



The Institutionalization of Agroecology in Viet Nam

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Key messages:

- Intensification of farming systems have resulted in better food security but also in environmental degradation and health hazards;
- Agroecology is one of the mottos of rural development policies since 2021;
- Approach to agroecology is government-initiated and increasingly market-driven;
- As a food system level approach, agroecology offers pathways to move from low-value commodity trading to a quality-oriented agricultural and food strategy;
- The empowerment of local actors, the building of horizontal networks, and the establishment of territorial markets could improve connectivity, collective action and local creation of value.

Agrarian Transition in Viet Nam

Agri-food systems have transformed rapidly in Viet Nam since the 1990s. Population growth, urbanization, transition from state-driven to market economy, local and foreign corporate investments, and integration in global trade networks have driven agrarian transformations. Farmers are increasingly connected to local and global markets. Shift from subsistence to commercial agriculture has entailed farm-level intensification and local and regional specialization. Investments have resulted in the creation of large-scale farming and processing operations and contributed to the consolidation and growth of the upstream (input supplies) and midstream (processing, storing, transportation, wholesaling and retailing) segments of the value chains.

However, a great diversity of situations between types of actors, agri-food products and territories is observed throughout the country, with contrasts in land use, farm size, capital-, labor- and technology-intensity of operations, and degree of integration in upstream and downstream markets. Over 40 million people are involved in smallholder farming, producing both for themselves and for the market. They coexist with large farms, while medium-size specialized farms, often part of cooperatives or under contractual arrangements with companies, produce higher-value products in response to a diversified demand.

Agrarian transformations have resulted in better food security, but the triple burden of malnutrition (overweight, undernutrition and micronutrient deficiency) is a growing public health challenge.

Exports of agricultural commodities (such as rice, coffee, pepper, shrimps, etc.) have boomed but rural poverty remains high due to low revenues and vulnerability to market shocks and natural disasters.

The boom in production has also caused environmental degradation, including soil erosion and contamination, air pollution, water pollution and scarcity, deforestation and loss of biodiversity. Agriculture contributes to one third of the total of greenhouse gases emissions, which have tripled in 20 years. Studies report an overuse of chemical inputs and health problems related to food contamination by heavy metals, pesticides and microorganisms. Increasing temperatures and rainfalls, more extreme climatic and weather events, and saline intrusion related to climate change also make farmers more vulnerable.

The model of “conventional intensification” of agriculture clearly shows its limits, and is increasingly challenged in a context of combined climate change, peak oil, global geopolitical troubles, zoonosis, pandemics, and increased competition for land and water, pushing for radical transformations. Meanwhile, demand for quality products and calls for environmentally sound and socially equitable practices, notably translated in the United Nations-driven agenda for sustainable development, have created inroads for Viet Nam to change the agri-food system.

Public Policies: from Productivity to Sustainable Agriculture

Agricultural public policies have long focused on improving agricultural productivity to ensure food security, improve farmers' livelihoods and conquer export markets. However, many stakeholders acknowledge the deadlock of chemical intensification and the need for climate-responsive policies. Since the late 2000s, public authorities have taken steps towards a more sustainable agriculture, with policies following three main pathways:

- food safety management, with the definition of references for a “safe vegetables” standard in 2008, the voluntary VietGAP (Good Agricultural Practices) standard in 2010 and the organic standard in 2018, the promotion of Integrated Crop Management (ICM) and Integrated Pest Management (IPM), and the ban of a number of toxic active ingredients in commercial pesticides;
- land management and soil fertility, with the adoption of programs and protocols for System Rice Intensification (SRI), to promote the use of organic fertilizers and the composting of crop residues, to prevent land degradation and to support afforestation;
- climate change adaptation and mitigation, with the endorsement of the National Climate Change Action Plan for 2012-2020 period (2012), National Climate Change Adaptation Plan for 2021-2030 period (2020), National Strategy on Climate Change until 2050 (2022), and the launch of programs and policies to develop new crop varieties, to finance necessary transformations, to promote climate-smart farming practices, and to develop a zero-carbon agriculture through technological solutions and innovations.

The Recent Institutionalization of Agroecology

The concept of “agroecology” or “ecological agriculture” (*nông nghiệp sinh thái*) has been conceptualized in Viet Nam long ago already, notably in a book from Dao The Tuan (1983) and in line with Vietnamese traditional integrated farming systems.

The concept has been officially endorsed in the Resolution approved at the 13th Communist Party Congress in 2021. The same year, Viet Nam has joined the Agroecology Coalition formed after the UN Food System Summit, which actions are guided

by the 13 principles of agroecology defined by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security in 2019 (Fig. 1). Many national policies now adopt a systemic approach to agroecology and food system transformation, as evidenced from the above:

- The Strategy for Sustainable Agriculture and Rural Development for the period of 2021- 2030, vision towards 2045, approved in 2022, aims at enhancing “ecological agriculture”, along with modernizing the countryside and supporting “smart” farmers. The future agriculture is expected to be green, environment-friendly and adaptive to climate change.
- The National Targeted Program on New Rural Development for the 2021-2025 period, approved in 2022, aims to restructure the agricultural sector and to foster inclusive and sustainable development in the rural economy. It supports the development of cooperatives and the vertical integration of value chains to face market instability, and to achieve economies of scale in food production and marketing.
- The National Action Plan on Food Systems Transformation in Viet Nam towards Transparency, Responsibility and Sustainability, approved in 2023, targets transformations “from the daily meal to the planet”. It endorses “the development of agroecology” and sets the objectives of ensured food security, improved traceability, increased use of organic fertilizers, expanded area of agricultural land dedicated to organic production, higher percentage of products produced following GAP standards, as well as lower GHG emissions from the food system.

Fig. 1 – 13 principles of agroecology
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Main Actors and Organizations Supporting the Agroecological Transition

The Ministry of Agriculture and Environment (MAE, ex-MARD) is the most important state agency in promoting and supporting agroecology transition in Viet Nam (Fig. 2). Beyond policy formulation, it sets and oversees the enforcement of agri-food standards and regulations, controlling activities related to food and agriculture, monitoring inspections, and delivering certifications. It also implements the national biodiversity conservation master plan and manages carbon credits. The Ministry of Health (MOH) plays a key role in encouraging sustainable food consumption patterns. Public research organizations – such as the Viet Nam Academy of Agricultural Sciences (VAAS) or the Centre for Agricultural Research and Ecological Studies (CARES) – strive to enhance farmers' knowledge and support rural stakeholders in managing productivity and improving environmental protection and livelihoods in rural areas.

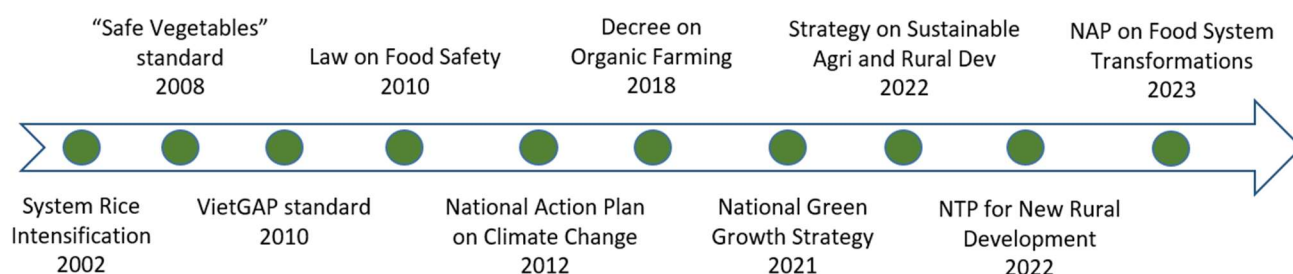
Non-governmental institutions are involved in different ways in the agroecological transition. PGS Vietnam (Participatory Guarantee Systems), under the Vietnamese Organic Agriculture Association (VOAA), was established in 2008. Although not yet legally regulated by the Vietnamese Government, this locally-focused certification scheme for organic or safe agriculture allows a more participatory governance across the value chains and builds on sharing of experiences among farmers. Often initiated by NGOs such as Rikolto, PGS is currently adopted by dozens of farmer groups and accepted by some retailers and consumers.

Varied international development agencies and research institutes are active. E.g., the Rural Development Agency of Korea, JICA, GIZ, FAO, ACIAR, CGIAR centers, CIRAD and IDH support in different respects organic agriculture, agroforestry, crop diversification, climate change adaptation, crop-livestock integration, integrated landscape management, risk management, and inclusive safe value chains through collective action. The ASSET (Agroecology and Safe food System Transitions) research for development project aims at catalyzing agroecological transformations from local to regional scales through co-designed technical and organizational change pathways.

Besides regional research-based networks such as ASEA (Agroecology for Southeast Asia) and MALICA (Market and Agriculture Linkage for Sustainable Food Systems in Asia), regional multistakeholder initiatives in support of agroecology have emerged. In the ALiSEA network (Agroecology Learning Alliance in South-East Asia) coordinated by the GRET, members from Vietnamese research institutes, NGOs and the private sector share their experiences and promote agroecology.

Private brands, labels and certificates, notably for VietGAP and organic standards, have proliferated in large retail markets. Agrifood corporations and local cooperatives have invested in food safety, quality management and certifying bodies development. Enforcement of standards however remains a concern. Driven by global trends, large export companies move into implementing landscape approaches (e.g., in the coffee and pepper sectors) or developing inclusive value chains.

Fig. 2 – Main steps in the institutionalization of sustainable and ecological agriculture in Viet Nam



Rationale to Develop Agroecology: From a High-Level Political Agenda to Harnessing Market Drives

The recent high-level public endorsement of agroecology reveals a further shift in many discourses, policies and practices from a single

focus on productivity and food sufficiency to a more encompassing focus on quality, rural livelihoods, environment and consumer health. The historical principles, which drove the first move to sustainable agriculture, are reasserted. While the increase in export value remains a major target, approaches towards it are changing. The focus is

put on strategies to add value to food products, to narrow the rural-urban gap in livelihoods, to use resource efficiently, to foster circularity, to improve risk management and cooperation within value chains, and to tighten connections between producers and consumers.

The main measures and solutions identified by the government to achieve these goals are as follows:

- to harmonize policy frameworks and strengthen regulations and controls in order to improve the management of quality and the safety of the products, including traceability;
- to build capacities and raise awareness about good practices for all stakeholders in the food system, including consumers;
- to promote private-public partnerships in building infrastructures and developing technological innovations, including digital solutions.

The approach to agroecology, while clearly state-driven as a comprehensive framework to transforming agricultural and food systems, also has long-standing roots in peasant agriculture and in local non-governmental institution-based initiatives.

The recent strategy clearly intends to harness market drivers and transformations. Public actors conceive agroecology as a way to establish a reputation for sustainability for Vietnamese agrifood products and to build an international “brand name”. Furthermore, national authorities see requirements from global markets as an incentive for national agriculture and value chains to comply with international food safety regulations. Viet Nam reasserts its vocation to “feed the world” while recognizing the key global and local sustainability challenges and assuming that economic benefits from this strategy will trickle down to all, including smallholders. Crises affecting the agricultural sector, recent national and international commitments by the government, including climate-based targets, and initiatives from local farmers, private actors and international organizations, might all accelerate and scale up the transformations.

Challenges

The current implementation of agroecological principles however faces significant challenges:

- conventional input providers have built competitive distribution networks;
- technical solutions are not always available nor affordable to substitute chemical inputs with organic ones;
- extension workers need to expand their knowledge regarding agroecological practices;
- local consumers’ and citizen’s awareness about agroecological practices and benefits is low;
- the cost, complexity and risks associated with the adoption of quality standards, plus a lack of consistent enforcement, prevent small-scale producers from transitioning away from intensive farming.

Recommendations

To catalyze and bring to scale a full-fledged agroecological transition, different interventions and approaches should be leveraged by public authorities and other stakeholders, such as:

- investing in capacity building of state agents at local levels to enforce existing regulations and foster food safety risk-assessment processes;
- empowering local actors to develop horizontal networks of cooperation for a better and fairer circulation of knowledge, information, practices, assets;
- promoting integrated landscape management and territorial approaches;
- favoring bottom-up technical and market innovations;
- supporting territorial markets (such as local public procurement, direct sales and e-commerce channels) for agroecological products, and connecting them with wider rural development dynamics such as agrotourism;
- supporting smallholders’ capacity to create and retain value locally by investing in public or collectively managed infrastructures for post-harvest treatment, processing, transportation, wholesaling, storage and retailing.

References

- Dao The Tuan, 1983, *Hệ sinh thái nông nghiệp*, NXB Khoa học Kỹ thuật, Hanoi.
- HLPE, 2019, *Agroecological and other innovative approaches*. Report by the HLPE, Rome.