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POLICY ADVICE

BARRIERS AND OPPORTUNITIES FOR AGROECOLOGY TRANSITION IN THE FLEMISH FOOD SYSTEM

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BARRIERS AND OPPORTUNITIES FOR AGRO-ECOLOGY TRANSITION IN THE FLEMISH FOOD SYSTEM

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SUMMARY

policy advice

The Flemish food strategy recognises agroecology as a guiding framework for the transition to a more sustainable agriculture and food system. Farming systems driven by agroecology as a systems approach remain a minority in Flanders. This document offers concrete recommendations to boost opportunities for agroecology and remove barriers by integrating insights from multiple research projects.

Bottlenecks and recommendations for agroecology in Flanders



Agroecology is a niche in Flanders

- Recognize the potential of agroecology in policy



Agroecology requires additional competencies

- Embed core competencies (such as autonomy, systems thinking, critical reflection) for agroecology in agricultural education
- Ensure broad education of society around agroecology and systems thinking



Agroecology requires adapted advisory services

- Invest in setting up learning networks
- Provide more support for tailored advice on agroecology



Legislation as a stumbling block

- Map legislation that complicates agroecological practices and identify ways to remove these barriers



Agricultural land is scarce

- Explore the potential of public agricultural lands to promote agroecology



Scaling up agroecological production requires a supply chain-wide approach

- Give direction to local food strategies and improve their integration
- Invest in training on how to integrate and follow up on sustainability criteria in public procurement



Scaling up the agroecological revenue model requires cooperation

- Map existing subsidies and support measures and examine their impact on collaboration
- Support living labs as an approach to initiate and install collaboration.

INTRODUCTION

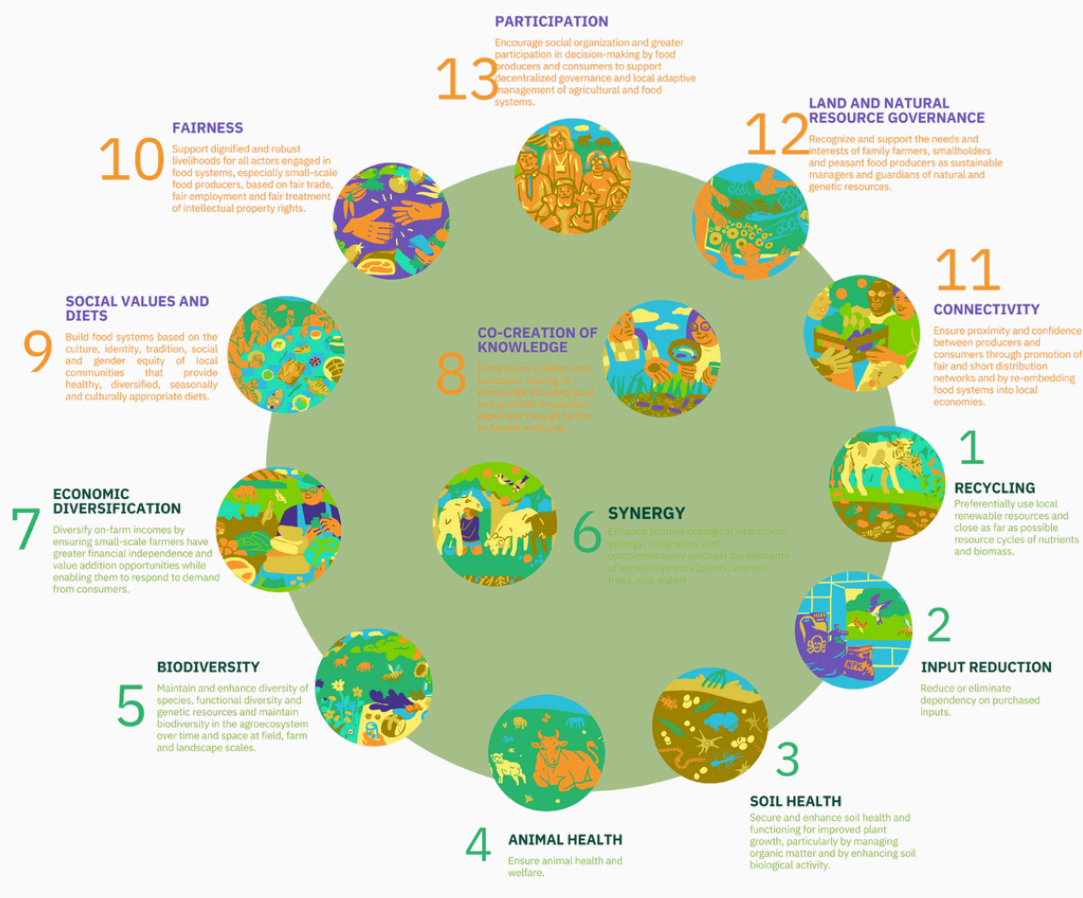
AGROECOLOGY, A LEVER TO MEET THE STRATEGIC OBJECTIVES OF THE FLEMISH FOOD STRATEGY

The Farm-to-Fork strategy, as part of the European 'Green Deal', emphasizes the importance of the transition to an environmentally friendly and resilient agriculture. Europe aims to produce food with less crop protection, less fertilizer use, improved soil management and more biodiversity, and recognises the potential of agroecology in achieving these ambitions. The Flemish Food Strategy 'Go4Food' also includes agroecology

as one of the 11 food deals to meet its strategic objectives.

AGROECOLOGY INCLUDES ECOLOGICAL AND SOCIOECONOMIC PRINCIPLES

We define agroecology as 'making use of the relationships between humans, agriculture and nature for the design and management of sustainable food systems', as derived from the definition of the Food and Agriculture Organisation (FAO). To this end, agroecology starts from 13 principles (HPLC, 2019) (Figure 1).



ILLUSTRATIONS: DOROTTYA POÓR

Figure 1: The 13 principles of agroecology (Agroecology Europe, from Gliessman (2007)(1) and HPLC (2009)(2). Illustrations: Dorottyia Poór

Organic farming aims at integrating the agroecological principles in a systemic way, but unlike agroecology, organic farming is captured in a legislative framework. A number of ecological principles focus on ecological interactions and synergies in the design of sustainable agricultural practices and systems, making farmers less dependent on external inputs. The better one succeeds in mimicking natural processes in ecosystems, the closer one approaches the agroecological approach. Ecological principles are complemented by a number of socio-economic principles, in which 'autonomy' and 'connection' are central. In an agroecological approach, farmers are seen as equal partners within the agri-food system. They have more influence on prices and are less dependent from influential players in the (global) food and agricultural market.

AGROECOLOGY IS NOT RESTRICTED TO FARMERS

However, agroecological principles do not only focus on farmers, but can also inspire entire food chains and land use in Flanders. The agroecological approach strives to connect agriculture and nature and urban and rural areas. Via local networks, farmers, processors and consumers are connected, with agricultural production being tailored to the local context.

AN AGROECOLOGICAL TRANSITION REQUIRES A SYSTEMS APPROACH

Consequently, scaling up this agroecological approach, or agroecology transition, requires innovation at various levels. Adapted business models, regulations and consumption patterns are needed to increase supply and demand of agroecological products.

OBSTACLES AND OPPORTUNITIES FOR AGROECOLOGY

Within the framework of the Flemish food deal agroecology, obstacles and opportunities for agroecology were identified. This document provides insights and recommendations to address some of these obstacles based on results from a multitude of research projects.

Agroecological initiatives, still a niche within our Flemish agricultural context, often meet resistance because they challenge the established agro-industrial model in Flanders. They challenge the regime along with the existing technologies, business models, markets and policy frameworks associated with it

CHANGE IS RESISTED AS LONG AS POSSIBLE

Established systems tend to maintain stability and resist change as long as the need for change does not sufficiently impose itself on society. The recent farmers' protests, largely supported by the broader society, have reminded us of the major challenges our current agricultural model is facing. This momentum can be used to further explore

and invest in alternative models, including agroecology.

LAND-SPARING VERSUS LAND-SHARING

The debate on organic agriculture and agroecology is quickly narrowing into a 'land-sparing' versus 'land-sharing' debate, or questioning the impact of agroecological and organic agriculture on various aspects of sustainability. This puts further polarisation on edge, while one agricultural model doesn't need to exclude the other. However, a clear commitment from the government is necessary to give agroecology the oxygen it needs to develop further. Farmers want to feel supported in the choices they make for the future, both by the government, the market and consumers.



Picture: Hilde Wustenberghs

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RECOGNIZE THE POTENTIAL OF AGROECOLOGY IN POLICY

The Flemish food strategy builds on **4 pillars**:

- Healthy and sustainable food,
- Food system within ecological limits,
- A resilient food economy, and
- Food to connect farmers and citizens

When designing policies to address these pillars, we ask that **ambitious objectives** are installed in relation to agro-ecological, organic and local food systems in the short, medium and long term. Provide tailor-made policies to meet these objectives. Focus not only on stimulating production, but also on **stimulating demand**.

**SIX CORE COMPETENCIES FOR BEING
ABLE AND DARING TO MOVE INTO
AGROECOLOGY**

To integrate agroecological principles in practice, six competencies were found to be crucial for a farmer. These go far beyond technical knowledge and skills to implement agroecological practices. They also include systems thinking, showing commitment, observation and creativity, critical reflection, emancipation and autonomy, and social openness. Although these competences were identified as core competences to engage in agroecology transition, we are convinced that every farmer can benefit from developing these competences.

**IMPORTANCE OF CREATING GENERAL
AWARENESS AROUND THE POTENTIAL OF
AGROECOLOGY**

However, since agroecology transition is not only driven by farmers, but also from the market, policy and wider society, it is important to create general awareness around the potential of agroecology. This requires a broad understanding of the concept of agroecology as an alternative systemic approach to food production and consumption. Systems thinking differs from mainstream linear thinking, it is about thinking in relationships at different levels. Systems thinking stimulates agroecological innovation by understanding relationships between agriculture, nature and people in addressing the challenges within our current agricultural and food system (3).



EMBED CORE COMPETENCIES (SUCH AS AUTONOMY, SYSTEMS THINKING, CRITICAL REFLECTION) FOR AGROECOLOGY IN AGRICULTURAL EDUCATION

In a policy note written in 2017, we already advocated the inclusion of the **six competencies** for farmers in agricultural education through actions in **four areas**:

- integrating agroecology in curricula,
- alternative education methods focused on experiential learning,
- supporting teachers through training and networking, and
- cooperation between agricultural practice and education policy to make the concept agroecology tailored to the context in Flanders (4).



ENSURE BROAD EDUCATION OF SOCIETY AROUND AGROECOLOGY AND SYSTEMS THINKING

We also argue that education on agroecology and systems thinking should not only be integrated into agricultural education, but also into **general education**. We also support opportunities for further stimulating the connection between agriculture and society. Through citizen science, citizens can be made more aware of the impact of their behaviour on the environment and their potential contribution in agroecology transition (5). Other ways stimulating collaboration between farmers and citizens that can encourage citizen awareness include cooperatives, agricultural education, on farm voluntary work, care farming, etc. These forms of cooperation should be supported by local and regional authorities by taking into account the benefits that farmer-citizen cooperation can offer in terms of education, care, nature-inclusive agriculture and short food value chains and linking them to strategic policy objectives (6).

BOTTLENECK 3

AGROECOLOGY REQUIRES ADAPTED ADVISORY SERVICES

APPLYING AGROECOLOGY IS A CONTEXT-SPECIFIC JOURNEY

When farmers apply agroecological practices on their farms, they often go through quite a journey. There is no simple roadmap for agroecology transition. Translating agroecological principles into practice on a farm is very context-specific. Pioneers often experiment with agroecological practices on their own. On the one hand because of context specificity, but on the other hand also because agricultural advisory services lack expertise on agroecology. Agroecology requires tailored advice, also with a view to further developing previously mentioned competences.

Agroecology does not offer standard solutions, so farm specific context, economic context, legislation, local and social impact, etc. must be taken into account.

IMPORTANCE OF ADVISORS IN PROVIDING A NETWORK

Advisors also play an important role in supporting network building of the farmer, by establishing connections that give the farmer access to knowledge, machinery, local network, food value chain actors, etc. Besides merely making the contacts, advisers can also play an important role in facilitating the connection (7).



Picture: Hilde Wustenberghs

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INVEST IN SETTING UP LEARNING NETWORKS

By engaging farmers in learning networks, they learn from each other, are strengthened in their approach and feel more confident by sharing experiences. These learning networks start from the farmers' needs and are supported by a specialised advisor, whether or not linked to a research institution. Involving researchers is also recommended, to provide scientific evidence of farmers' experiences in the field. Learning networks can be set up around agroecology as a systems approach, but can equally focus on a specific theme. For example functional agrobiodiversity or integrated crop protection (8, 9).



PROVIDE MORE SUPPORT FOR TAILORED ADVICE ON AGROECOLOGY

Existing advisory services are mainly tailored to conventional agriculture. Independent advice on agroecology is insufficiently present in Flanders. Farmers mainly get access to advisors connected to a supplier upstream or buyer downstream the value chain. Make access to independent advice on agroecology easier by mapping advisory services specifically for agroecology and by listing them on the Flemish government's web pages around training and advisory services for the agricultural sector.

Legislation is often a barrier for farmers who want to get started with agroecology and this for two main reasons.

**LEGISLATION IS OFTEN FOCUSED ON
CONVENTIONAL AGRICULTURE**

Like advisory services, legislation often focuses on the conventional agricultural model in Flanders. For example, the combination of wood chips and manure contributes to increasing soil carbon content, which improves soil quality and resistance to extreme weather conditions. However, in legislation, this combination of wood chips and manure has the status of animal manure and is therefore subject to the relevant regulations.

LEGISLATION IS FRAGMENTED

In addition, legislation is also often fragmented, making it very challenging for pioneering farmers to find out what is allowed or not allowed. Farmers who want to start planting and felling trees in an agroforestry system first have to consult several different regulations which might impact on farm applicability (10). Farmers experimenting with agroforestry still feel uncertain about harvesting their trees. As regulations change a lot, they are not confident that harvesting trees for wood will still be possible when the moment is there. Besides the regulations around planting and harvesting, there are also many indirect rules and legislation that make it difficult for farmers to engage in agroforestry. For instance, the combination of animals and fruit-bearing trees is not obvious due to regulations around food safety.

All these different rules and administrative burdens create a lot of extra work for farmers. In addition, the legislation feels very controlling and therefore does not stimulate agroecology transition.

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MAP LEGISLATION THAT COMPLICATES AGROECOLOGICAL PRACTICES AND IDENTIFY WAYS TO REMOVE THESE BARRIERS

Although the government encourages innovation through various channels, it is often these contradictions and fragmentation in legislation that discourage pioneering farmers. Because of the **uncertainty, lack of clarity and administrative burden**, they drop out. Our advice would be to further identify legislation that complicates agroecological practices. Find ways to remove these barriers if we want to encourage farmers to engage in agroecological practices. We also stress the importance of cooperation between different policy domains in order to achieve unambiguous policies.

AGRICULTURAL LAND IS EXPENSIVE AND SCARCE

Several studies show that agricultural land in Flanders is scarce and expensive. If policy makers want to get more farmers willing to engage in agroecological practices, there is an important task for the government to increase access to land for agroecological production. The high price of agricultural land discourages farmers to experiment with agroecology due to potential lower yields in period of transition.



Picture: Lieve De Cock

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EXPLORE THE POTENTIAL OF PUBLIC AGRICULTURAL LANDS TO PROMOTE AGROECOLOGY

Public land can be an important tool to facilitate agroecological transition of existing g farms (by providing experimentation space) and initiate new agroecological farming practices (by providing long-term access to land). It also provides opportunities for local governments to effectively implement their local food strategy. However, the age-old public agricultural heritage owned by public institutions such as OCMW's and churchwardens is under pressure. Public lands are structurally sold to deal with needs for investment. As a result, the potential to use public land ownership as a policy measure to support agroecology, is also decreasing very fast (11).

Agroecology is not just about agricultural production. It also involves rethinking the entire food system, and consequently includes changing our consumption patterns.

**THE GOVERNMENT CAN HELP FURTHER
SCALE UP INITIATIVES AND
STRUCTURALLY EMBED THEM.**

In Wallonia, various support mechanisms are installed to ensure that food production and consumption is not merely left to the market. Several cities and municipalities developed a shared vision concerning a sustainable food system. The Walloon food strategy creates the conditions and provides resources to enable local and regional collaboration to implement that shared vision. Both at local and regional level, budgets and infrastructure are made available to boost agroecological and organic production. Smaller initiatives are supported by giving them access to a wider network outside agriculture, new promotion and communication channels and infrastructure. The demand side gets a boost by governments investing in organic and agroecological catering in kitchens of schools, rest homes and governmental organisations (12).



GIVE DIRECTION TO LOCAL FOOD STRATEGIES AND IMPROVE THEIR INTEGRATION

In Flanders, we see more and more cities working on a local food strategy to promote sustainable and healthy food. This often fits within developing a broader vision on connecting city and countryside, short food value chain production and consumption and strengthening the local economy. Our advice would be to **give direction to this local food strategy by seeking alignment with the Flemish food strategy. Integrate local food strategies with area specific strategies and projects on rural development.** Engage 'area specific based partnerships' in rural areas to integrate these local food strategies (13).



INVEST IN TRAINING ON HOW TO INTEGRATE AND FOLLOW UP ON SUSTAINABILITY CRITERIA IN PUBLIC PROCUREMENT

Invest in training on how to integrate and monitor sustainability criteria (seasonal production, fair prices, organic production, etc.) in public procurement. This training is important both for buyers, catering companies and farmers who have to supply the products. **Get inspired by other regions in Europe such as Copenhagen** (14). Map the local food system. Invest in understanding needs and concerns of big caterers (kitchen infrastructure and logistic requirements, knowledge of using seasonal vegetables). Also engage with farmers to understand their barriers when participating in public procurement. Support them where necessary, e.g. in obtaining the necessary certificates (15).

BOTTLENECK 7

SCALING UP THE AGROECOLOGICAL REVENUE MODEL REQUIRES COOPERATION

Through its strong label, organic farming demonstrates that agroecological farming and more large-scale distribution channels need not be mutually exclusive. Yet agroecological farming often goes hand in hand with alternative relationships in both marketing and supply, based mainly on short food value chain principles. These principles include a limited number of economic operators, reconnecting farmers and citizens through transparent production process, the farmer as price setter, and the local character of production. Building a profitable farm based on a short food value chain is not possible for all farmers. Short food value chains imply a significant expansion of the farmer's tasks: in addition to production, one has to deal with communication, logistics/marketing and sales.

SCALING UP AND COLLABORATION OFFER OPPORTUNITIES

Opportunities to address these challenges, and thus further scale up agroecology, lie in scaling up the short chain by collaboration. Such collaboration in the value chain can be very diverse: outsourcing tasks, putting together an offer, sharing knowledge, connecting people in the food system, making decisions together, building a local economy and so on. By joining forces, collaboration enables what an individual farm does not or hardly succeeds in doing. Moreover, collaboration contributes to social contacts. Collaborations can be restricted to farmers, but can also be extended to collaboration with processors or sellers, or even with governments when building a local food strategy.

Yet setting up such collaborations is very challenging, and not all initiatives established are sustainable in the long term (16, 17). Policy can play an important role in supporting these types of collaboration.

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MAP EXISTING SUBSIDIES AND SUPPORT MEASURES AND EXAMINE THEIR IMPACT ON COLLABORATION

Make an analysis of existing subsidies and support measures, and their impact on promoting or discouraging collaboration. Explore ways to integrate 'collaborative thinking' among our farmers by making individualistic thinking patterns more explicit. This includes training agricultural advisors to support collaboration, demonstrating successful collaborations, approaching the farm business plan from a collaborative perspective, developing technology that promotes collaboration and facilitating collaborations.



SUPPORT LIVING LABS AS AN APPROACH TO INITIATE AND INSTALL COLLABORATION.

Living labs can help connecting stakeholders and creating experimentation space for farmers. Living labs bring together various types of actors to develop innovative approaches around a shared problem through co-creation. They aim to bring together and exchange knowledge. Moreover, living labs provide an environment where innovation can be tested in the field, taking into account the local context. Living labs offer a clear framework around co-creation and co-design, and a lot of experience is being built around this in various European projects and partnerships (18, 19). They can be an important lever install multi-stakeholder projects and jointly develop innovation (20).

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RESEARCH PROJECTS



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