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Building public policies for the agroecological transition of food systems: lessons from the South

A construção de políticas públicas para a transição agroecológica dos sistemas alimentares: lições do sul

La construcción de políticas públicas para la transición agroecológica de los sistemas alimentarios: lecciones desde el sur

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Abstract

This article presents the results of the first stage of the TAFS project (Agroecological transitions for sustainable food systems: a case for public policies) coordinated by the Centre for International Cooperation in Agricultural Research for Development (CIRAD) and carried out by various partners in ten countries in Africa, Latin America and Asia. The main objective of the TAFS project was to provide decision-makers with convincing arguments for the formulation and construction of public policies to support the Agro-Ecological Transition (AET) of food systems at the territorial scale. The project also drew on this knowledge to stimulate collective reflection on public action instruments and to co-construct, with decision-makers and territorial food system actors, a strategic vision of the transition to sustainable food systems based on agroecological practices. The results are based on scientific evidence, field data and practical experiences. They highlight three main conclusions: i) the diversity of definitions and visions of the Agro-

Ecological Transition with a series of conceptions hybridizing three categories: Agroecology, organic production and sustainable agriculture; ii) the variety of actors involved in the formulation of agro-ecological transition policies, but the key role of the actor translating the implemented concept: social movements or international cooperation agencies; iii) the AET institutionalization processes are marked by dialogues between these two categories of actors and public authorities and shaped by the political regime and/or the international cooperation system.
Keywords: Agroecology, public policies, territories, organic production.

Resumo

Esse artigo apresenta os resultados da primeira etapa do projeto "Agroecological Transitions for Sustainable Food Systems: a case for public policies (TAFS)" coordenado pelo Centro de Cooperação Internacional em Pesquisa Agronômica para o Desenvolvimento (CIRAD) e executado por vários parceiros em dez países de África, América Latina e Ásia. O principal objetivo do projeto TAFS era fornecer aos tomadores de decisão argumentos convincentes para a formulação e a construção de políticas públicas de apoio à Transição Agro-Ecológica (TAE) dos sistemas alimentares na escala territorial. O projeto também se baseou nesses conhecimentos para estimular a reflexão coletiva sobre os instrumentos de ação pública e para co-construir, com os tomadores de decisão e os atores territoriais do sistema alimentar, uma visão estratégica da transição para sistemas alimentares sustentáveis, fundada em práticas agroecológicas. Os resultados estão baseados em evidências científicas, dados de campo e experiências práticas. Eles destacam três principais conclusões: i) a diversidade das definições e visão da Transição Agroecológica com uma série de concepções hibridando três categorias: Agroecologia, produção orgânica e agricultura sustentável; ii) a variedade de atores implicados na formulação de políticas de transição agroecológica, mas o papel-chave do ator tradutor da concepção implementada: movimentos sociais ou agências de cooperação internacional; iii) os processos de institucionalização da TAE são marcados pelos diálogos entre essas duas categorias de atores e os poderes públicos e moldados pelo regime político e/ou pelo sistema de cooperação internacional.
Palavras-chave: Agroecologia, políticas públicas, territórios, produção orgânica.

Resumen

Este artículo presenta los resultados de la primera fase del proyecto TAFS (Transiciones Agroecológicas para Sistemas Alimentarios Sostenibles: argumentos a favor de las políticas públicas) coordinado por el Centro de Cooperación Internacional en Investigación Agronómica para el Desarrollo (CIRAD) y llevado a cabo por diversos socios en diez países de África, América Latina y Asia. El principal objetivo del proyecto TAFS era proporcionar a los responsables de la toma de decisiones argumentos convincentes para la formulación y construcción de políticas públicas de apoyo a la Transición Agroecológica (TAE) de los sistemas alimentarios a escala territorial. El proyecto también se basó en estos conocimientos para estimular la reflexión colectiva sobre los instrumentos de acción pública y co-construir, con los responsables de la toma de decisiones y los actores de los sistemas alimentarios territoriales, una visión estratégica de la transición hacia sistemas alimentarios sostenibles basados en prácticas agroecológicas. Los resultados se basan en evidencias científicas, datos de campo y experiencias prácticas. Destacan tres conclusiones principales: i) la diversidad de definiciones y visiones de la transición agroecológica con una serie de concepciones que hibridan tres categorías: Agroecología, producción ecológica y agricultura sostenible; ii) la variedad de actores implicados en la formulación de políticas de transición agroecológica, pero el papel clave del actor que traduce el concepto implementado: movimientos sociales o agencias de cooperación internacional; iii) los procesos de institucionalización de la TAE están marcados por diálogos entre estas dos categorías de actores y las autoridades públicas y moldeados por el régimen político y/o el sistema de cooperación internacional.
Palabras-clave: Agroecología, políticas públicas, territorios, producción orgánica.

Introduction

The transformations observed in global food systems in recent decades have generated significant ecological, social and economic impacts. The environmental degradation caused by the industrial agricultural model, the growing exclusion of family farmers and the increase in nutritional problems have contributed to the recognition of alternative approaches that promote more sustainable agricultural development. In this scenario, agroecology has emerged as a response that seeks to promote fairer and more resilient food systems (Gliessman, 2000; Altieri, 2018; Dale, 2020). Since the 1990s, agroecology has advanced in the political field, consolidating itself as a reference for both international cooperation agencies and public policies at different levels, including federal states, provinces and cities (Sabourin *et al*., 2017; Guéneau *et al*., 2019; Pavageau *et al*., 2020). Although few countries have implemented specific policies, there has been a significant growth in public actions that incorporate guidelines and instruments to support the agroecological transition (Place *et al*., 2022).

This article presents the results of the first stage of the "Agroecological Transitions for Sustainable Food Systems: A Case for Public Policies" (TAFS) project, coordinated by the Centre for International Cooperation in Agricultural Research for Development (CIRAD) and developed in partnership with organizations from ten countries in Africa, Latin America and Asia[1] . The project studied the processes and policies of agroecological transitions on a national and territorial scale (Stassart *et al*., 2012; Gliessman, 2016; Lamine, 2020), articulating empirical data and practical experiences. Its main objective was to provide solid subsidies for the formulation of public policies that promote the Agroecological Transition (AET). In this context, the project identified three interconnected challenges: i) ensuring a continuous supply of sufficient, affordable, diversified, nutritious and healthy food for urban and rural populations; ii) fostering the generation of decent jobs and adequate incomes for farmers and their families; and iii)

[1] The TAFS project was co-financed in its first stage by CIRAD and the French Ministry Foreign Affairs through the CGIAR and the Viability initiative through TPP Agroecology (https://www.cifor-icraf.org/agroecology-tpp/). 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.

ensuring the sustainable management of natural resources at a productive and territorial level, especially in the face of climate change.

The aim of the analysis presented in this article is to understand the conditions and factors that influence the construction of policies to support AET in different contexts. We sought to analyze how different modalities of AET emerge on a national or regional scale and which political factors contribute to the institutionalization of specific representations of AET (Mzoughi; Napoleone, 2013). Our working hypotheses are based on the assumption that, in countries of the Global South, the institutionalization of AET depends on two central elements: on the one hand, the institutional structure and dynamics of international cooperation, which can create or restrict opportunities for the construction of agroecological policies; on the other hand, the initiatives and pressures exerted by social movements and organized civil society, which play a key role in promoting institutional change. In addition, it is argued that the predominant model of conventional agricultural policies constitutes a significant obstacle, limiting the ability to move towards sustainable food systems (Sabourin *et al*., 2018).

The article is structured in three sections in addition to the introduction and conclusion. The first introduces the theoretical and methodological approach. The second presents a cross-sectional analysis of AET initiatives and policies in the countries studied. The third discusses the results with a focus on the processes of institutionalization and implementation of AET public policies, highlighting the lessons learned in terms of instruments and guidelines for the agroecological transition on a territorial and national scale.

Methodology, material and method

The study's theoretical and methodological framework is based on the sociology of public action (Hassenteufel, 2010; Lascoumes; Le Galès, 2012). From this perspective, we sought to characterize the processes of interaction between key players, institutional factors and representations that influence AET. To this end, an analytical framework was structured into five main components: i) identification of the actors involved, their

relationships and resources; ii) analysis of the interactions between interest groups, coalitions and networks; iii) evaluation of the ideas and representations of AET in the public debate and existing legislation; iv) characterization of the relevant institutions and political structures; and v) study of the public action instruments implemented (Lascoumes; Le Galès, 2012).

Data was collected between 2021 and 2022 in ten countries (Madagascar, Mali, Burkina Faso, Senegal, South Africa, Brazil, Argentina, Colombia, Vietnam and Laos - Figure 1) through documentary analyses and semi-structured interviews with government, private sector and civil society representatives. This approach made it possible to capture the diversity of institutional, social and environmental contexts that influence agroecological transitions, providing a basis for cross-cutting analyses of the determining factors and obstacles faced by each country. The adoption of a common methodology made it possible not only to systematize the results, but also to share experiences between the countries involved (Box 1). In this article, we limit ourselves to a cross-sectional synthesis of the national studies, presenting broad regional trends.[2] The diversity of national and regional contexts investigated allowed for a cross-sectional analysis that goes beyond direct comparison, highlighting local specificities while identifying broader patterns. This approach revealed how *ad hoc* and tailored public policy instruments can play a decisive role in supporting the construction of sustainable food systems, both in the short and long term.

[2] The detailed results by parent can be consulted on the project's website (https://compar.cirad.fr/en/ressources/notes-de-positionnement).

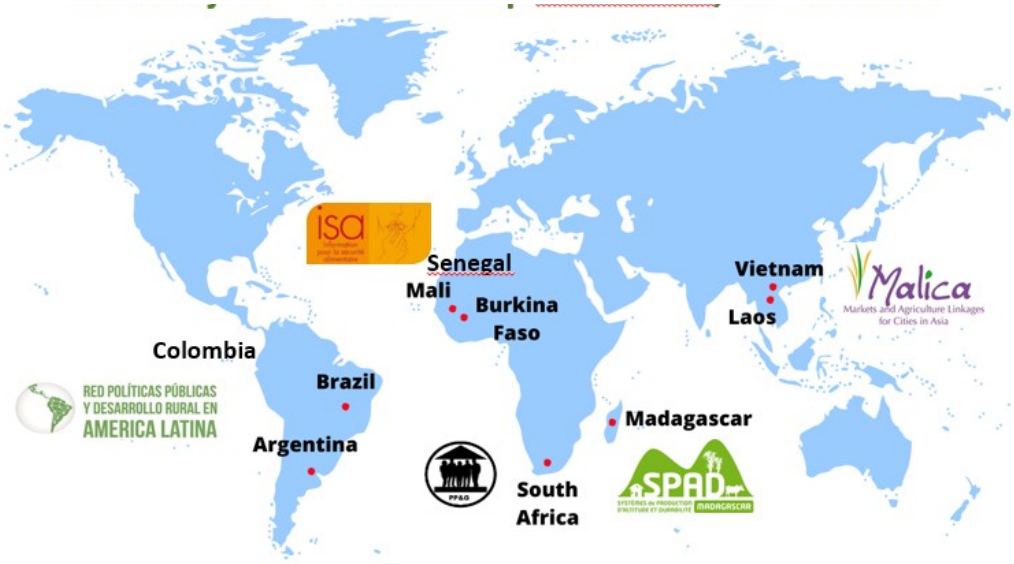

Figure 1. Location of the case studies and partner institutions

Box 1 : Analytical and data collection framework

1. **Actors: Which actors/institutions support or oppose AET?**

Identification and typology of the actors: description of their activities, technical, financial and political resources, as well as their proximity to political and institutional power.
Influence analysis: the role played by each actor in the processes of formulation, implementation and resistance to the AET.
Mobilization dynamics: the capacity to engage and articulate these actors in the context of AET.

2. **Interactions and Power Relations: How do different groups interact around AET?**
   - Interest groups, coalitions and networks: identifying alliances, tensions and conflicts between actors.
   - Analyzing disputed narratives and points of convergence or divergence.
   - Mapping formal and informal arenas for negotiation and consensus-building.
3. **Ideas and references:**
   - What are the normative frameworks and representations mobilized around AET?
   - Definitions and concepts: analysis of the main ideas guiding the characterization of AT in public speeches and policies.
   - Mapping the predominant and alternative visions of agroecology, based on public discourses and regulations.
4. **Identification of concrete initiatives and proposals to promote AET.**
   - Institutions and Normative Structures: What rules and institutions shape AET processes?
   - Evolution of policies and institutional frameworks related to AET and their relationship with dominant agricultural policies.
   - Identification of critical moments and paradigmatic shifts that have influenced AET.
   - Analyzing interactions between levels of governance (local, national and international) in promoting or obstructing AET.
5. **Results in terms of instruments: What public policies and instruments have been implemented**
   - Identification of the instruments used to promote or restrict AET, such as subsidies, regulations, and tax incentives.
   - Analyzing the concrete effects of policies on agroecological production systems and the socioeconomic environment.
   - Mapping persistent barriers and opportunities to strengthen the institutionalization of AET.

Source: Authors, adapted from Lascoumes and Le Galès (2012)

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

Conceptions and key players in the construction of AET policies

Three major conceptions of AET: agroecology, organic production and sustainable agriculture

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

In this study, we identified three major conceptions of AET in the ten countries analyzed: agroecology, organic production and sustainable agriculture. Of these, only organic production has a standardized and consolidated definition, supported by certification

processes and the work of the International Federation of Organic Agriculture Movements (IFOAM). Agroecology and sustainable agriculture, on the other hand, have a greater diversity of interpretations and subtypes, moulded by local and regional dynamics, as well as the political and economic agendas of each country.

In Latin America, agroecological movements generally advocate a radical transformation of agricultural and food systems, as opposed to the conventional export-orientated model. This transformation is seen as indispensable for tackling the environmental, social and economic challenges affecting the region (Wezel *et al*., 2014). Although it shares principles with organic production such as the protection of ecosystems and the rejection of synthetic inputs, Latin American agroecology distinguishes itself by emphasizing the autonomy of producers, both in terms of access to inputs and the marketing of their products. It also values the recycling of resources within agricultural systems, reducing dependence on external inputs. Agroecology goes beyond agricultural techniques, proposing a broader transformation of the agri-food system, including relations between producers and consumers. This approach promotes short commercialization circuits, which strengthen food security and sovereignty on a territorial scale. Thus, Latin American agroecology adopts a holistic approach, which explicitly integrates the social, environmental, economic and cultural dimensions, as well as questioning the structures and impacts of conventional agribusiness, following the example of the results found in Brazil and Argentina (Niederle *et al.*, 2021; Sosa Varroti *et al.*, 2022).

In African and Asian countries such as Laos, Madagascar, Senegal, Burkina Faso and Mali, AET is not characterized by the replacement of intensive conventional agriculture with an ecological model aligned with the principles of nature. Instead, it involves the "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 exempt from environmental impacts such as deforestation, burning, soil erosion and, in some cases, pesticide contamination (Cesaro, 2020; Debar, 2020). This ecological intensification

[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 fertilizers, pesticides), as was the case during the green revolutions and other agricultural modernization (Griffon, 2013).

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 related to AET tend to prioritize predominantly technical approaches, targeting specific production units or production chains, while socio-political aspects, such as equity in access to resources and community participation, are often relegated to the background (Milhorance *et al*., 2024). In this context, governments prioritize the rationalization of the use of chemical inputs, the introduction of bio-inputs and technical training through subsidies and training programs. This corresponds to one of the paths towards sustainable agriculture observed in Brazil and Argentina (Niederle *et al.*, 2022; Patrouilleau *et al.*, 2022). These strategies reflect a functionalist view of AET, which favors practical and immediate solutions to environmental and production problems.

South Africa, on the other hand, has a different configuration, where agroecology manifests itself in two main strands. The first is a community-based approach, associated with campaigns for food sovereignty and the fight against dependence on external inputs. This strand seeks to strengthen the resilience of local communities through agroecological practices that value the collective management of resources and production for local consumption. The second strand is more orientated 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 agroecological policies with the demands of global markets (Greenberg; Drimie, 2021).

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

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

In West Africa, the term "sustainable land management" has been used 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, 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, stand out. These initiatives include community forest management, assisted natural regeneration, restoring halieutic resources, community management of pastoral resources and integrated water resource management. Although not new, these approaches illustrate how sustainable agriculture can be mobilized to address contemporary environmental challenges at different scales (Milhorance *et al*., 2022).

In Latin America, sustainable 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 significant debate, especially regarding the definition of concrete instruments for its implementation (Lipper *et al*., 2014). Caron and Treyer (2016) point out that CSA tends to depoliticize 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 been promoting integrated strategies that combine climate adaptation, mitigation and increased productivity, based on the concept of CSA. However, in practice, the adaptation agenda has gained greater prominence, aligned with the potential for increased productivity, while mitigation efforts have been relegated. Mitigation, associated with controlling deforestation and enforcing environmental standards, faces resistance from various agribusiness players, who traditionally oppose these measures (Milhorance *et al*., 2022).

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

Diversity of actors involved in AET

The construction and implementation of AET reflects a complex interaction between multiple actors, each playing specific roles depending on their interests, capacities and socio-political contexts. These actors include civil society organizations, 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 these actors interact directly influences the conceptions, agendas and policies related to AET.

Civil society organizations play a central role in all the countries studied, being responsible not only for influencing public policies, but also for implementing local initiatives. Producers' associations, agroecological movements, technical NGOs and consumer organizations form the core 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 organizations advocate practices that prioritize the recycling of resources, the autonomy of farmers and the transformation of production and marketing relations 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.*, 2022).

In countries like Laos, Madagascar and Vietnam, civil society often acts as a beneficiary of international cooperation programs, which can limit its ability to promote a more radical agroecology adapted to local contexts (Gueneau; Xiong, 2022; Raharison, 2022). In the South African context, there are different dynamics. Agroecology is associated with both community food sovereignty campaigns and business initiatives aimed at certified organic production. This duality reflects the tensions between a community-based model and a market-orientated approach, highlighting the challenges of aligning diverse interests in the same production system (Greenberg; Drimie, 2021).

Governments, at their different levels, also play a crucial role in promoting EAC. As well as funding international cooperation programs, some countries, such as Argentina, Brazil and Senegal, have implemented specific legislation and instruments in favor of agroecology. In Brazil, for example, policies such as the National School Feeding Program (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 "PSE Vert" (Senegal Emerging Green Plan), which included agroecology in its political agenda. This movement was driven by broader coalitions such as *Dynamique pour la Transition Agroécologique au Sénégal* (DyTAES), which brings together NGOs, farmers' unions and research institutions to promote the integration of agroecology into national strategic documents (Bottazzi; Boillat, 2021).

International cooperation agencies and global NGOs have also played a significant role in promoting sustainable agriculture, especially 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 support from bilateral and multilateral programs. These initiatives often prioritize technical solutions, but also open up space for the adoption of more radical approaches, such as participatory certifications and direct sales promoted by bilateral and international NGOs. At the same time, a large number of international, bilateral or decentralized cooperation NGOs have developed support for a more radical and territorialized peasant agroecology, based especially 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, especially for export. These companies adopt agro-ecological practices, but generally within a model geared towards global markets and highly dependent on international certifications. In Argentina, "extensive agroecology" stands out, practised by medium-sized farmers (50 to 600 hectares) who combine polyculture and livestock farming to supply local and national markets (Sosa Varroti *et al.*, 2022). However, in countries like Burkina Faso, the presence of the private sector in AET is less expressive, although there are emerging initiatives in the market for organic inputs and practices associated with sustainable agriculture (Medina, 2022).

Research institutions, in turn, 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 an essential role in articulating academic communities, farmers and social movements, generating technical and political knowledge to support agroecological practices. In Senegal, DyTAES incorporates 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 institutions have been investigating not

only the technical aspects of agroecology, but also its socio-economic implications, contributing to a more integrated vision of AET (Greenberg; Drimie, 2022).

The promotion of AET, therefore, is the result of a complex network 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-orientated approaches. International agencies and research institutions complement these efforts by providing funding, technical expertise and political legitimacy. This diversity of actors and approaches reflects the multiple possible configurations of AET.

AET conceptions and practices are therefore deeply influenced by the dynamic interactions between these actors, shaping political agendas and implementation strategies at different scales.

The processes of building 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 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-orientated approaches and civil society-led initiatives.

Defining political agendas: coalitions, institutions and funding

The definition of AET policy agendas varies substantially according to the actor or institution that promotes the translation of the conceptual proposal and instruments in each country, as well as depending on the degree of dependence on international funding.

It's worth noting that in the countries of the Global South, AET was profoundly shaped by international cooperation long before public policies explicitly aimed at this goal emerged. This initial role was played by non-governmental initiatives, often of a religious nature, inter-university partnerships and rural education and extension programs. Some of these actions, which began more than fifty years ago, preceded the involvement of large multilateral organizations such as the United Nations, decisively influencing the spread of agroecological practices and the formation of networks of actors at local and global levels (Pavageau *et al*., 2020).

In the countries of West Africa, Madagascar and some regions of Asia, the influence of international co-operation remains significant.

In these contexts, especially in African countries, agroecology was widely disseminated through projects funded by international organizations, which 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 A*et al*ready 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 sense and in the promotion of agroecology in the region. There is still a debate around so-called "natural agroecology", often idealised as inherent in contexts where the limitation of chemical inputs is due to economic or structural constraints. Small farmers, especially the younger ones, refute the romantic conception of purely subsistence farming, based on self-consumption, manual family labor and the sale of surpluses. Instead, they demand technological innovation, mechanization and productive intensification in order to secure decent incomes and raise their consumption and investment standards (Pavageau *et al*., 2020).

In Burkina Faso, the drafting of the National Strategy for the Development of Agroecology (SNAE) in 2020 was a significant milestone in integrating agroecology into the political agenda at national level in West Africa. Supported by international agencies such as the French Development Agency, this strategy faced challenges arising from disagreements between civil society actors and the government over the use of chemical inputs. These disputes are aggravated by ideological differences over the use of chemical

inputs in contrast to exclusively organic practices (Medina, 2023). In addition, the military junta established 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 AET with a narrative of resistance and national sovereignty. In 2023, an agreement between civil society actors formalized the idea of the "rational use" of chemical inputs, representing a breakthrough in the debates and the construction of the SNAE. Even so, the implementation of the SNAE remains limited by political instability, terrorism that hinders the implementation of policies at local level and the growing resistance of the population 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 collectives, especially on the outskirts of Bamako, show dynamism in adopting agroecological practices and organizing marketing systems, often supported by international NGOs that provide technical and financial resources. Despite these efforts, the lack of a comprehensive national strategy and the lack of inter-institutional coordination reduce the reach 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 then President Ibrahim Boubacar Keïta, and in 2021, with a second coup 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 external investment flows more uncertain, jeopardizing 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 co-operation, which has mainly promoted conservation agriculture and no-till farming as transition strategies. However, agroecology in Madagascar remains limited to niche markets, mainly geared towards exports. The lack of coordination between public policies

and excessive sectorization - with agroecology often relegated to a peripheral role in agricultural development policies - jeopardize the consolidation of an integrated approach. In addition, the government's emphasis on large agricultural enterprises and environmental protection (oriented towards forest protection, biodiversity management and protected areas) reflects a limited vision, centered on emergency food security and the conservation of forests and protected areas (Raharison, 2022).

In Laos, state planning around AET is driven by international co-operation in the field of "green and sustainable agriculture". However, the lack of clarity regarding the final objectives and the fragmentation in the implementation of the various plans and programs limit policy coherence. The mobilization of external resources is pragmatic, but the lack of fine coordination between projects funded by different donors' compromises integration between local and national initiatives. This difficulty of articulation reflects the limitations of the state apparatus in translating international guidelines into consistent local strategies. In Vietnam, on the other hand, the scenario is marked by a more coordinated and centralized approach. National plans funded by international cooperation prioritise reducing the use of chemical inputs, conserving natural resources (water and soil) and adapting to climate change. The capillarity and rigor of the state control system ensures greater effectiveness in the implementation of policies, although centralization can also limit the adaptation of strategies to regional specificities. This coordination capacity demonstrates the decisive role of strong institutional structures in advancing pragmatic, albeit predominantly technical, policies aimed at sustainability (Tung, 2021; Guéneau; Xiong, 2022).

These cases illustrate the centrality of international co-operation in building AET policies, but also reveal its limitations. Dependence on external funding creates dynamics that often perpetuate institutional fragmentation and competition between local actors, jeopardizing 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 territorial realities and local demands. Civil society plays a key role in mobilizing resources and forming coalitions, while the market, especially the certified organic product segment, works as a complementary element. This

dynamic is evident in the creation of territorial proximity markets[4] , including public procurement, agroecological fairs and short marketing chains, as well as export networks geared towards high added value niches (Sosa Varroti *et al.*, 2024).

In Latin America, AET policies are largely state-led, with less influence from international funding compared to other regions.

Colombia stands out as an example of how international cooperation can interact with national policies to shape AET. It is a combination of the affirmation of a national program will and the provision of significant public resources from cooperation linked to the context of the civil war and the peace plan. This articulation is manifested in four main policies: i) productive inclusion in the post-conflict scenario; ii) general clean agriculture programs; iii) food sovereignty and family farming policies; and iv) environmental and climate change adaptation policies. Although they are relevant, the integration of these strands at territorial level remains deficient, jeopardizing the effectiveness of the initiatives. The Agroecology Bill No. 544 and the Intersectoral Commission on Food Security and Nutrition (CISAN) appear as potential instruments for strengthening AET, but a large part of the resources have been absorbed by agribusiness, which presents itself as "green" by reinforcing sustainable agriculture aimed at global markets. From this perspective, productive alliances have favoured crop diversification and "green businesses", financially supported by the Sustainable Colombia Fund and the Sustainable Livestock Fund. These programs, although favourable to environmental sustainability, often neglect fundamental principles of agroecology, such as social inclusion and agrarian justice. Among the structural limitations, violence in rural areas, the political power of agribusiness and difficulties in accessing land are central obstacles to the consolidation of AET (Valdivia *et al.*, 2022).

Brazil is a unique case in the panorama analyzed, having implemented the National Policy for Agroecology and Organic Production (PNAPO) between 2013 and 2018. This policy was the result of a broad coalition of NGOs, social movements and farmers' networks that managed to institutionalize agroecology at federal level. However, the dismantling of

[4] Territorial markets refer to commercialization and consumption circuits that are rooted in a territorial logic, i.e. linked to the cultural, economic and social specificities of a territory.

PNAPO as of 2019 by the Bolsonaro government has significantly weakened the institutionalization 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 characterized by a combination of market-oriented and civil society-oriented approaches. In both intensive and extensive production, Argentina has 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 networks of agroecological family farmers have organized themselves to serve mainly specific urban markets. Extensive agroecology has emerged as a viable technical and economic alternative to agribusiness in the country's key productions (grains, cereals, meat), representing a strategic opportunity for alliances with small agroecological producers and their organizations (Sosa Varroti *et al.*, 2022). However, many of these producers consider that the extensive producers, when they resort to organic certifications, are not always aligned with the fundamental principles of agroecology. Until 2023, public support was rather uneven at national level, occurring mainly through training, extension and research initiatives (led by INTA) and provincial and local government programs, such as the case of the Province of Buenos Aires, which, still under the Peronist government in 2025, maintains a Provincial Programme for the Promotion of Agroecology within the Provincial Ministry of Agrarian Development. However, since the beginning of Javier Milei's presidency in 2024, most of the institutions and public policies supporting agroecology at national level, analysed in stage 2 of the TAFS project (Sosa Varrotti *et al.*, 2024), have been dismantled.

In this context, markets and consumers also represent relevant factors for the farmers involved in AET. It is worth noting that in all the countries analyzed, access to markets is seen as a strategic priority. Marketing models include direct sales, public purchases, specialized supermarkets, exports and niche markets for certified products. Products such as coffee and cocoa (Brazil, Colombia, Vietnam), tropical fruit (bananas, mangoes) and value-added identity goods such as vanilla from Madagascar, tea from Vietnam and rooibos from South Africa play crucial roles in making AET economically viable.

However, access to these markets often depends on certifications, technical support and external financing, creating significant barriers for small producers.

Definition of instruments and AET guidance

AET can be promoted by various types of public policy instruments, the design and implementation of which reflect different objectives, scales of intervention and socio-political contexts. The study constructed a broad and exhaustive 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) (Table 1).

Generally speaking, "innovation and knowledge management instruments" aim to promote horizontal sharing of experiences and experimentation (as seen in Burkina Faso and Colombia), valorize certain traditional techniques (Burkina Faso, Laos, Madagascar) and articulate territorial networks of agroecological knowledge (Brazil, Argentina). These mechanisms include participatory research actions, exchanges of knowledge between farmers and extension programs that encourage the adaptation of practices to different local realities. Another set of instruments focuses on guaranteeing access to fundamental resources. Experiences from Brazil and South Africa indicate that agrarian reform, land actions, access to water and credit, as well as agricultural extension aimed at family farmers, constitute a solid basis for negotiating specific programs to promote agroecology. These mechanisms are usually accompanied by financial incentives or technical advice to strengthen cooperatives and producer organizations, which boosts the adoption of agroecological practices on a wider scale. With regard to guaranteeing market access and food security, there is a wide range of initiatives. The ten countries involved in the study have organic certification standards, largely motivated by the demands of importing countries. In Senegal, Argentina and Brazil, for example, there are participatory certification systems and, in the Brazilian case, social control mechanisms run by farmers' groups. In Brazil, instruments such as differentiated public purchases with guaranteed prices for agroecological and organic products have been replicated in federal

states and municipalities, demonstrating the importance of articulation between different levels of governance.

In addition, there are instruments to support short supply chains, based on the creation of local markets: fairs, farm shops and consumer co-operatives, as well as Communities that Sustain Agriculture in cities. In Latin America, strategies such as preferential public purchases for family farmers with differentiated prices for agroecological or organic products - exemplified by the food procurement and school feeding programs in Brazil - show the possibility of strengthening short circuits and promoting an inclusive agroecological transition (Lamine, 2020). There are also urban and peri-urban agriculture programs, such as the GAP program in Vietnam, ProHuerta in Argentina (shut down in 2024 after thirty years of operation) and initiatives related to food security and nutrition in Brazil and Senegal. In Madagascar, Cover Cropping Systems are linked to soil conservation practices and can dialogue with agroecological principles (Raharison, 2022).

Environmental regulations and subsidies associated with greener practices are not limited to the direct promotion of AET, but can range from the protection of agricultural biodiversity and the regulation of land use to the limitation of genetically modified varieties. Some countries have adopted pesticide reduction programs, although in Latin America these policies are scarce and less applied. In Laos and Vietnam, on the other hand, there are more consolidated efforts in this direction, driven by international cooperation, which strengthen integrated pest management and biological control. In addition, subsidies for environmentally responsible agricultural practices can be seen in programs such as the “Green Agriculture Plan” (Laos and Vietnam), which encourage the replacement of chemical inputs with solutions based on bio-inputs and soil conservation techniques (Tung, 2021; Guéneau; Xiong, 2022).

Table 1. Some examples of instruments contributing to the AET.

Countries	**Innovation Knowledge**	**Markets and food safety**	**Environmental regulation**	**Pesticide management**
South Africa	Regenerative farming plan	National Food & Nutrition Security Plan	Conservation Agriculture policy	SmartAgri
Argentina	INTA Agroecology Network Rural Exchange	Pro-Huerta, Buenos Aires Central Market	Conservation and Use of Biodiversity in Agroecosystems	Glyphosate ban in 2023 Misiones Province
Brazil	ECOFORTE (Strengthening Territorial AE Networks)	Food Puchase Progr. & National School Feeding Progr .	Biodiversity and Creole Seeds	National Policy for AE and Prod. Orga PNAPO and Bioinsumos program
Burkina Faso	National Strategy for Agroecology TAPSA (project)	National Food Safety & Nutrition Policy & Nutrition	Nation. Strategy Soils Conservation & Restauratiion	PADITA (technical alternatives project)
Colombia	Law No. 544/2021 - Agroecology	Food matkets Food Public Purchase	Green Business, Sustainable Colombia	
Laos	PRONAE National Agro Ecology Program	Strategic Plan for National Organic Agriculture	Initiative on Conservation Agriculture	Good Agriculture Practices
Madagascar	GSDM Groupe Professionnels de l'Agroécologie	National Plan for Food Safety.	Nation Agriculture and Conservation Task Force	Integrated Pests Management (IPM)
Mali	Agroecology National. Plateform	Pol. Food Safety and Nutrition	Office Protection des Végétaux	FAIR Sahel Project
Senegal	DyTAES Dynamique de Transition Agroécologique	Agriculture and Sustainable Food Security Program	Desertification Fight Plan	Emergent Green Project
Vietnam	Vietnamese Good Agricultural Practices	Food safety & sustainable development plan	Law on Environmental Protection 2014	Integrated Pests Management (IPM)

In the regulatory sphere, the instrument to "reduce the use of pesticides" deserves special attention because they illustrate how, even without explicit reference to agroecology, certain policies can benefit food security and sovereignty, public health and the maintenance of local seeds. At the same time, they can encourage the replacement of pesticides with bio-inputs and the adoption of practices that are less dependent on agrochemicals.

For example, in Burkina Faso, the debate pits sectors that defend the "rational use" of inputs against unknown or unavailable alternatives, against the "zero input" standard supported by certified organic production for export, even though in this country the levels of chemical input use are extremely low compared to Latin America. In Mali, strong public assistance to the cotton sector, the main provider of chemical inputs and pesticides, encourages their use on other crops as well. However, certified organic production for export (mangoes, shea, green beans, among others) remains banned from the use of pesticides, and is mainly supported by international NGOs. In Laos and Vietnam, plans and programs to reduce pesticides are supported by international cooperation, resulting in advances in Integrated Pest Management and biological control. Even so, contradictions persist in systems that encourage conservation agriculture and no-till farming, but resort to glyphosate for larger-scale crops. Organic horticulture, on the other hand, relies on defensive plants, pesticide syrups and homemade bio-inputs, although these strategies do not always find support in consolidated public policies.

In Argentina, municipal legislation restricting the use of agrochemicals dates back to the 1990s, and the province of Misiones recently decreed a ban on the herbicide glyphosate by 2023. In Brazil, although there is a law and a policy to reduce the use of agrochemicals, its practical application has never been regulated. After occasional efforts under the PNAPO (2013-2016), there was a setback in 2017 (Temer government) and especially in 2019 (Bolsonaro government), when more than 500 previously banned pesticides were authorized.

In fact, the issue of inputs and pesticides is not the same in Africa as it is in Latin America. In Africa, there is talk of a reduction, but use remains quite low (Whei Zhou *et al.*, 2025). The size 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).

Conclusion

The cross-sectional and comparative study carried out in ten countries on three continents in the Global South, despite their contextual differences and specific emergency conditions, allows for the identification of some common and structuring conclusions for understanding AET.

Firstly, regardless of the technical or conceptual approach adopted, building effective public policies for AET requires a combination of different actors and factors. In Latin America and Africa, where the study concentrated more cases, the emergence of AET initiatives and policies depends above all on the mobilization of farmers' social movements and their ability to form coalitions with sectors of civil society, the state and funders, 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 centralization and state planning characteristic of their political regimes put the state at the center of decision-making. Even so, bilateral, international and non-governmental funding agencies play a crucial role in translating and promoting innovations, predominantly at the technological level.

Secondly, public policies on AET, when they exist, generally have limited resources and a restricted scope, reflecting a fragile institutionalization. For this reason, such policies are vulnerable to dismantling due to political and electoral changes, as observed in Brazil during the Bolsonaro government and in Argentina under the administrations of Presidents Macri and Milei (Niederle *et al*., 2022; Sosa Varroti *et al*., 2024). Paradoxically, even in these adverse scenarios, AET has shown resilience at the level of civil society and local collectivities, 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 restrict innovations and paradigmatic or socio-organizational changes, as seen in Laos, Vietnam and Madagascar.

Finally, AET often faces tensions, competitions and even conflicts between civil society organizations. These conflicts can 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 can also arise around certification processes, with disputes between third party certification (predominant in South Africa and Madagascar), participatory certification (Argentina, Brazil and Colombia) and initiatives without certification, promoted by agroecological movements. In Brazil, the innovation of social control by producer organizations stands out, enabling both direct sales and public procurement by the state. In addition, tensions related to water and waste management can be observed in various contexts, such as Argentina, Vietnam, Colombia and Madagascar.

The study reveals a remarkable diversity of conceptions, trajectories and instruments, which point to multiple strategies for AET. By applying a common analytical framework, it was possible to understand how the processes of policy implementation and institutionalization of AET are opposed to 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 the mere transposition of radical approaches, such as the sustainable transformation of food systems promoted by Latin American agroecology, to diverse contexts such as those in Africa and Asia.

Against this backdrop, it is clear that there are no universal solutions for AET that can be applied homogeneously 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 institutional weaknesses. This adaptation requires the use of open, inclusive and participatory instruments that dialogue with territorial realities and reinforce the autonomy and protagonism of local communities in the agroecological transition.

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References

ACHTERBERG, Eline; QUIROZ, Diana. **Funding African agroecological food systems?** The Netherlands' public funding of agriculture abroad. Amsterdam: Profundo. 2021.

ALPHA Arlène *et al.* **La faiblesse des politiques publiques de soutien à l'agroécologie au Mali**, Montpellier : CIRAD, TAFS, 2022. Disponível em : https://compar.cirad.fr/content/download/4316/33019/version/1/file/TAFS+Policy+Brief+Step+1+Mali.pdf. Acesso em: 20 jan 2025.

AUDET, René; GENDRON, Corrine. IFOAM and the institutionalization of organic agriculture. In: UTTING, Peter; REED, Darryl;REED, Ananya (Eds). **Business Regulation and Non-State Actors**. London: Routledge, 2011.

ALTIERI, Miguel A. Agroecology: A new research and development paradigm for world agriculture. **Agriculture, Ecosystems & Environment**, v. 27, n. 1-4, p. 37-46. 1989.

_____, **Agroecology**: the science of sustainable agriculture. Boca Raton: CRC Press. 2018.

ALTIERI, Miguel A; NICHOLLS, Clara. I. Agroecology scaling up for food sovereignty and resiliency. **Sustainable Agriculture Reviews**. v. 11, p. 1-29. 2012.

BELLON, Stéphane; OLLIVIER, Guillaume. Institutionalizing Agroecology in France: Social. Circulation Changes the Meaning of an Idea. **Sustainability**, v. 10, n. 5, 1380, 2018.

BOTTAZZI, Patrick; BOILLAT Sébastien. Political agroecology in Senegal: Historicity and repertoires of collective actions of an emerging social movement **Sustainability,** v. 13, n. 11, 6352. 2021.

CARON, Patrick; TREYER, Sébastien. Climate-Smart Agriculture and International Climate Change Negotiation Forums. In: TORQUEBIAU, Emmanuel (Ed). **Climate Change and Agriculture Worldwide**. Dordrecht: Springer Netherlands, 2016. p. 325-336. Disponível em: https://doi.org/10.1007/978-94-017-7462-8_25 . Acesso em: 20 jan 2025.

CESARO, Jean Daniel. Transformation des agricultures en Asie du Sud-Est: la paysannerie face aux défis de la mondialisation. **Géoconfluences,** septembre 2020. [s.n.t] 2020, 26 p. Disponível em: http://geoconfluences.ens-lyon.fr/informations-scientifiques/dossiers-regionaux/asie-du-sud-est/articles-scientifiques/agricultures-mondialisation. Acesso em: 3 dez 2024.

DALE, Bryan. Alliances for agroecology: From climate change to food system change. **Agroecology and Sustainable Food Systems**, v. 44, n. 5, p. 629-652. 2020.

DEBAR, Jean Christophe. **L'agriculture, cause majeure de la déforestation en Afrique.** Fondation FARM, 23/06/2020. Disponível em: https://fondation-farm.org/lagriculture-cause-majeure-de-la-deforestation-en-afrique . Acesso em: 4 dez 2024.

DI ROBERTO, Hadrien *et al*. L'agroforesterie en contexte post-forestier : perspectives et controverses d'une mise à l'agenda politique en Côte d'Ivoire. **Bois & Forets des Tropiques,** v. 356, p. 81-91. 2023. https://doi.org/10.19182/bft2023.356.a37121 .

EZZINE DE BLAS, Driss; LE COQ, Jean-François; GUEVARA SANGINES, Alejandro. **Los pagos por servicios ambientales en América Latina:** Gobernanza, impactos y perspectivas. Ciudad de México: Universidad Iberoamericana. 2017. 360 p.

FAO - Food and Agriculture Organization. **The 10 elements of agroecology** - Guiding the transition to sustainable food and agricultural systems, Roma: FAO. 2018. Disponível em: https://openknowledge.fao.org/server/api/core/bitstreams/3d7778b3-8fba-4a32-8d13-f21dd5ef31cf/content . Acesso em: 18 dez 2024.

GIRALDO, Omar Felipe; ROSSET, Peter. M. Agroecology as a territory in dispute: Between institutionality and social movements. **The Journal of Peasant Studies**, v. 45, n. 3, p. 545-564. 2018.

GLIESSMAN, Steve. **Agroecologia:** processos ecológicos em agricultura sustentável. Porto Alegre: Editora da UFRGS. 2000.

_____. Transforming food systems with agroecology. *In*: **Agroecology and Sustainable Food Systems**, v. 40, n. 3, p. 187-189. 2016.

GREENBERG, Stephen; DRIMIE, Scott. **The state of the debate on agroecology in South Africa**. A scan of actors, discourses and policies. TAFS phase 1 report. [s.l.]: CIRAD. 2021. Disponível em: https://compar.cirad.fr/en/content/download/4332/33083/version/1/file/TAFS_Policy+Brief+%231-Policy+landscape_OCT2022.pdf Acesso em: 20 jan 2025.

GUENEAU, Stéphane; XIONG, Maiyer. The Institutionalisation of Agroecology in Lao PDR, **Policy Brief TAFS** (December, 2022). Montpellier: CIRAD 2022. Disponível em: https://compar.cirad.fr/content/download/4314/33011/version/1/file/Policy+Brief+Agroecology+Laos.pdf . Acesso em : 20 jan 2025.

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

HASSENTEUFEL, Philippe. **Sociologie politique**: l'Action publique. Paris: Armand Colin, Collection U. 2008, 294 p.

_____. L'action publique comme construction collective d'acteurs en interaction. In: HASSENTEUFEL, Philippe. **Sociologie politique**: l'action publique. Paris: Armand Colin. 2011. p. 115-156.

HLPE. **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. Roma: HLPE. Report 14, 2019. Disponível em: http://www.fao.org/fileadmin/templates/cfs/HLPE/reports/HLPE_Report_14_FR.pdf . Acesso em: 2 dez 2024.

LAMINE, Claire. **Sustainable Agri-food Systems:** Case Studies in Transitions Towards Sustainability from France and Brazil. London: Bloomsbury Publishing. 2020. 208 p.

LASCOUMES, Pierre; LE GALES, Philippe. **Sociologia da Ação Pública.** Maceio: Edufal, 2012.

LE CAM, Michel. Mali: la France suspend son aide au développement dans un contexte d'isolement croissant de Bamako. Le Monde, 17 novembre 2022. Disponível em : 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 . Acesso em: 20 jan 2025

LE VELLY, Renan *et al*. When markets make agroecologies: Empirical evidence from downstream and upstream markets in Argentina, Brazil and France. **Journal of Innovation Economics and Management** v. 42, n. 3, p. 21-42. 2023. https://doi.org/10.3917/jie.pr1.0146 .

LEMEILLEUR, Sylvaine *et al.*. Analyzing institutional changes in community-based management: a case study of a participatory guarantee system for organic labeling in Brazil. **Journal of Institutional Economics**, v. 18. n. 6, p. 919-935. 2022.

LIPPER, Leslie *et al.* (eds). **Climate Smart Agriculture**: Building Resilience to Climate Change. Série Natural Resource Management and Policy. Vol. 52. Cham: Springer. 2018. https://doi.org/10.1007/978-3-319-61194-5 .

LOCONTO, Alison; FOUILLEUX, Eve. Defining Agroecology: Exploring the Circulation of Knowledge in FAO's Global Dialogue. **The International Journal of Sociology of Agriculture and Food.** v. 25, n. 2, p. 116-137. 2019. https://doi.org/10.48416/ijsaf.v25i2.27.

MEDINA, Carla. **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. 2022.

MEUNIER, Elliott *et al.* Understanding changes in reducing pesticide use by farmers: Contribution of the behavioural sciences, **Agricultural Systems**, v. 214, 103818. 2024. https://doi.org/10.1016/j.agsy.2023.103818.

MILHORANCE, Carolina *et al.* Tackling the implementation gap of climate adaptation strategies: understanding policy translation in Brazil and Colombia. **Climate Policy**, v. 22, n. 9–10, p. 1113–1129. 2022. https://doi.org/10.1080/14693062.2022.2085650.

MILHORANCE Carolina *et al*. **L'intégration de l'agroécologie dans les politiques publiques du Sénégal**. Dakar: ISRA-Bame; CIRAD. 2022.

MZOUGHI, Naoufel; NAPOLEONE, Claude. Introduction. L'écologisation, une voie pour reconditionner les modèles agricoles et dépasser leur simple évolution incrémentale. **Natures Sciences Sociétés**, v. 21, n. 2, p. 161-165. 2013. https://doi.org/10.1051/nss/2013092.

NIEDERLE, Paulo *et al.* Ruptures in the Agroecological Transitions: Institutional Change and Policy Dismantling in Brazil, **Journal of Peasant Studies**, v. 50, n. 3, p. 931–953. 2022. https://doi.org/10.1080/03066150.2022.2055468 .

OSORIO-GARCÍA Ana *et al.* Can an innovation platform support a local process of climate-smart agriculture implementation? A case study in Cauca, Colombia, **Agroecology and Sustainable Food Systems**, v. 44, n. 3, p. 378–411. 2019. https://doi.org/10.1080/21683565.2019.1629373 .

PATROUILLEAU Mercedes *et al.* **Analysis of Agroecological Transition at the national level in Argentina.** Report 1. Buenos Aires: INTA, TAFS. 2022.

PAVAGEAU, Charlotte; PONDINI, Stefanie; GECK, Mattias. **Flux d'argent**: qu'est-ce qui freine l'investissement dans la recherche agroécologique pour l'Afrique? Geneva: Biovision Fondation. 2020.

PLACE Frank *et al.* **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, Tahina S. **Analysis of the agroecological transition of food systems at the national level.** The case of Madagascar. TAFS Project Report. Tananarive: SPAD, Cirad. 2021.

SABOURIN, Eric *et al.* **Políticas públicas a favor da agroecologia na América Latina e no Caribe Porto Alegre.** Porto Alegre: FAO Red PP-AL. 2017.

SABOURIN, Eric *et al.* ¿Qué políticas públicas para apoyar la agroecología en América Latina y el Caribe? **Perspective**, n. 45, p. 1-4, 2018. https://doi.org/10.19182/agritrop/00020.

SOSA VARROTTI Andrea Patrícia *et al.* Análisis de las agriculturas alternativas en Argentina: políticas públicas y actores clave. In: CONSTANTINO, Andrea. (Coord.), **Las nuevas dinámicas del acaparamiento de tierras en Argentina:** caracterización, alternativas y desafíos. Bahía Blanca: Editorial de la Universidad Nacional del Sur. 2025. p. 83-100.

STASSART Pierre, BARET Philippe, GRÉGOIRE Jean Claude, HANCE Thierry, MORMONT Marc, REHEUL Dirk, VISSER Marjolein. **L'agroécologie : trajectoire et potentiel pour une transition vers des systèmes alimentaires durables**. Dijon: Educagri, 2012.

THANH TUNG, Hoang. **Analysis of Agroecological Transition at the National Level:** The Emergence and Institutionalization of Agroecology in Viet Nam. TAFS Project Report 1. Hanoi: Malica. 2021.

VALDIVIA, Merelyn; LE COQ, Jean François; DAZA Paola. Roadmap for the scaling up of Agroecology in Colombia. **CCAFS Info note**. January 2022. p. 1-9. 2022. https://hdl.handle.net/10568/119284 .

WEZEL Alexander *et al*. Pratiques agroécologiques pour une agriculture durable. A review. **Agronomy for sustainable development.** v. 34, n. 1, p. 1-20, 2014. http://dx.doi.org/10.1007/s13593-013-0180-7

WEI, Zhou; LI, Michèle; ACHAL, Vareniam. A comprehensive review on environmental and human health impacts of chemical pesticide usage**, Emerging Contaminants**, v. 11, n. 1, 100410. 2025. https://doi.org/10.1016/j.emcon.2024.100410 .