEHOLDERS: Which stakeholders/institutions are in favor (or against) TAE?
o Identification and typology of actors (description of actors and their activities, their technical, financial and political resources, their proximity to power and their capacity for mobilization...)
o Function and role of certain key actors.
2. INTERACTIONS BETWEEN PARTICIPANTS:
o Interest groups, coalitions and networks; controversies, tensions or conflicts
o Spaces for discussion or negotiation between interested parties
3. IDEAS/REPRESENTATIONS: What are the different views and narratives of TAE in the public debate and in existing legislation and regulations?
o Definitions and concepts used to characterize and support TAE
The main solutions proposed to support TAE
o TAE narratives/representations.
4. INSTITUTIONS: rules, standards and policy frameworks
o Brief historical context (existing agricultural or food policies and projects that promoted or hindered TAE).
o Critical moments in TAE's trajectory.
5. RESULTS in terms of INSTRUMENTS: What forms of public action were implemented to promote or hinder TAE?

Our study covered 10 countries in Africa (Madagascar, Mali, Burkina Faso, Senegal, South Africa), Latin America (Brazil, Argentina, Colombia) and Asia (Vietnam and Laos) (see Figure 2). In each of the countries, data was collected through desk reviews of existing documentation and communication interfaces (websites), online surveys, open-ended interviews with relevant stakeholders from

government, the private sector and NGOs involved in agroecological practices and in the implementation of initiatives or policies in agroecological policy formulation processes.

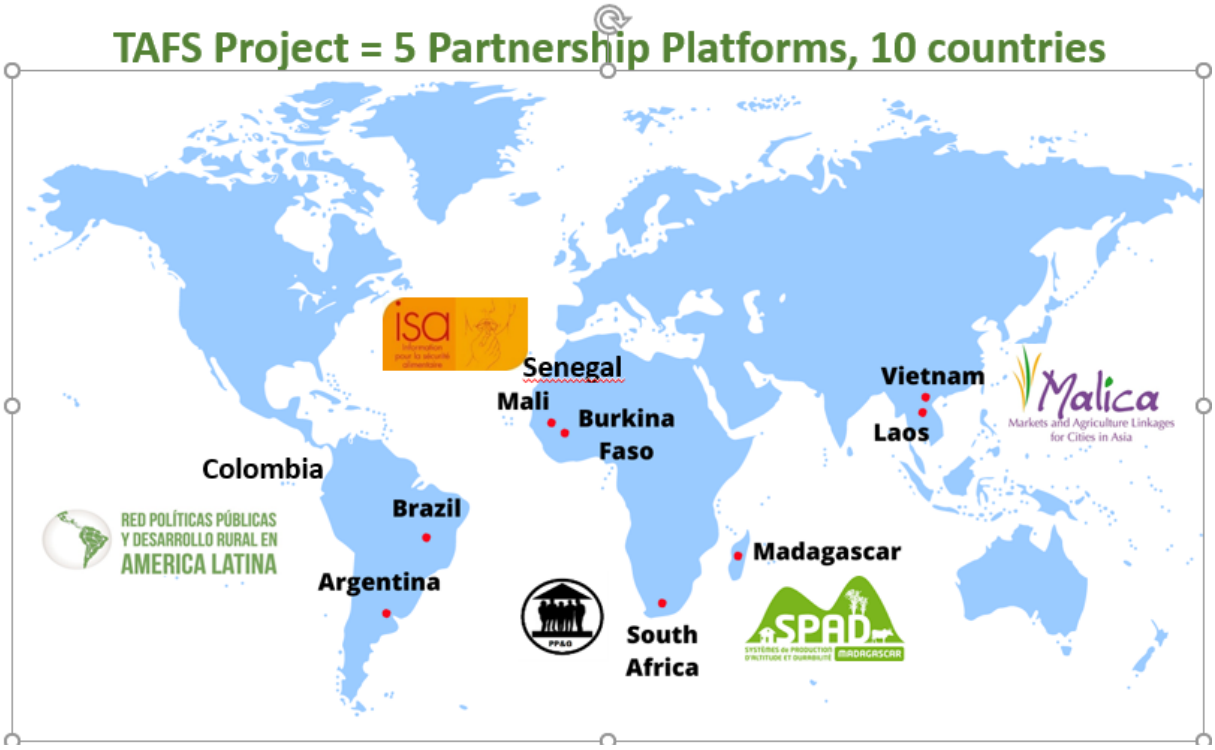

Figure 2: Location of partners and countries participating in the studies.

In each country, the data was collected and synthesised in a report and summarised in policy briefs for decision-makers. These reports include: i) an analysis of the different dominant and alternative visions of the agroecological transition; the identification of the main actors, interest groups and networks that support the AET, as well as its main opponents; ii) a study of existing initiatives, policies and projects for the development of agroecology with reference to the general policy scenario; iii) an analysis of the main types of agroecological practices and associated food systems; iv) the main policies and instruments in favour of the AET and, finally, v) the identification of the main constraints to the agroecological transition.

The reports were then discussed collectively by the authors and co-authors from each country, in order to highlight, from a comparative and cross-cutting perspective, the main elements influencing the institutionalisation of agriculture in the different countries: the conception of agroecology supported by the most influential players, the nature of the configurations between key players, the institutional processes and the public policy instruments, particularly those linked to the political regime and the international aid system.

2. Cross-sectional analysis of the construction of AET policies

2.1. Conceptions and visions of AET

The definition of agroecology is, to a large extent, a process of conceptual - and, in some cases, political - construction carried out by the various players involved. This process reflects the specificities of local and regional contexts, as well as the interactions between the various players, their dominant ideas and the political and institutional frameworks in place. Conceptions of agro-ecology, and the paths towards its institutionalisation, vary widely according to these factors, and are adapted to meet local needs and realities. In international dialogue forums, it is common for projects to promote broad conceptions of agroecology and sustainable food systems (Loconto & Fouilleux, 2019; Di Roberto et al. 2023). This generality, in turn, gives national and sub-national actors considerable scope to interpret and prioritise specific approaches according to context.

The results indicate three major conceptions or paths of AET in the ten countries: agroecology, organic farming and sustainable agriculture. Only organic production has a common definition and institutionalisation, marked by organic certification processes and an international federation (IFOAM). Agroecology and sustainable agriculture have several sub-types within each category.

In Latin America, agroecology proposes a radical transformation of agricultural and food systems and opposes the conventional export-oriented model, considering that this transformation is necessary to face environmental and social challenges (Wezel et al, 2014). Agroecology shares two principles with organic farming: producing while protecting ecosystems and rejecting inputs that are not derived from organic processes. But Latin American agroecology also advocates greater autonomy for producers in upstream and downstream markets, and stresses the importance of recycling in agricultural systems. It aims to transform the agri-food system and relations between producers and consumers, by proposing short circuits linking food security and food sovereignty on a regional scale. In addition to the technical dimension of agricultural production, agroecology offers a holistic approach combining social, environmental, economic and cultural aspects. In Argentina, a number of agroecological initiatives were launched in the wake of the 2001 financial crisis, notably 'extensive' agroecology on medium-sized farms. In South Africa, 'grassroots' agroecology is associated with the campaign for food sovereignty alongside a more entrepreneurial vision of organic farming.

In African and Asian countries such as Laos, Madagascar, Senegal, Burkina Faso and Mali, AET is not characterised by the replacement of intensive conventional agriculture with an ecological model aligned with the principles of nature. Rather, it is an *ecological intensification*[3] (Griffon, 2013) of traditional peasant agriculture, which has historically operated with few or no external inputs, often limited to cash crops. Although less dependent on chemical inputs, these traditional systems were not free from environmental impacts such as deforestation, slash-and-burn, soil erosion and, in some cases, pesticide contamination (Cesaro, 2020; Debar, 2020). This ecological intensification approach seeks to improve the efficiency of traditional systems, adapting them to current demands without compromising natural resources. Despite the specificities of each country, public policies in favour of AET tend to favour essentially technical approaches, targeting specific production units or commodity chains, while socio-political aspects, such as equity in access to resources and community participation, are often relegated to second place (Milhorance et al. 2024). In this context, governments often give priority to rationalising the use of chemical inputs, introducing bio-inputs and providing technical training through subsidies and training programmes. This corresponds to one of the paths towards

[3] The idea behind the notion of ecological intensification is to develop agricultural production systems that make intensive use of the biological and ecological processes of ecosystems and their natural functions, rather than making intensive use of inputs (fossil fuels, chemical fertilisers, pesticides), as was the case during the green revolutions and other agricultural modernisation (Griffon, 2013).

sustainable agriculture observed in Brazil and Argentina (Niederle et al, 2022; Patrouilleau et al, 2022). These strategies reflect a functionalist vision of AET, which favours practical and immediate solutions to environmental and production problems.

South Africa, on the other hand, presents a different configuration, where agroecology takes two main forms. The first is a community-based approach, associated with campaigns for food sovereignty and the fight against dependence on external inputs. It seeks to strengthen the resilience of local communities through agro-ecological practices that promote the collective management of resources and production for local consumption. The second component is more oriented towards corporate production, integrated into the organic farming model, with a focus on certification and access to export markets. This duality reflects the coexistence of different interests and priorities within the South African agricultural sector, highlighting the challenges of aligning agro-ecological policies with the demands of global markets (Greenberg and Drimie, 2021).

Organic farming, promoted by IFOAM and other organisations in the sector, presents a clearer and more consolidated definition of the transition process based on the exclusion of synthetic inputs in favour of 'natural' alternatives. This approach is governed by strict certification systems, which guarantee compliance with specific standards and provide access to differentiated markets. The majority of organic producers are family farmers, but there are also family entrepreneurs and export-oriented businesses. For these players, certification represents a market opportunity and a way of adding value to their products (Audet and Gendron, 2011).

Sustainable agriculture, on the other hand, is not really a new alternative. It is an approach that is broad enough to incorporate pre-existing practices and concepts, often developed as part of previous sustainable natural resource management initiatives. This approach does not directly challenge conventional intensification, but integrates agro-ecological practices supported by financial incentives such as conditional credits and subsidies, for example as payment for environmental services.

In West Africa, the term 'sustainable land management' has been in use since the 2000s, mainly associated with technical assistance and rural extension initiatives, without the development of specific policy instruments. These practices include soil conservation, integrated water management and alternative pest control practices. In Senegal, for example, a distinction is made between initiatives aimed at protecting, restoring or creating the conditions for sustainable management of natural resources such as water, soil, forests and fisheries, which are fundamental to food production. These initiatives include community-based forest management, assisted natural regeneration (ANR), fisheries resource recovery, community-based pastoral resource management and integrated water resource management. Although not new, these approaches illustrate how sustainable agriculture can be mobilised to address contemporary environmental challenges at different scales (Milhorance et al., 2022b).

In Latin America, sustainable agriculture practices are complemented by strategies to promote environmental services (for water, forest and biodiversity conservation, see Ezzine de Blas et al, 2017) or adaptation to climate change, such as the *Climate Smart Agriculture* (CSA) proposal applied in Colombia and Brazil (Osorio Garcia et al, 2019). The CSA concept brings together integrated strategies to boost climate adaptation, environmental impact mitigation and agricultural productivity, with the aim of increasing producers' incomes and guaranteeing food security. However, CSA is the subject of considerable debate, particularly with regard to the definition of concrete instruments for its implementation. Caron and Treyer (2016) point out that the CSA tends to depoliticise climate debates, as solutions presented as *win-win-win* mask the fact that crucial issues often require political arbitration, in contexts where actors have unequal access to resources. In Brazil, private agribusiness associations, in partnership with the Ministry of Agriculture, have promoted integrated strategies that

combine climate adaptation, mitigation and productivity enhancement, based on the CSA concept. However, in practice, the adaptation programme has gained in importance, due to the potential for increasing productivity, while mitigation efforts have taken a back seat. Mitigation, combined with the control of deforestation and the application of environmental standards, has met with resistance from various agribusiness players, who have traditionally opposed these measures (Milhorance et al., 2022a).

As a result, the concept of CSA, although compatible with notions of sustainable agriculture, has been selectively appropriated, favouring productivist interests to the detriment of a more balanced approach committed to environmental sustainability. Unlike agroecology, which takes a holistic approach and encompasses social, cultural and environmental dimensions, sustainable agriculture tends to focus primarily on environmental sustainability. Sustainable agriculture is promoted by governments concerned with preserving soils, reducing pesticides and mitigating environmental impacts, reinforcing the technical and functionalist approach to sustainability.

2.2. The key players

The construction and implementation of AET reflects a complex interaction between multiple actors, each playing a specific role according to its interests, capacities and socio-political context. These actors include civil society organisations, the private sector, governments at different levels, international cooperation agencies and research institutions, which together shape the local, national and international dynamics of promoting agroecology. The way in which these players interact directly influences the concepts, agendas and policies relating to AET.

Civil society organisations play a central role in all the countries studied, being responsible not only for influencing public policy but also for implementing local initiatives. Producer associations, agro-ecological movements, technical NGOs and consumer organisations are at the heart of this action. In Latin America and West Africa, peasant agroecology, with its emphasis on food sovereignty, is promoted as an alternative to the conventional export-based model. These organisations advocate practices that prioritise resource recycling, farmer autonomy and the transformation of production and marketing relationships on a territorial scale (Sabourin et al, 2018).

In Senegal, for example, the NGO ENDA-Pronat has played a pioneering role since the 1980s, promoting pesticide substitution and experimental agroecological practices. These efforts are complemented by major events, such as the IFOAM conference in Burkina Faso in 1989, which consolidated the role of agroecology in West Africa (Milhorance et al, 2022b). In countries such as Laos, Madagascar and Vietnam, civil society often acts as a beneficiary of international cooperation programmes, which may limit its ability to promote a more radical agroecology adapted to local contexts (Gueneau and Xiong, 2022; Raharison, 2022). In the South African context, the dynamics are different. Agroecology is associated with both community food sovereignty campaigns and commercial initiatives aimed at certified organic production. This duality reflects the tensions between a community-based model and a market-oriented approach, highlighting the challenges of aligning diverse interests in the same production system (Greenberg and Drimie, 2021).

Governments, at their various levels, also play a crucial role in promoting AET. In addition to funding international cooperation programmes, some countries, such as Argentina, Brazil and Senegal, have implemented specific legislation and instruments to promote agroecology. In Brazil, for example, policies such as the National School Food Programme (PNAE) encourage agroecological practices by promoting the direct purchase of food from family farmers. In Senegal, Macky Sall's re-election in 2019 marked a turning point with the launch of the 'Green PSE' (Emerging Senegal Green Plan), which included agroecology in its political programme. This movement has been supported by broader coalitions, such as the Dynamique pour la Transition Agroécologique au Sénégal (DyTAES), which brings

together NGOs, farming unions and research institutions to promote the integration of agroecology into national strategic documents.

International cooperation agencies and global NGOs have also played an important role in promoting AET, particularly in low- and middle-income countries. Since the 1970s, sustainable agriculture initiatives such as conservation agriculture, integrated watershed management and biological pest control have been promoted with the support of bilateral and multilateral programmes. These initiatives often focus on technical solutions, but also pave the way for the adoption of more radical approaches, such as participatory certification and direct sales promoted by bilateral and international NGOs. At the same time, a large number of international, bilateral and decentralised cooperation NGOs have developed support for a more radical and territorialised peasant agroecology, based in particular on direct sales and participatory product certification (Lemeilleur et al., 2022).

The private sector plays a variable role in AET, depending on the country and its economic structure. In Brazil, Colombia, South Africa and Madagascar, 'green agribusiness' companies have invested in organic production, particularly for export. These companies adopt agroecological practices, but generally as part of a model geared towards global markets and heavily dependent on international certification. In Argentina, a distinction is made between 'extensive agroecology', practised by medium-sized farmers (50 to 600 hectares) who combine mixed farming and livestock to supply local and national markets (Sosa Varroti et al, 2024). However, in countries such as Burkina Faso, the private sector's presence in WT is less expressive, although there are emerging initiatives in the market for organic inputs and practices associated with sustainable agriculture (Medina, 2022).

Research institutions, for their part, contribute directly or indirectly to AET, given that agroecology is conceived as an applied science based on the paradigm of agroecological systems (Gliessman, 2018). In Brazil, networks such as the National Articulation of Agroecology (ANA) play a key role in articulating academic communities, farmers and social movements, generating technical and policy knowledge to support agroecological practices. In Senegal, DyTAES integrates researchers as key actors, promoting evidence-based policies. In addition, TaFAé (Task Force for the Promotion of Agroecology) has played an important role in sharing technical experiences and formulating projects to raise funds, although it has faced limitations due to a lack of political legitimacy. In South Africa, research institutes have studied not only the technical aspects of agroecology, but also its socio-economic implications, thus contributing to a more integrated vision of AET (Greenberg and Drimie, 2021).

The promotion of AET is, therefore, the result of a complex web of interactions between different types of actors, each bringing different perspectives and priorities. While social movements and NGOs often lead more transformative initiatives, the private sector and governments tend to adopt more technical and market-oriented approaches. International agencies and research institutes complement these efforts by providing funding, technical expertise and political legitimacy. This diversity of players and approaches reflects the many possible configurations of AET. Conceptions and practices of WT are therefore profoundly influenced by the dynamic interactions between these actors, which shape political agendas and implementation strategies at different scales.

3. The process of constructing AET policies

The construction of AET policies is a process influenced by factors such as the institutional structure of each country, the presence of certain key players and the interaction with international cooperation systems and consumer markets (Achterberg & Quiroz, 2021; Le Velly et al, 2023). AET, as a concept and practice, is translated in different ways in different national contexts, reflecting both local dynamics and the influences of global agendas. These processes are often marked by contradictions and tensions, including institutional fragmentation, competition between actors and the coexistence of market-oriented approaches and civil society-led initiatives.

3.1 Defining policy agendas: coalitions, institutions and funding

The definition of AET policy agendas varies considerably depending on the actor or institution promoting the translation of the conceptual proposal and instruments in each country, as well as on the degree of dependence on international funding. It should be noted that in the countries of the South, AET was profoundly shaped by international cooperation long before the emergence of public policies explicitly aimed at this objective. This initial role was played by non-governmental initiatives, often religious in nature, inter-university partnerships and rural education and extension programmes. Some of these actions, which began more than fifty years ago, preceded the involvement of major multilateral organisations such as the United Nations, decisively influencing the spread of agro-ecological practices and the formation of stakeholder networks at local and global level (Pavageau et al., 2020).

In the countries of West Africa, Madagascar and certain regions of Asia, the influence of international cooperation remains significant.

In these contexts, particularly in African countries, agroecology has been widely disseminated through projects funded by international organisations, which have played a central role in introducing and promoting agroecological practices. However, this does not mean that agroecology was non-existent in these regions. Practices aligned with the principles of AET already existed, but under different definitions or as part of traditional farming systems. The example of Pierre Rabhi's work in Gorom-Gorom, a Sahelian region of Burkina Faso, in the 1980s is emblematic in this respect and for the promotion of agroecology in the region. There is still a debate surrounding what is known as 'natural agroecology', which is often idealised as inherent to contexts where the limitation of chemical inputs is due to economic or structural constraints. Small-scale farmers, particularly the younger ones, reject the romantic notion of purely subsistence farming, based on self-consumption, manual labour by the family and the sale of surpluses. Instead, they are demanding technological innovation, mechanisation and intensification of production to ensure decent incomes and raise their levels of consumption and investment (Pavageau et al., 2020).
In Burkina Faso, the development of the National Strategy for the Development of Agroecology (Stratégie nationale pour le développement de l'agroécologie - SNAE) in 2020 marked an important step in the integration of agroecology into the political agenda at national level in West Africa. Supported by international agencies such as the French Development Agency, this strategy has faced challenges linked to disagreements between civil society players and the government over the use of chemical inputs. These disagreements are compounded by ideological differences over the use of chemical inputs versus exclusively organic practices (Medina, 2022). In addition, the military junta installed in 2022 generated political instability in the country and changed the direction of the debate on agroecology, reviving the narrative of the legacy of President Thomas Sankara who, in 1987, had already introduced agroecological elements into his national policy, associating WT with a narrative of resistance and national sovereignty. In 2023, an agreement between civil society actors formalised the idea of 'rational use' of chemical inputs, representing a step forward in the debates and the construction of the SNAE. Despite this, the implementation of the SNAE remains limited by political instability, terrorism, which hampers the implementation of policies at local level, and the population's growing resistance to dependence on international cooperation.

Mali presents a similar case to Burkina Faso. The integration of agroecology into political strategies has been led by civil society and international cooperation since the 2010s, given the limited involvement of the national state outside the cotton sector. Local groups, particularly on the outskirts of Bamako, are demonstrating their dynamism by adopting agroecological practices and organising marketing systems, often supported by international NGOs that provide technical and financial resources. Despite these efforts, the absence of an overall national strategy and the lack of inter-institutional coordination

are reducing the scope of AET initiatives, making it difficult to consolidate them on a national scale (Alpha et al. 2022). The political changes that took place in 2020, when a coup d'état overthrew the government of the then president, Ibrahim Boubacar Keïta, and in 2021, with a second coup d'état that consolidated military power, further affected the ability to promote AET. As a result, there was a significant reduction in international cooperation projects, reflecting the political instability and sanctions imposed by various partners (Le Cam, 2022). This scenario has made foreign investment flows more uncertain, jeopardising the continuity and effectiveness of actions carried out by both civil society and local bodies.

In Madagascar, AET is led by civil society with significant support from international cooperation, which has mainly promoted conservation agriculture and no-till farming as transition strategies. However, agroecology in Madagascar remains limited to niche markets, mainly export-oriented. The lack of coordination between public policies and excessive sectoralisation - agroecology is often relegated to a peripheral role in agricultural development policies - compromise the consolidation of an integrated approach. In addition, the government's focus on large-scale farming and environmental protection (geared towards forest protection, biodiversity management and protected areas) reflects a limited vision, centred on emergency food security and the conservation of forests and protected areas (Raharison, 2022).

In Laos, government planning for AET is guided by international cooperation in the field of 'green and sustainable agriculture'. However, the lack of clarity in the final objectives and the fragmented implementation of the various plans and programmes limit the coherence of policies. The mobilisation of external resources is pragmatic, but the lack of fine coordination between projects funded by different donors compromises the integration between local and national initiatives. This difficulty of coordination reflects the limitations of the state apparatus in translating international guidelines into coherent local strategies (Guéneau and Xiong, 2022).

In Vietnam, on the other hand, the scenario is marked by a more coordinated and centralised approach. The national plans financed by international cooperation give priority to reducing the use of chemical inputs, conserving natural resources (water and soil) and adapting to climate change. The capillarity and rigour of the state control system ensure greater efficiency in the implementation of policies, even if centralisation can also limit the adaptation of strategies to specific regional characteristics. This capacity for coordination demonstrates the decisive role of strong institutional structures in driving forward pragmatic, albeit mainly technical, policies aimed at sustainability (Tung, 2021).

These cases illustrate the central role of international cooperation in the development of AET policies, but also reveal its limitations. Dependence on external funding creates a dynamic that often perpetuates institutional fragmentation and competition between local players, compromising the effectiveness and sustainability of initiatives. At the same time, the lack of strategic alignment between international donors and national priorities results in policies that are disconnected from local realities and demands. Civil society plays a key role in mobilising resources and building coalitions, while the market, particularly the certified organic products segment, acts as a complementary element. This dynamic is evident in the creation of local territorial markets, including public markets, agroecological fairs and short marketing chains, as well as export networks focused on high value-added niches (Sosa Varroti et al, 2024).

In Latin America, AET policies are largely state-led, with international funding having less influence than in other regions.

Colombia is an example of how international cooperation can interact with national policies to formulate AET. It is a combination of the assertion of a desire for a national programme and the contribution of significant public resources from cooperation linked to the context of the civil war and the peace plan. This combination is reflected in four main policies: i) productive inclusion in the post-conflict scenario; ii) general clean agriculture programmes; iii) food sovereignty and family farming policies; and iv) environmental and climate change adaptation policies. Although they are all relevant, the integration of these strands at territorial level remains deficient, which compromises the effectiveness of the initiatives. The Agroecology Bill No. 544 and the Intersectoral Commission on Food Security and Nutrition (CISAN) appear to be potential instruments for strengthening AET, but a large proportion of the resources have been absorbed by agribusiness, which presents itself as 'green' by strengthening sustainable agriculture geared towards global markets. With this in mind, *production alliances* have promoted crop diversification and 'green enterprises', financially supported by the Sustainable Colombia Fund and the Sustainable Livestock Fund. These programmes, while favourable to environmental sustainability, often neglect the fundamental principles of agroecology, such as social inclusion and agrarian justice. Among structural limitations, violence in rural areas, the political power of agribusiness and difficulties of access to land are major obstacles to the consolidation of AET (Valdivia et al, 2022).

Brazil is a unique case in the panorama analysed, as it implemented the National Policy for Agroecology and Organic Production (PNAPO) between 2013 and 2018. This policy is the result of a broad coalition of NGOs, social movements and farmers' networks that succeeded in institutionalising agroecology at federal level. However, the dismantling of the PNAPO from 2019 by the Bolsonaro government has considerably weakened the institutionalisation of AET, leaving it dependent on social networks and certification mechanisms, without the support of robust public policies (Schmitt et al, 2017; Niederle et al, 2022).

In Argentina, the scenario is characterised by a combination of market-led and civil society-led approaches. In both intensive and extensive production, Argentina presents a combination of institutional approaches to AET, both market-driven (as in organic production) and civil society-driven, with a focus on agroecology applied to family farming, where NGOs and agroecological family farmer networks have organised to serve mainly specific urban markets. *Extensive agroecology* has emerged as a viable technical and economic alternative to agro-industry in the country's main crops (grains, cereals, meat), representing a strategic opportunity for alliances with small agroecological producers and their organisations (Sosa Varroti et al, 2024). However, many of these producers consider that extensive producers, when they use organic certification, are not always aligned with the fundamental principles of agroecology. Until 2023, public support was fairly patchy at national level, mainly taking the form of training, extension and research initiatives (led by the National Institute of Agricultural Technology INTA) and provincial and local government programmes, as in the case of the province of Buenos Aires which, still under the Peronist government in 2025, maintains a programme for the promotion of agroecology within the provincial Ministry of Agrarian Development. However, since the start of Javier Milei's presidency in 2024, most of the institutions and public policies supporting agroecology at national level analysed in phase 1 of the TAFS project (Patrouilleau et al, 2022) have been dismantled (Sosa Varrotti et al, 2024).

In this context, markets and consumers are also relevant factors for farmers involved in AET. It should be noted that in all the countries analysed, access to markets is considered a strategic priority. Marketing models include direct sales, public procurement, specialist supermarkets, exports and niche markets for certified products. Products such as coffee and cocoa (Brazil, Colombia, Vietnam), tropical fruits (bananas, mangoes) and value-added identity products such as vanilla from Madagascar, tea from Vietnam and rooibos from South Africa play a crucial role in the economic viability of AET. However, access to these markets is often dependent on certification, technical support and external funding, creating significant barriers for small producers.

3.2. Definition of instruments and orientation of AET

WAET can be promoted by different types of public policy instrument, whose design and implementation reflect different objectives, scales of intervention and socio-political contexts. The study produced a broad and comprehensive typology of these instruments, published by Place et al (2022). This paper adopts a pragmatic classification based on the objectives of each instrument, in line with previous studies on AET policies in Latin America (Sabourin et al., 2018; see Table 1 below).

Innovation and knowledge management instruments have three objectives: to promote horizontal knowledge sharing and experimentation (give examples from Burkina Faso, Colombia), to develop certain traditional techniques (Burkina Faso, Laos, Madagascar) and to promote ***territorial agroecological knowledge networks*** *(Ecoforte programme in Brazil, UTT in Argentina).*

As in Brazil and South Africa, ***the instruments used to guarantee access to resources*** are agrarian reform and land actions, access to water, access to credit and agricultural extension for family farmers. These actions form a solid basis for negotiating more specific agroecology programmes.

Table 1. A few examples of WT support instruments in each country

COUNTRIES	**Innovation knowledge**	**Markets and Food safety**	**Environemental regulation**	**Pesticides management**
South Africa	Regenerative farming Plan	National Food & Nutrition Security Plan	Conservation Agriculture policy	SmartAgri
Argentina	Agroecology network INTA Cambio Rural Programme	Pro-Huerta, Central Market of Buenos Aires	Conservation & use of Biodiversiy in Agroécosystems	Prohibition of Glyphosate in Prov. of Misiones
Brazil	ECOFORTE (Support to AET Networks)	Food Purchase Progr. & National Progr. for School Food	Biodiversity ans local seeds programmes	Nat. Policy for AE & Organic Production. Bio input Programme
Burkina Faso	National Strategy for Agroecology TAPSA (project)	National Policy for Food Safety	National Strategy for soil Conservation	PADITA (technical alternatives Project)
Colombia	Bill Nº 544/2021 - Agroecology	Public Food Purchase for Family farming	Green Business & Sustainable Colombia Funds	
Laos	PRONAE National Agro Ecology Programme	Strategic Plan for National Organic Agriculture	Initiative on Conservation Agriculture	Good Agriculture Practices
Madagascar	GSDM Professional for Agroecology	Food Safety National Plan	Nation.Task Force for Conservation Agriculture	Integrated Pests Management (IPM)
Mali	Nation. Plateform For Peasant Agroecology	Food Safety National Policy	Vegetable Protection Office	FAIR Project

Senegal	Dynamic of AET in Senegal DyTAES	Progr. Agriculture & Sustainable Food sovereignty	Plan to Combat Desertification	PSE Green Senegal
Vietnam	Vietnamese Good Agricultural Practices	Food safety & sustainable development Plan	Law on Environmental Protection 2014	Integrated Pests Management (IPM)

Instruments to guarantee market access and food safety include a wide range of actions. All ten countries studied have organic certification standards, largely in response to demands from importing countries. Participatory certification systems exist in Senegal, Argentina and Brazil (where there is also social control certification, administered by producer organisations). The instruments used to support short distribution channels are based on the social construction of local markets: fairs, farm shops, consumer cooperatives and farmer support communities (FSCs) in towns and cities. Other types of short circuits have become widespread in Latin America: they involve preferential public food purchasing from family farmers, with a premium price for agro-ecological or organic produce, such as the food purchasing programme and the school canteen programme in Brazil. Lastly, urban and peri-urban agriculture programmes (the ProHuerta programme in Argentina, the GAP programme in Vietnam), food security and nutrition programmes (Brazil, Senegal) and the GAP programme in Laos, or Plant Cover Systems (Systèmes de Plantation de Couverts Végétaux -SCV) in Madagascar, all have close links with agroecology.

Environmental regulations and subsidy instruments do not only concern agroecology, but also the promotion of more environmentally-friendly farming practices. They include regulation of agricultural biodiversity, genetically modified varieties and land use. Programmes to reduce pesticide use are rarely implemented in Brazil, but are more effective in Vietnam and Laos. Several countries have introduced subsidies for environmentally-friendly farming practices: this is the case of the *Green Agriculture Plan* programmes in Laos and Vietnam, for example.

Instruments can also be differentiated according to the scale of intervention: macro, national or micro (local and territorial). In countries such as Brazil, Argentina, Colombia, Burkina Faso and, to a certain extent, Madagascar, these instruments are more focused on the systemic transformation of food systems, in line with more open and participatory AET policies. In other African and Asian countries, on the other hand, the emphasis is more on input substitution and soil conservation practices and techniques, which may leave room for agricultural greening processes (Mzoughi and Napoleone, 2013).

The case of instruments aimed at reducing pesticide use

National policies that do not explicitly support agroecology include instruments that can have a significant impact: these include (food security and sovereignty, public health, local seeds) substitution instruments (bi-inputs) and reducing the use of pesticides (Meunier et al, 2023).

In *Burkina Faso,* the debate pits the practice of rational use of inputs advocated by certain agro-ecology sectors (when there is no known alternative) against the 'no input' standard advocated by organic production, which depends on certification and exports.

In *Mali* , strong public support for the cotton industry, which supplies chemical inputs and pesticides, leads to their use for other crops. Pesticides are not used on organic crops certified for export (mango, shea, green beans, etc.) by producers supported by international NGOs (Alpha et al, 2022).

In *Laos, Vietnam and Madagascar,* there are plans and programmes aimed at reducing the use of pesticides, with the support of international cooperation and significant results in terms of integrated pest management, biological control, etc. The agroecology introduced by soil conservation agriculture programmes, including direct planting, even maintains the use of glyphosate for larger-scale crops. In the case of organic horticulture, the use of defensive plants and homemade pesticide mixtures or organic inputs is encouraged.

In Brazil : The law and policy to reduce pesticide use exist, but have never been regulated and enforced, despite several attempts at regulation with the PNAPO (2013-2016). The political change led to the total abandonment of this policy and the legalisation of more than 500 previously banned pesticides in 2017 (Temer Presidency) and 2019 (Bolsonaro Presidency).

The issue of inputs and pesticides is not the same in Africa as in Latin America. In Africa, there is talk of a reduction, but use remains fairly low (Whei Zhou et al, 2025). The scale of the problem is the scale of pesticide use; contamination problems are much more serious in Latin America, in a completely different context (Meunier et al, 2024). In Asia, the cases studied in Laos and Vietnam do not correspond to countries that are major pesticide users, unlike China, India, Thailand, Indonesia or the Philippines.

A tentative typology of AET construction processes

The study reveals four main categories of public policy instruments: agro-ecological knowledge management (research, training, extension and strengthening the organisation of stakeholders); financing (credits and subsidies conditional on practices); marketing (certification, markets and fairs, public procurement); and regulatory instruments (land, environmental, phytosanitary, trade, etc.). The way in which these sets of instruments and projects are implemented depends on the combination of different translation dimensions and the development of policies for or against AET. We found 3 types among the ten countries studied, some with variants or subtypes.

Type 1. Agroecology and organic farming in liberal countries dominated by agribusiness : the dominant context is that of agribusiness and the legacy of the conventional Green Revolution model. Despite this dominant model, organised civil society is promoting agroecology and organic production initiatives with irregular and more or less marginal support from public policies, mainly focused on family farming, with some direct influence from international aid (ideas, more or less funding). South Africa, Argentina, Brazil, Colombia.

Sub-type 1.a : Identical, but with greater influence of international funding: Colombia and South Africa.

Sub-type 1.b : Identical, but with more participatory approaches and several regional or national government public instrument initiatives in favour of AET: Brazil and Argentina.

Type 2. Organic farming, agroecology and sustainable agriculture in contexts of peasant agricultural transition and weak states, with a strong influence of international aid and funding: Burkina Faso, Mali, Madagascar.

Sub-type 2.a - Capacity building for the State and civil society: Senegal

Sub-type 2.b: - Increased public support for sustainable agriculture programmes: Madagascar

Type 3: State-planned communist countries with centrally planned organic and sustainable agriculture, but high dependence on international funding: Laos, Vietnam.

To complete the study, it was also necessary to identify the actors and institutions (in the sense of regulatory bodies) that are delaying or blocking changes in favour of AET.

Clearly, in Argentina, Brazil, Burkina Faso and Mali, the change of political regime towards a more conservative and less open government has had a negative impact on AET policies. Paradoxically, and this shows the limits of public policies and national resources, these public setbacks have not prevented AET from maintaining its momentum at the level of civil society and local communities (Niederle et al, 2022).

Sometimes, international aid based on and centred on practices and technologies inherited from the Green Revolution is a factor holding back AET processes, as we have seen in Laos, Vietnam and Madagascar. Finally, there are still tensions, competitions and even conflicts between civil society organisations, mainly around the technical model (organic production, agroecology or sustainable agriculture) as in Burkina Faso, or around certification processes (South Africa, Argentina, Brazil), or water and waste management.

Conclusion

Despite their contextual differences and the specific conditions under which agroecology emerged, the cross-sectional and comparative study carried out in ten southern countries on three continents has enabled us to identify a number of common conclusions that will help us to understand the implementation of WT policies.

First of all, whatever the technical or conceptual approach adopted, building effective public policies on AET requires a combination of different actors and factors. In Latin America and Africa, where the study concentrated the most cases, the emergence of WT initiatives and policies depends above all on the mobilisation of peasant social movements and their ability to form coalitions with sectors of civil society, the state and donors, whether national or international. In these contexts, change involves a social and political dimension that transcends the merely technical. In Laos and Vietnam, on the other hand, the centralisation and state planning characteristic of their political systems place the state at the centre of decision-making. Despite this, bilateral, international and non-governmental funding agencies play a crucial role in translating and promoting innovations, mainly at the technological level.

Secondly, AET public policies, where they exist, generally have limited resources and a restricted scope, reflecting weak institutionalisation. As a result, these policies are likely to be dismantled following political and electoral changes, as observed in Brazil under the Bolsonaro government and in Argentina under the Macri and Milei administrations (Niederle et al., 2022; Sosa Varroti et al., 2024). Paradoxically, even in these unfavourable scenarios, AET has shown resilience at the level of civil society and local authorities, highlighting the limits of public policies and the strength of territorial actors.

Thirdly, although international aid is often essential to make AET viable in countries with limited national resources, it can in some cases perpetuate models based on the Green Revolution. This approach can limit innovation and paradigmatic or socio-organisational change, as seen in Laos, Vietnam and Madagascar (Achterberg & Quiroz, 2021).

Finally, AET is often confronted with tensions, competitions and even conflicts between civil society organisations. These conflicts may stem from ideological differences or convictions about the most appropriate technical model - for example, organic production, agroecology or sustainable agriculture, as in the case of Burkina Faso. They may also relate to certification processes, with conflicts between third-party certification (predominant in South Africa and Madagascar), participatory certification (Argentina, Brazil and Colombia) and non-certification initiatives promoted by agroecological movements. In Brazil, the innovation of social control by producer organisations stands out, enabling direct sales and public purchases by the State. In addition, tensions linked to water and waste management are observed in different contexts, such as Argentina, Vietnam, Colombia and Madagascar.

The study reveals a diversity of conceptions, trajectories and instruments, indicating multiple AET strategies. The application of a common analytical framework has enabled us to understand how the processes of policy implementation and institutionalisation of AET oppose the dominant model of conventional agriculture, based on the paradigms of the Green Revolution. Alternatives to agroecology, in this sense, cannot be limited to the systematic adoption of minimalist practices or to the simple transposition of radical approaches, such as the sustainable transformation of food systems promoted by Latin American agroecology, to diverse contexts such as those of Africa and Asia.

In this context, it is clear that there are no universal solutions for AET that can be applied consistently in different contexts. It is essential to adopt a flexible approach, capable of adapting policies and instruments to local conditions and opportunity structures, as well as to institutional weaknesses. This adaptation requires the use of open, inclusive and participatory instruments that dialogue with territorial realities and strengthen the autonomy and protagonism of local communities in the agro-ecological transition.

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References

Achterberg , E. & Quiroz , D. (2021). Fonds d'aide au développement pour l'agroécologie. Profond.

Alpha, A. ; Soumare, M. ; Dedieu, C. ; Sidibe, O. ; Sanogo, K. (2022) La faiblesse des politiques publiques de soutien à l'agroécologie au Mali, Montpellier, CIRAD, TAFS,

Audet R.; Gendron, C. (2011) IFOAM and the institutionalization of organic agriculture in A Reed, D. Reed & P. Utting (Eds) Business Regulation and Non-State Actors, London, Routledge,

Altieri, M A (1989) Agroecology: A new research and development paradigm for world agriculture. *Agriculture, Ecosystems & Environment*, 27(1-4), 37-46.

Altieri, M A. (2018) Agroecology: the science of sustainable agriculture. CRC Press.

Altieri, M A et Nicholls, C I (2012). Agroecology scaling up for food sovereignty and resiliency. *Sustainable Agriculture Reviews*: Volume 11, 1-29.

Caron, P. ; Treyer, S. (2016) « Climate-Smart Agriculture and International Climate Change Negotiation Forums ». In Climate Change and Agriculture Worldwide, TORQUEBIAU E. (Ed), 325 36. Dordrecht: Springer, https://doi.org/10.1007/978-94-017-7462-8_25

Cesaro, J. D. (2020) Transformation des agricultures en Asie du Sud-Est : la paysannerie face aux défis de la mondialisation. In *Géoconfluences, dossier L'Asie du Sud-Est, carrefours et confins,* 26 p. http://geoconfluences.ens-lyon.fr/informations-scientifiques/dossiers-regionaux/asie-du-sud-est/articles-scientifiques/agricultures-mondialisation

Dale, B. (2020). Alliances for agroecology: From climate change to food system change. *Agroecology and Sustainable Food Systems*, 44(5), 629-652. 2020

Di Roberto, H., Milhorance, C., Sockhna Dieng N. ; Sanial, E. (2023) L'agroforesterie en contexte post-forestier : perspectives et controverses d'une mise à l'agenda politique en Côte d'Ivoire ». Bois & Forets des Tropiques N° 356, 2023 : 81-91. https://doi.org/10.19182/bft2023.356.a37121

FAO (2018) Les 10 éléments de l'agroécologie - Guider la transition vers des systèmes alimentaires et agricoles durables, FAO, Rome - https://openknowledge.fao.org/server/api/core/bitstreams/3d7778b3-8fba-4a32-8d13- f21dd5ef31cf/contenu

Giraldo, O. F. et Rosset, PM (2018). Agroecology as a territory in dispute: Between institutionality and social movements. The Journal of Peasant Studies, 45(3), 545-564.

Gliessman, S. (2000). Agroecologia: processos ecológicos em agricultura sustentável. Porto Alegre: Universidade Federal do Rio Grande do Sul, 2000.

Gliessman, S. (2016) Transforming food systems with agroecology. In *Agroecology and Sustainable Food Systems*, Vol. 40, pp. 187-189.

Greenberg, S.; Drimie, S. (2021) The state of the debate on agroecology in SouthAfrica. A scan of actors, discourses and policies. TAFS phase 1 report. CoE-FS-SAFL, https://compar.cirad.fr/en/content/download/4332/33083/version/1/file/TAFS_Policy+Brief+%231-Policy+landscape_OCT2022.pdf

Griffon, M. (2013) *Qu'est-ce que l'agriculture écologiquement intensive* ? Paris, Édition Quae Collection : Matière à débattre et décider, 224 p.

Guéneau, S.; Xiong, M. (2022) The Institutionalisation of Agroecology in Lao PDR, Montpellier, CIRAD Policy Brief TAFS, https://compar.cirad.fr/content/download/4314/33011/version/1/file/Policy+Brief+Agroecology+Laos.pdf

Hassenteufel, P. (2008). Sociologie politique : action publique, Paris, Armand Colin, 294 p. CollectionU.

Hassenteufel P. (2011). L'action publique comme construction collective d'acteurs en interaction. Dans : Hassenteufel P. Sociologie politique : *l'action publique*. Paris : Armand Colin, p. 115-156.

HLPE. (2019). Approches agroécologiques et autres approches innovantes de l'agriculture et des systèmes alimentaires durables qui améliorent la sécurité alimentaire et la nutrition. Groupe d'experts de haut niveau sur la sécurité alimentaire et la nutrition.

Kingdon, JW (1995). Agendas, alternatives et politiques publiques (2e éd.). Longman, MI L'Université du Michigan.

Lamine C. (2020) . Sustainable Agri-food Systems : Case Studies in Transitions Towards Sustainability from France and Brazil, Bloomsbury Publishing, 208 p. 2020

Lascoumes P. ; Le Gales P. (2012) Sociologie de l'action publique. Maceió, Edufal, ISBN : 9788571777033

Lemeilleur, S., Dorville, C., Niederle, P. et Ilbert, H. (2022). Analyzing institutional changes in community-based management: a case study of a participatory guarantee system for organic labeling in Brazil. *Journal of Institutional Economics*, 1-17. 2022

Le Cam, M. (2022) « Mali : la France suspend son aide au développement dans un contexte d'isolement croissant de Bamako ». Le Monde, 17 novembre 2022. https://www.lemonde.fr/afrique/article/2022/11/17/mali-la-france-suspend-son-aide-au-developpement-dans-un-contexte-d-isolement-croissant-de-bamako_6150304_3212.html

Le Velly G.; Goulet F.; Dufeu I., Loconto A., Niederle P. (2023) When markets make agroecologies: Empirical evidence from downstream and upstream markets in Argentina, Brazil and France. *Journal of Innovation Economics and Management* (42) : 21-42 : 2023. https://doi.org/10.3917/jie.pr1.0146

Loconto, A. M.; Fouilleux, E. (2019) « Defining Agroecology: Exploring the Circulation of Knowledge in FAO's Global Dialogue ». The International Journal of Sociology of Agriculture and Food 25, no 2 , 2019: 116 37. https://doi.org/10.48416/ijsaf.v25i2.27

Medina, C. (2022) Analyse de la dynamique institutionnelle autour de l'agroécologie au Burkina Faso. Etat des lieux des politiques publiques, acteurs et discours. Rapport d'étude du projet FAIR-Sahel. Montpellier, CIRAD, Juillet 2022.

Meunier, E. ; Smith, P. ; Griessinger T.; Robert, C. (2024) Understanding changes in reducing pesticide use by farmers: Contribution of the behavioural sciences, Agricultural Systems, Vol. 214, 2024, 103818, https://doi.org/10.1016/j.agsy.2023.103818

Milhorance, C. ; Howland, F. ; Sabourin,E. ; Le Coq, J.F. (2022 a) « Tackling the implementation gap of climate adaptation strategies: understanding policy translation in Brazil and Colombia ». *Climate Policy*, 14 juin 2022, 1 17. https://doi.org/10.1080/14693062.2022.2085650

Milhorance, C., Camara, A.D. ; Sourisseua J.M., Piraux, M. ; Mane, C. ; Sirdey, N. ; Belmin, R. ; Ka D.Y. ; Sall M., Anta Sall M.C. (2022b) L'intégration de l'agroécologie dans les politiques publiques du Sénégal. Dakar: ISRA-Bame; CIRAD, novembre 2022

Mzoughi, Naoufel et Napoléone, Claude (2013) Introduction. L'écologisation, une voie pour reconditionner les modèles agricoles et dépasser leur simple évolution incrémentale. *Natures Sciences Sociétés*, pp. 161-165.

Niederle. P., P. Petersen, E. Coudel, C. Grisa, C. Schmitt, E. Sabourin, E. Schneider, A. Brandenburg, C. Lamine, (2022). Ruptures in the Agroecological Transitions:

Institutional Change and Policy Dismantling in Brazil, J*ournal of Peasant Studies*, 50, 2022 https://doi.org/10.1080/03066150.2022.2055468

Osorio-Garcia A. M., L. Paz, F. Howland, F., Ortega, I.; Acosta Alba,L., Arenas, N.; Chirinda, D. Martinez Baron, O.; Bonilla F., Loboguerrero A.M., Chia E, Andrieur, N. (2019) Can an innovation platform support a local process of climate-smart agriculture implementation? A case study in Cauca, Colombia, *Agroecology and Sustainable Food Systems*, DOI: 10.1080/21683565.2019.1629373

Pavageau, C., Pondini, S. et Geck, M. (2020). Flux d'argent : qu'est-ce qui freine l'investissement dans la recherche agroécologique pour l'Afrique ?

Patrouilleau M. M. ; Sosa Varroti, A.P. ; Goites, E. ; Toso, F.H. (2022) Analysis of Agroecological Transition at the national level in Argentina, Buenos Aires, INTA, TAFS Report 1,

Place, F., Niederle, P., Sinclair, F., Carmona, N., Guéneau, S., Gitz, V., . . . Hainzelin, E. (2022)

Agroecologically-conducive policies: A review of recent advances and remaining challenges, Working Paper 1. Bogor, Indonesia: The Transformative Partnership Platform on Agroecology, 2022. https://doi.org/10.17528/cifor-icraf/008593

Raharison, T.S. (2021) Analysis of the agroecological transition of food systems at the national level. The case of Madagascar, Tananarive, SPAD, Cirad . TAFS Project Report

Sabourin, EP, Patrouilleau, MM, Le Coq, J.F., Vásquez, L. et Niederle, PA (2017). *Políticas públicas a favor da agroecologia na América Latina e no Caribe Porto Alegre, FAO - Red PP-AL, 2017*

Sabourin E., Le Coq J.-F., Fréguin-Gresh S., Marzin J., Bonin M., Patrouilleau MM, Vázquez L., Niederle P., (2018). Quelles politiques publiques pour soutenir l'agroécologie en Amérique latine et dans les Caraïbes ? Cirad, Montpellier, Perspective 45. https://doi.org/10.19182/agritrop/00020.

Sosa Varroti, A. P., Patrouilleau, M. M., Goites, E. ; Toso , F. H. (2024) "Análisis de las agriculturas alternativas en Argentina: políticas públicas y actores clave", em Constantino, A. (Coord.), Las nuevas dinámicas del acaparamiento de tierras en Argentina: caracterización, alternativas y desafíos. Bahía Blanca, Editorial de la Universidad Nacional del Sur (Ediuns). 2024

Stassart, P.M., Baret, P., Grégoire, J.-C., Hance, T., Mormont, M., Reheul, D., . . . Vissser, M. (2012). L'agroécologie : trajectoire et potentiel pour une transition vers des systèmes alimentaires durables.

Thanh Tung Hoang, (2021) Analysis of Agroecological Transition at the National Level. The Emergence and Institutionalization of Agroecology in Viet Nam, Hanoi, Malica, TAFS Report 1,

Valdivia M., Le Coq J. F., Daza P. (2022) Roadmap for the scaling up of Agroecology in Colombia.. Rome : CGIAR, 9 p. (CCAFS Info Note) https://hdl.handle.net/10568/119284

Wezel, A., Casagrande, M., Celette, F., Vian, J.-F., Ferrer, A. et Peigné, J. (2014). Pratiques agroécologiques pour une agriculture durable. A review. Agronomy for sustainable development, 34 (1), 1-20. 2014

Wei Zhou M. , V. Achal (2025) A comprehensive review on environmental and human health impacts of chemical pesticide usage, Emerging Contaminants, Vol. 11, Issue 1, 2025, 100410, https://doi.org/10.1016/j.emcon.2024.100410 -

Abstract: The report analyses the processes of building initiatives and public policies for the Agro-Ecological Transition (AET) of food systems in ten countries of the South. The results come from the first stage of the TAFS project (Agroecological transitions for sustainable food systems: arguments for public policies). The hypotheses were, on the one hand, the weight of political regimes and international cooperation in the translation and emergence of AET and, on the other hand, the fact that the dominant conventional production model is the biggest obstacle to the development of AET. The study consisted of applying the same framework to analyse the processes of building TAE on a national scale, using cross-references and methods from the sociology of public action and political sociology. The results show a diversity of conceptions of AET, of actors, of construction processes and, at the same time, of results in terms of instruments and their implementation.

Résumé : Le rapport analyse les processus de construction d'initiatives et de politiques publiques pour la transition agro-écologique (TAE) des systèmes alimentaires dans dix pays du Sud. Les résultats proviennent de la première étape du projet TAFS (Agroecological transitions for sustainable food systems : arguments for public policies). Les hypothèses étaient, d'une part, le poids des régimes politiques et de la coopération internationale dans la traduction et l'émergence de la TAE et, d'autre part, le fait que le modèle de production conventionnel dominant est le plus grand obstacle au développement de la TAE. L'étude a consisté à appliquer le même cadre d'analyse aux processus de construction de la TAE à l'échelle nationale, en utilisant des références croisées et des méthodes issues de la sociologie de l'action publique et de la sociologie politique. Les résultats montrent une diversité de conceptions des TAE, des acteurs, des processus de construction et, en même temps, des résultats en termes d'instruments et de leur mise en œuvre.

Resumo: O documento analisa os processos de construção de iniciativas e políticas públicas de Transição Agro-Ecologica (TAE) dos sistemas alimentares em dez países do Sul. Os resultados provem da primeira etapa do projeto TAFS (Agroecological transitions for sustainable food systems: arguments for public policies). As hipóteses eram, por um lado, o peso dos regimes políticos e da cooperação internacional na tradução e emergência da TAE e, por outro lado o fato do modelo produtivo convencional dominante, constituir o maior obstáculo ao desenvolvimento da TAE. O estudo consistiu na aplicação de um mesmo quadro de análise dos processos de construção da TAE na escala nacional cruzando referencias e métodos da sociologia da ação pública e da sociologia política. Os resultados mostram uma diversidade de concepções da TAE, de atores, de processos de construção e, pelo tanto de resultados em termos de instrumentos e da sua implementação.

Resumen: El informe analiza los procesos de construcción de iniciativas y políticas públicas para la Transición Agroecológica (TAE) de los sistemas alimentarios en diez países del Sur. Los resultados proceden de la primera etapa del proyecto TAFS (Transiciones agroecológicas para sistemas alimentarios sostenibles: argumentos para políticas públicas). Las hipótesis eran, por un lado, el peso de los regímenes políticos y de la cooperación internacional en la traducción y emergencia de la TAE, y, por otro, el hecho de que el modelo de producción convencional dominante es el mayor obstáculo para el desarrollo de la TAE. El estudio consistió en aplicar el mismo marco para analizar los procesos de construcción de la TAE a escala nacional, utilizando referencias cruzadas y métodos de la sociología de la acción pública y la sociología política. Los resultados muestran una diversidad de concepciones de la EAT, de actores, de procesos de construcción y, al mismo tiempo, de resultados en términos de instrumentos y de su aplicación.